

COLUMBUS AFB	MS	
Latitude = 33.65 N		WMO No. 723306
Longitude = 88.45 W		Elevation = 220 feet
Period of Record = 1967 to 1996		Average Pressure = 29.79 inches Hg

Design Criteria Data

	Design Value	Mean Coincident (Average) Values			
		Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Dry Bulb Temperature (T)	(°F)				
Median of Extreme Highs	98	77	107	5.4	W
0.4% Occurrence	96	77	111	5.6	W
1.0% Occurrence	94	77	111	5.3	W
2.0% Occurrence	92	76	111	5.3	S
Mean Daily Range	21	-	-	-	-
97.5% Occurrence	28	26	16	4.4	N
99.0% Occurrence	24	22	13	5.3	N
99.6% Occurrence	20	18	10	6.4	N
Median of Extreme Lows	15	13	7	6.0	N
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Wet Bulb Temperature (T_{wb})	(°F)				
Median of Extreme Highs	82	92	148	4.8	W
0.4% Occurrence	80	91	137	4.6	W
1.0% Occurrence	79	90	132	4.7	W
2.0% Occurrence	78	88	128	4.7	S
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Humidity Ratio (HR)	(gr/lb)				
Median of Extreme Highs	152	87	1.00	4.5	S
0.4% Occurrence	141	85	0.94	3.8	WSW
1.0% Occurrence	136	85	0.90	3.5	S
2.0% Occurrence	132	83	0.88	4.0	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		129	1397	1369	2957

Other Site Data

Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
8	3.8	90	4.7 + 1.5
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
64.9	7	10	34

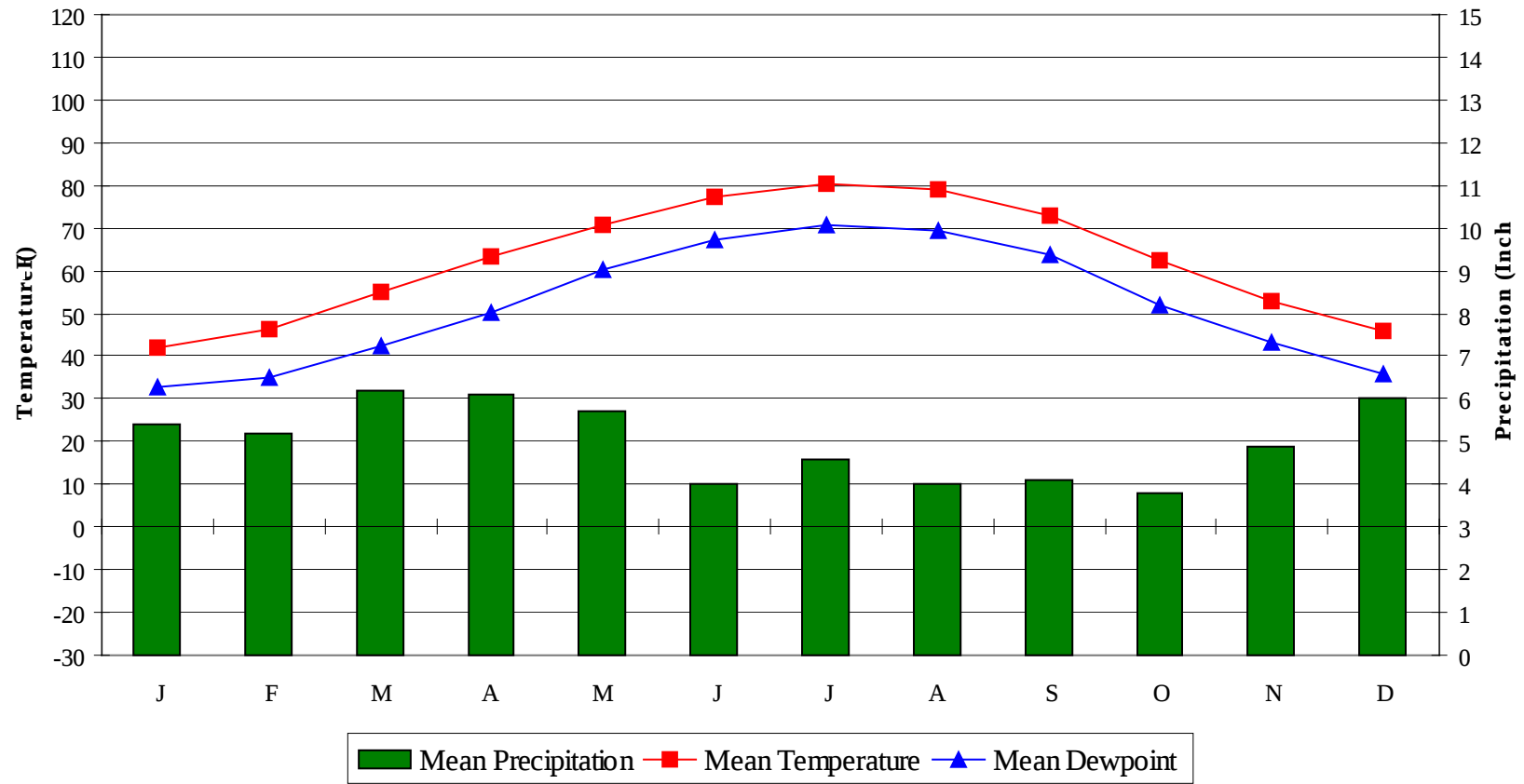
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

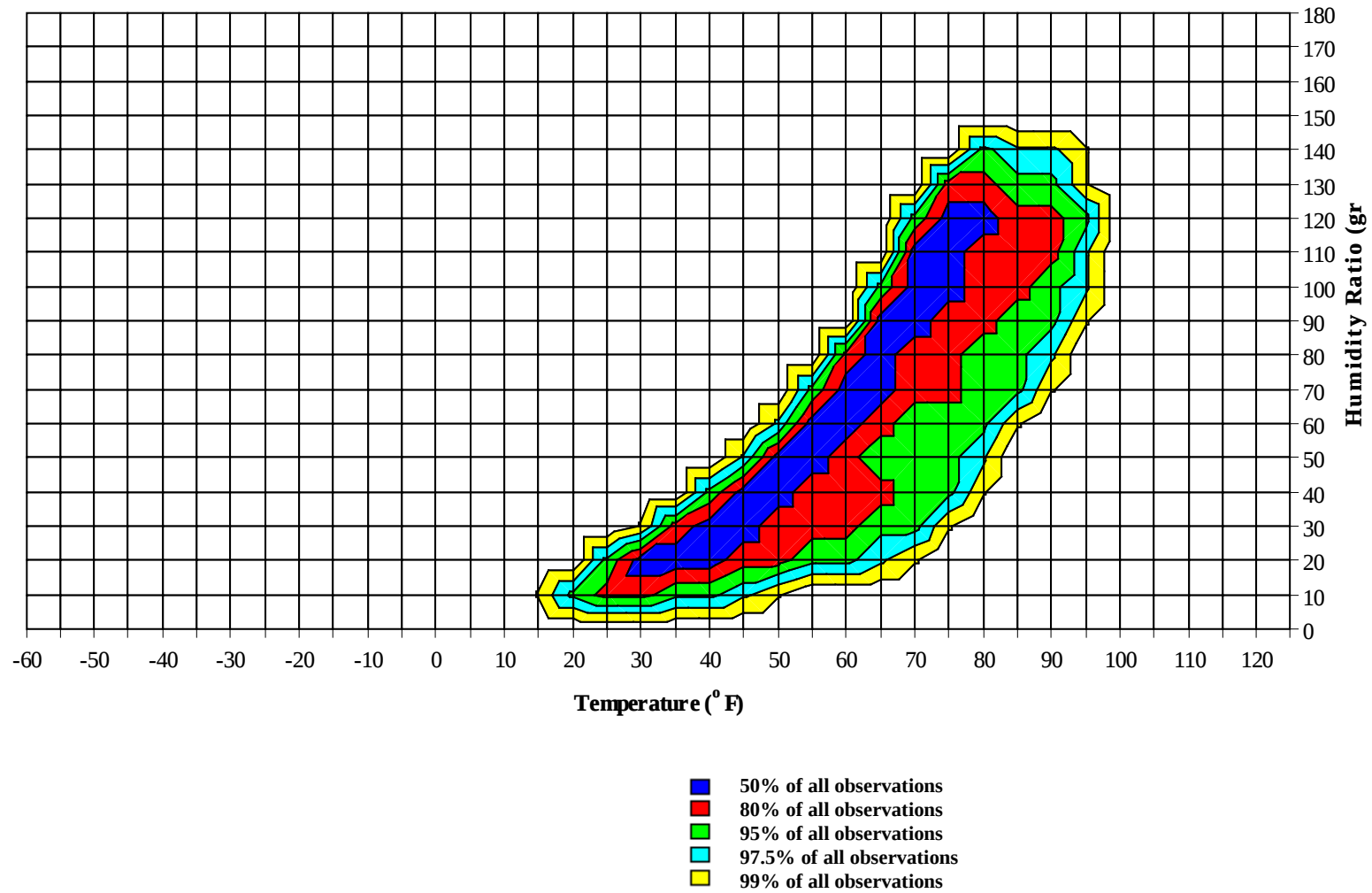


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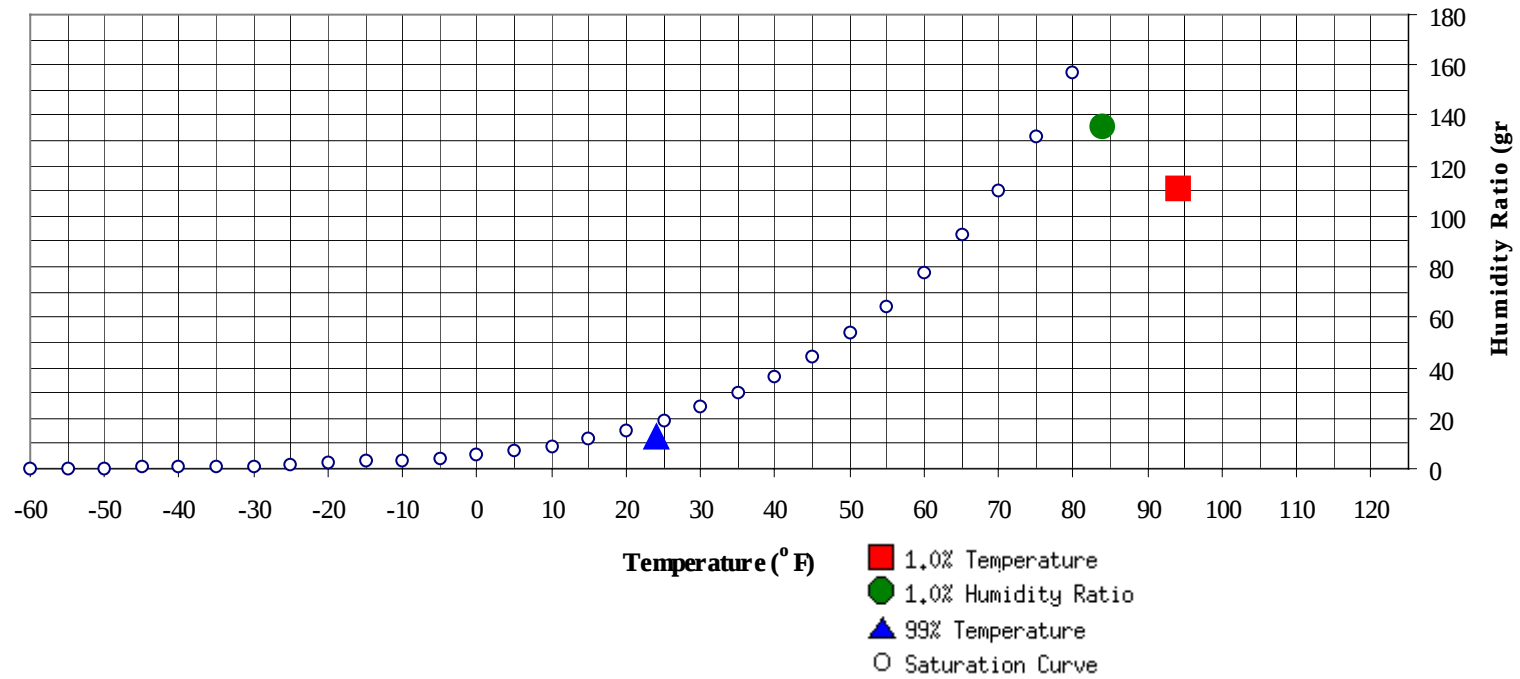
Long Term Psychrometric Summary



COLUMBUS AFB

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Psychrometric Summary of Peak Design Values

	(°F)	MCHR	Enthalpy	1.0% Humidity	(gr/lb)	MCDB	MCWB	MC Dewpt	Enthalpy
		(gr/lb)	(btu/lb)			(°F)	(°F)	(°F)	(btu/lb)
99% Dry Bulb	24	12.6	7.7	Ratio	135.8	83.8	78.1	75.9	41.4

1.0% Dry Bulb	(°F)	MCHR	MCWB	Enthalpy
		(gr/lb)	(°F)	(btu/lb)
94	111	76.8	40.0	

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Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1967 to 1996

Temperature Range (°F)	January					February					March				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
100 / 104															
95 / 99															
90 / 94															
85 / 89							0	0	0	65.0		0		0	62.3
80 / 84							1	0	1	62.4		10	2	13	64.5
75 / 79		1	0	1	63.9		5	1	6	62.8	0	22	9	32	62.7
70 / 74		5	1	7	61.7	1	12	5	17	60.1	4	32	19	55	60.8
65 / 69	2	11	6	19	59.4	4	19	12	35	57.9	14	35	28	77	58.1
60 / 64	8	19	12	39	56.1	12	26	20	58	55.1	27	40	39	106	55.0
55 / 59	14	26	19	60	51.9	17	29	26	72	50.9	35	33	38	106	51.1
50 / 54	16	34	27	77	47.0	20	30	28	79	46.3	41	30	38	108	46.9
45 / 49	25	43	35	104	42.8	28	30	35	93	42.3	37	22	31	91	42.5
40 / 44	32	39	43	113	38.3	32	27	33	92	37.8	34	13	24	72	38.3
35 / 39	44	30	42	116	33.8	37	24	30	91	33.6	32	5	13	50	34.2
30 / 34	43	20	34	97	29.3	33	12	20	65	29.3	16	2	4	23	29.8
25 / 29	34	12	19	64	24.6	23	5	11	39	24.8	5	1	1	8	25.2
20 / 24	19	5	7	31	20.0	12	2	3	17	20.3	1	0	1	2	20.2
15 / 19	7	2	2	11	15.5	4	1	1	5	15.8	1			1	17.0
10 / 14	2	0	1	3	10.8	1	0	0	1	11.4					
5 / 9	1	0	0	2	5.7	0			0	6.2					
0 / 4	1		0	1	1.9										
-5 / -1															

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

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WMO No. 723306

Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)**Period of Record = 1967 to 1996**

Temperature Range (°F)	April					May					June				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
100 / 104												0		0	76.0
95 / 99							0		0	75.4		9	1	10	76.1
90 / 94		1	0	1	72.1		10	1	11	74.0		45	10	55	75.7
85 / 89		8	1	10	68.6		37	10	46	72.1	1	71	27	99	74.0
80 / 84		32	10	42	66.3	1	61	23	85	69.5	11	61	44	116	72.6
75 / 79	1	43	21	66	64.3	13	56	42	111	67.9	48	36	70	154	71.2
70 / 74	12	46	36	94	62.3	45	44	62	152	66.1	97	15	60	172	69.0
65 / 69	35	42	47	124	60.2	70	26	55	151	63.1	52	3	21	76	64.8
60 / 64	45	35	44	124	56.4	54	11	32	97	59.1	22	0	6	28	60.2
55 / 59	43	19	36	98	52.1	36	3	17	55	54.4	7		1	8	55.5
50 / 54	42	10	24	76	47.8	20	0	5	25	49.9	2			2	51.0
45 / 49	32	3	14	49	43.7	8		0	9	45.9					
40 / 44	20	1	5	25	39.5	1			1	42.0					
35 / 39	8	0	1	9	35.1										
30 / 34	2		0	2	30.4										
25 / 29	0			0	26.7										
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															

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COLUMBUS AFB

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WMO No. 723306

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)**Period of Record = 1967 to 1996**

Temperature Range (°F)	July					August					September				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
100 / 104		3	1	4	78.7		1		1	76.7		0		0	75.2
95 / 99		20	4	24	78.1		14	2	16	77.4		4	0	5	74.9
90 / 94		69	18	87	77.0		61	13	74	76.4		23	3	27	74.9
85 / 89	3	77	34	114	75.9	1	81	28	109	75.1	0	51	11	62	73.5
80 / 84	22	49	58	130	74.7	12	55	53	120	73.9	2	60	25	87	71.4
75 / 79	88	23	83	194	73.1	67	27	86	179	72.6	23	49	55	127	70.5
70 / 74	109	6	46	161	70.4	118	8	54	181	69.8	78	31	67	176	68.4
65 / 69	21	0	4	25	65.7	37	1	11	49	65.3	51	14	37	102	64.1
60 / 64	5		0	5	61.1	10	0	2	12	60.5	37	6	23	67	59.5
55 / 59	0		0	0	57.6	2		0	3	55.9	28	2	12	42	55.3
50 / 54						0			0	48.5	13	0	5	18	50.4
45 / 49											6		1	7	45.9
40 / 44											1		0	1	42.3
35 / 39															
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															

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COLUMBUS AFB

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WMO No. 723306

Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)**Period of Record = 1967 to 1996**

Temperature Range (°F)	October					November					December				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
100 / 104															
95 / 99															
90 / 94		1		1	74.3										
85 / 89		8	0	9	70.4										
80 / 84	0	31	4	35	68.1		2	0	3	65.5		0	0	0	68.0
75 / 79	1	48	11	60	65.5	0	17	1	18	64.9		3	0	3	68.2
70 / 74	13	52	34	100	64.2	4	30	11	44	63.3	1	10	3	15	64.1
65 / 69	32	48	48	127	61.0	14	35	22	71	60.2	5	19	11	36	61.1
60 / 64	43	33	48	123	57.4	24	43	34	101	56.5	16	28	21	64	56.9
55 / 59	39	17	42	98	53.3	29	35	36	100	51.9	18	31	22	71	51.7
50 / 54	41	8	34	82	48.9	30	35	37	103	47.4	24	41	32	96	46.7
45 / 49	38	1	20	59	44.7	32	23	38	93	43.0	29	42	39	109	42.5
40 / 44	27	1	8	36	40.1	37	13	31	80	38.9	34	33	39	105	38.1
35 / 39	11	0	1	12	36.0	33	5	19	57	34.8	36	23	38	96	33.7
30 / 34	2		0	2	32.2	24	2	9	35	30.5	43	12	26	81	29.4
25 / 29						11	0	2	13	26.4	28	5	12	45	24.9
20 / 24						1	0	0	2	21.0	10	1	3	14	20.2
15 / 19						0			0	17.7	4	1	1	6	15.6
10 / 14											1	0	1	2	10.2
5 / 9											1	0	0	1	6.0
0 / 4											0	0	0	0	1.7
-5 / -1											0			0	-2.0

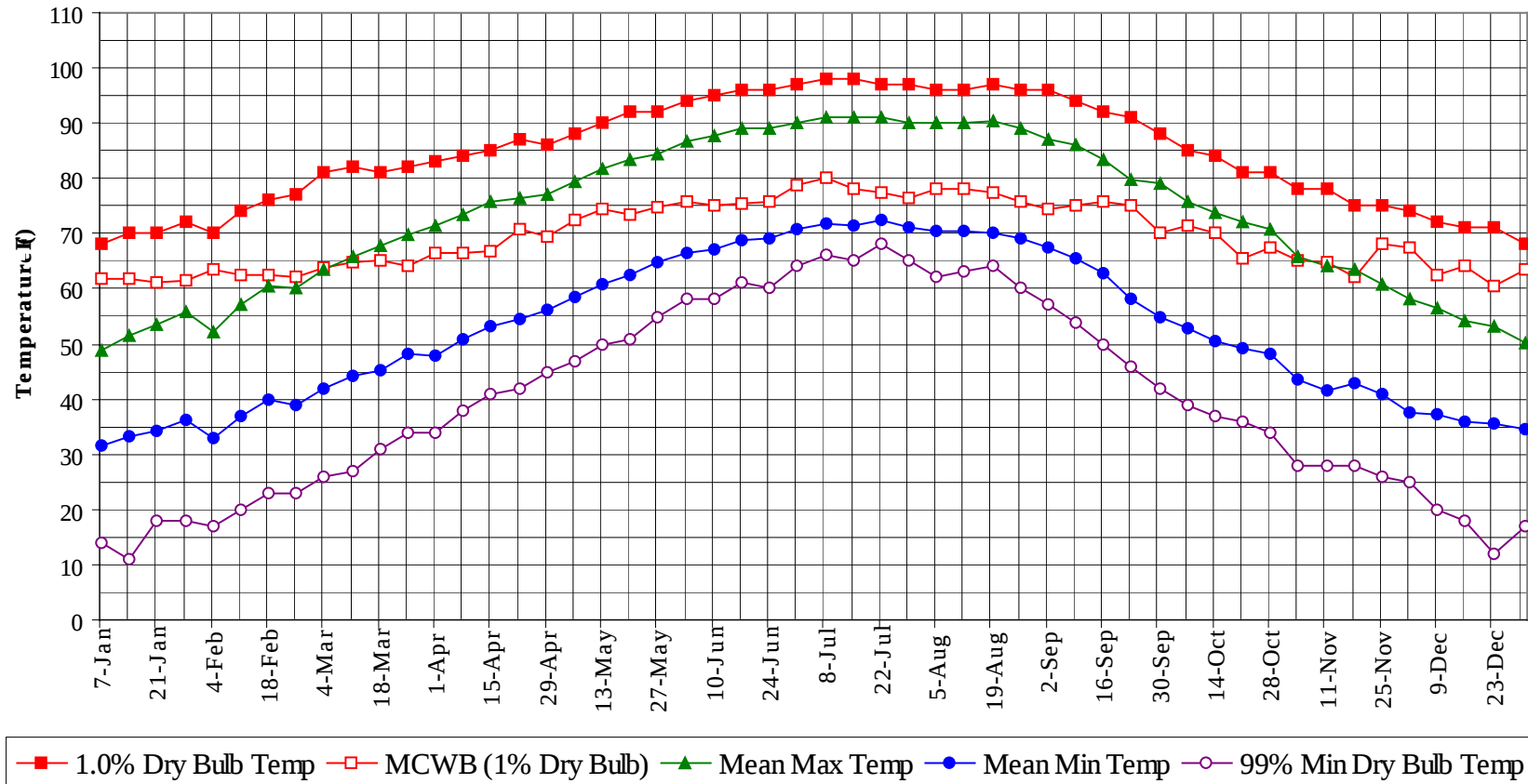
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

COLUMBUS AFB MS WMO No. 723306
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1967 to 1996

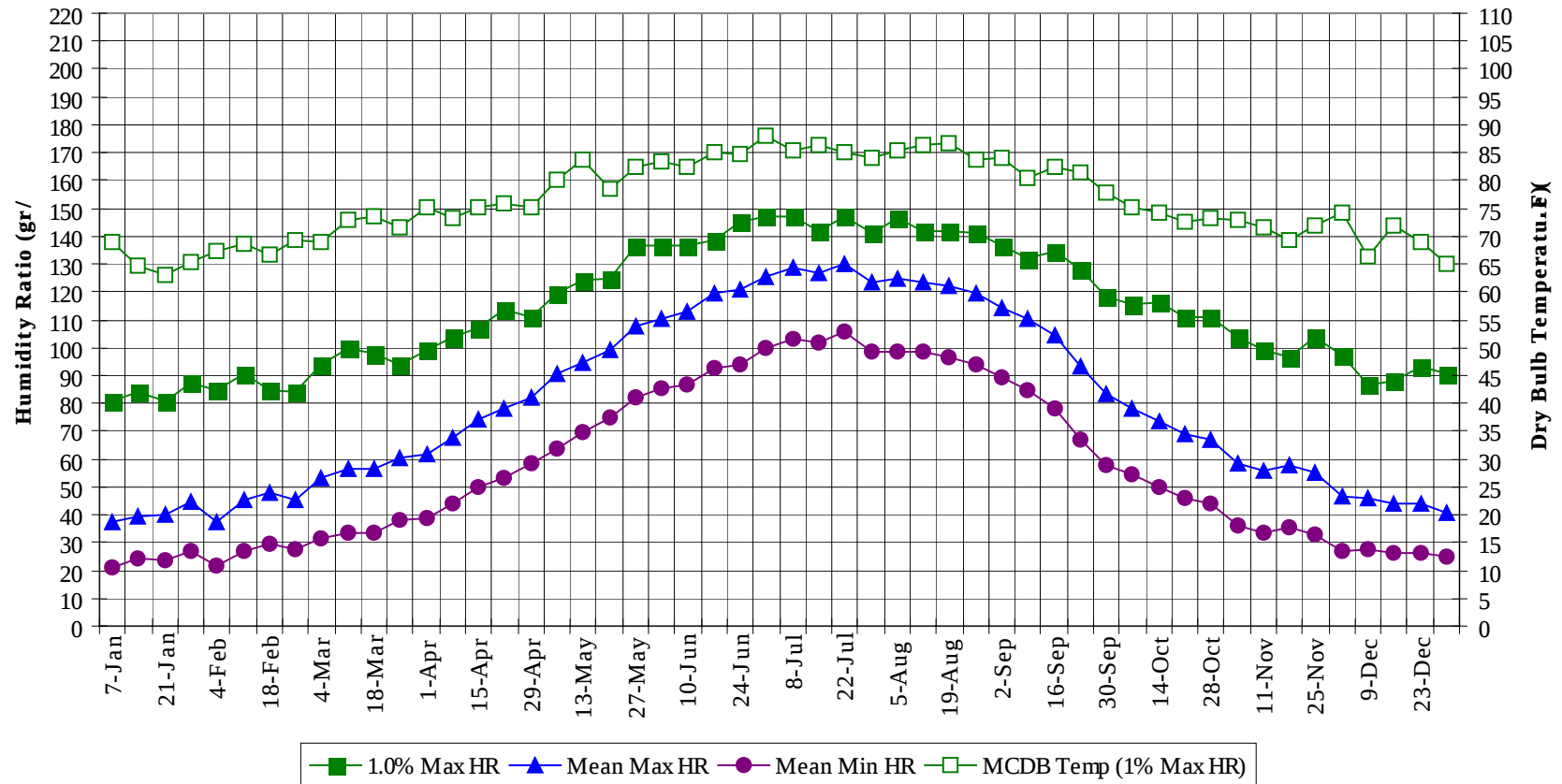
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
100 / 104		4	1	5	78.0
95 / 99		48	7	55	77.2
90 / 94		210	45	255	76.2
85 / 89	4	334	112	450	74.3
80 / 84	50	362	220	632	71.8
75 / 79	242	330	379	952	70.1
70 / 74	484	290	399	1173	67.1
65 / 69	336	253	302	891	61.8
60 / 64	301	240	281	823	57.1
55 / 59	269	195	250	714	52.3
50 / 54	249	188	231	668	47.5
45 / 49	236	165	212	613	43.0
40 / 44	218	126	181	525	38.5
35 / 39	201	87	143	431	34.0
30 / 34	164	48	93	305	29.5
25 / 29	101	23	46	169	24.9
20 / 24	44	9	14	67	20.1
15 / 19	15	3	4	22	15.6
10 / 14	4	1	1	6	10.7
5 / 9	2	1	1	3	5.8
0 / 4	1	0	0	1	1.8
-5 / -1	0			0	-2.0

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



COLUMBUS AFB**MS****WMO No. 723306****Long Term Dry Bulb Temperature and Humidity Summary**

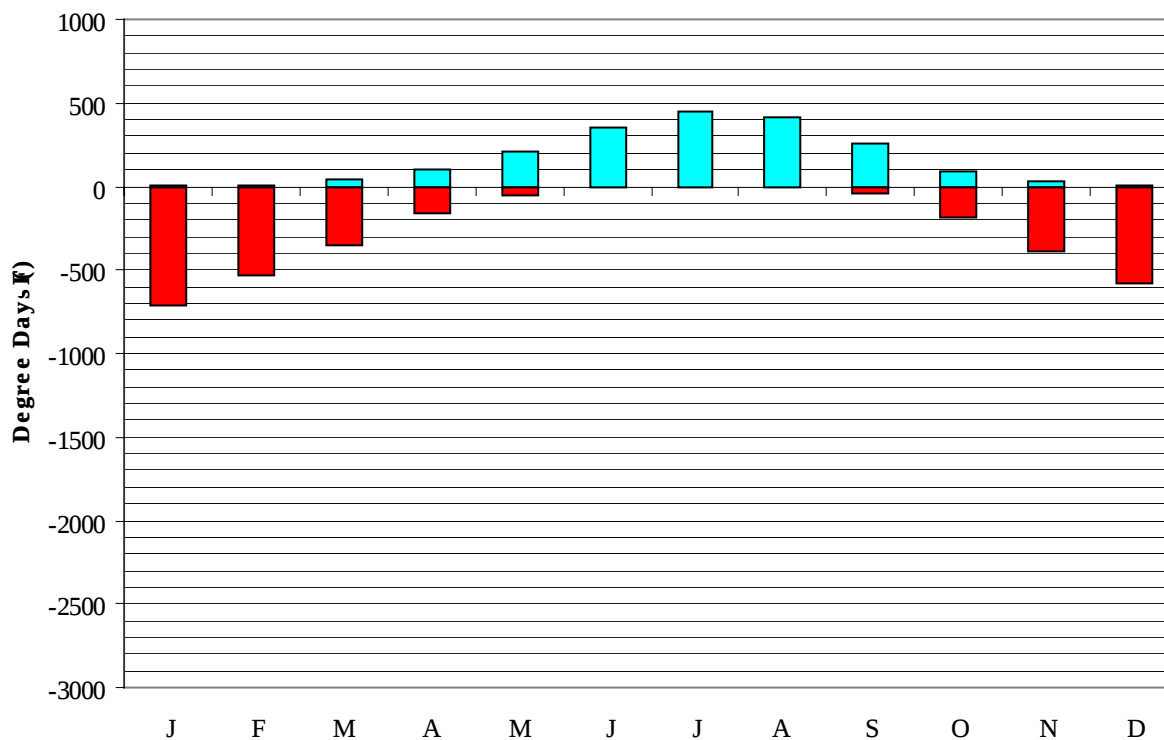
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	68.0	61.9	48.7	31.5	14.0	80.5	68.9	37.2	21.0
14-Jan	70.0	61.7	51.4	33.2	11.0	84.0	64.8	39.6	24.2
21-Jan	70.0	61.3	53.5	34.2	18.0	80.5	63.1	40.3	23.9
28-Jan	72.0	61.4	55.7	36.3	18.0	87.5	65.2	45.0	26.9
4-Feb	70.0	63.4	52.2	32.9	17.0	84.7	67.3	37.1	21.8
11-Feb	74.0	62.5	57.1	37.0	20.0	90.3	68.8	45.1	26.7
18-Feb	76.0	62.3	60.6	40.0	23.0	84.7	66.6	47.9	29.3
25-Feb	77.0	62.0	60.3	38.9	23.0	84.0	69.4	45.3	27.6
4-Mar	81.0	63.9	63.6	42.0	26.0	93.8	68.9	53.2	31.7
11-Mar	82.0	64.9	65.8	44.3	27.0	100.1	73.0	56.2	33.3
18-Mar	81.0	65.0	67.7	45.2	31.0	98.0	73.7	56.6	33.3
25-Mar	82.0	64.2	69.6	48.3	34.0	93.8	71.5	60.4	38.1
1-Apr	83.0	66.6	71.4	47.8	34.0	99.4	75.2	61.8	38.4
8-Apr	84.0	66.4	73.4	50.9	38.0	103.6	73.4	67.5	44.1
15-Apr	85.0	66.9	75.8	53.1	41.0	107.1	75.3	74.3	50.2
22-Apr	87.0	70.7	76.4	54.4	42.0	113.4	75.8	78.0	52.9
29-Apr	86.0	69.5	77.2	56.0	45.0	111.3	75.1	82.3	58.2
6-May	88.0	72.4	79.5	58.4	47.0	119.7	80.0	90.3	63.6
13-May	90.0	74.4	81.9	60.8	50.0	123.9	83.7	94.4	69.6
20-May	92.0	73.5	83.5	62.6	51.0	124.6	78.6	98.9	74.6
27-May	92.0	74.9	84.6	64.8	55.0	136.5	82.3	107.9	82.0
3-Jun	94.0	75.7	86.8	66.4	58.0	136.5	83.4	110.5	85.1
10-Jun	95.0	75.2	87.9	67.1	58.0	136.5	82.3	113.0	86.9
17-Jun	96.0	75.6	89.1	68.9	61.0	138.6	85.0	119.4	92.6
24-Jun	96.0	75.8	89.1	69.3	60.0	144.9	84.8	120.7	93.6
1-Jul	97.0	78.6	90.1	70.7	64.0	147.0	87.9	125.5	99.9
8-Jul	98.0	80.1	91.1	71.8	66.0	147.0	85.3	128.6	102.9
15-Jul	98.0	78.0	91.2	71.5	65.0	142.1	86.5	126.8	101.6
22-Jul	97.0	77.4	90.9	72.4	68.0	147.0	85.2	130.2	105.5
29-Jul	97.0	76.5	89.9	71.0	65.0	141.4	84.2	123.7	98.4
5-Aug	96.0	78.1	89.9	70.5	62.0	146.3	85.5	124.6	98.8
12-Aug	96.0	78.0	90.2	70.4	63.0	142.1	86.3	123.4	98.3
19-Aug	97.0	77.4	90.4	70.1	64.0	142.1	86.8	122.2	96.5
26-Aug	96.0	75.8	89.2	69.1	60.0	141.4	83.7	119.5	93.8
2-Sep	96.0	74.4	86.9	67.4	57.0	136.5	84.0	114.3	89.3
9-Sep	94.0	75.0	86.2	65.6	54.0	132.3	80.3	110.1	84.6
16-Sep	92.0	75.6	83.6	62.9	50.0	134.4	82.5	104.4	78.5
23-Sep	91.0	75.3	79.8	58.1	46.0	128.1	81.6	93.0	66.9
30-Sep	88.0	70.2	79.0	54.9	42.0	118.3	77.7	83.1	57.6
7-Oct	85.0	71.5	75.8	52.7	39.0	115.5	75.3	78.0	54.5
14-Oct	84.0	70.0	73.9	50.6	37.0	116.2	74.1	73.6	50.0
21-Oct	81.0	65.6	72.3	49.0	36.0	111.3	72.5	69.2	45.9
28-Oct	81.0	67.6	70.7	48.2	34.0	111.3	73.1	67.2	43.8
4-Nov	78.0	65.1	65.7	43.4	28.0	103.6	73.0	58.8	36.1
11-Nov	78.0	65.0	64.1	41.4	28.0	99.4	71.5	55.5	33.7
18-Nov	75.0	62.0	63.5	42.7	28.0	96.6	69.3	57.6	35.2
25-Nov	75.0	68.1	61.0	41.0	26.0	103.6	71.9	55.5	32.9
2-Dec	74.0	67.3	58.3	37.4	25.0	97.3	74.3	47.0	27.0
9-Dec	72.0	62.6	56.7	37.1	20.0	86.8	66.5	46.3	27.3
16-Dec	71.0	64.2	54.1	35.9	18.0	88.2	72.0	43.7	26.3
23-Dec	71.0	60.5	53.3	35.6	12.0	93.1	68.8	44.1	26.0
31-Dec	68.0	63.6	50.2	34.4	17.0	90.3	65.1	40.5	24.7

COLUMBUS AFB

MS

WMO No. 723306

Degree Days, Heating and Cooling
(Base 65°F)



Mean Cooling Degree Days Mean Heating Degree Days

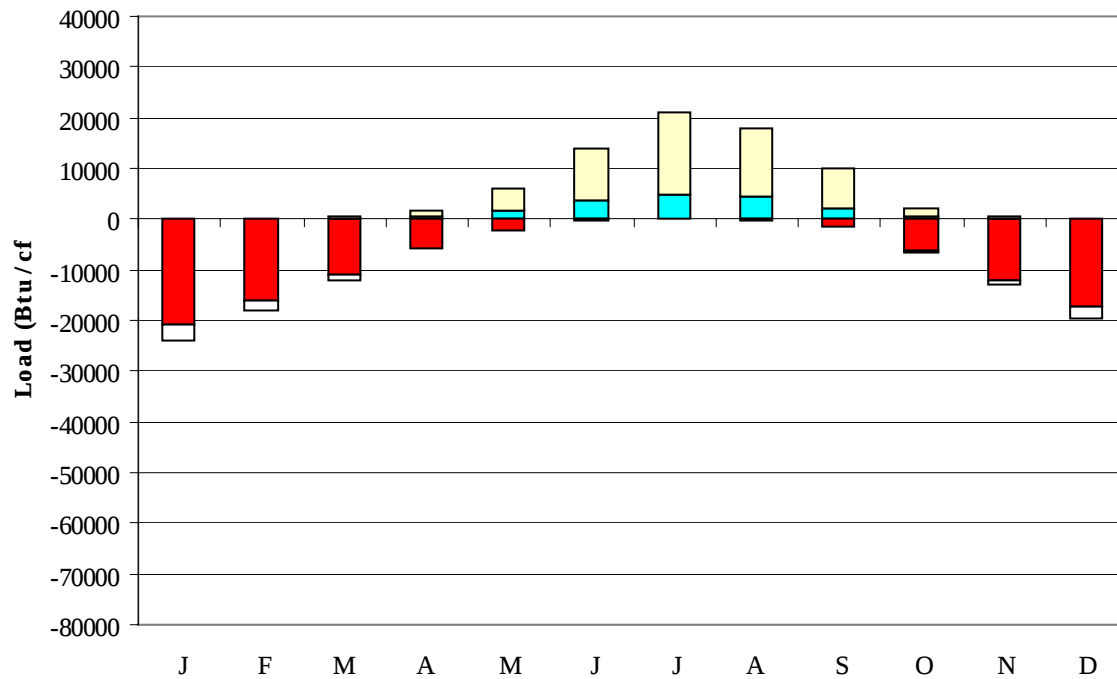
	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	3	711
FEB	11	536
MAR	43	350
APR	100	162
MAY	210	49
JUN	355	6
JUL	445	0
AUG	408	2
SEP	258	37
OCT	94	186
NOV	26	387
DEC	8	581
ANN	1960	3007

COLUMBUS AFB

MS

WMO No. 723306

Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



■ Average Sensible Cooling Load	■ Average Sensible Heating Load
■ Average Latent Cooling (Drying) Load	■ Average Latent Heating (Humidifying) Load

	Average Sensible Cooling Load (Btu/cfm)	Average Sensible Heating Load (Btu/cfm)	Average Latent Cooling Load (Btu/cfm)	Average Latent Heating Load (Btu/cfm)
JAN	1	-20791	31	-3054
FEB	20	-15939	79	-2250
MAR	157	-11019	259	-1073
APR	559	-5610	964	-254
MAY	1630	-2076	4490	-5
JUN	3648	-367	10261	0
JUL	5013	-50	15894	0
AUG	4361	-142	13651	0
SEP	2270	-1502	7711	0
OCT	481	-6320	1771	-140
NOV	47	-12038	505	-920
DEC	5	-17273	191	-2321
ANN	18192	-93127	55807	-10017

Average Annual Solar Radiation – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

City: MERIDIAN
 State: MS
 WBAN No: 13865
 Lat(N): 32.33
 Long(W): 88.75
 Elev(ft): 308

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 0.321
 Vert Gap: 0.257

AVERAGE INCIDENT SOLAR RADIATION (Btu/sq.ft./day), Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Global	820	1070	1380	1720	1880	1960	1870	1770	1510	1290	930	760	1420
	Std Dev	63	86	103	119	111	118	119	105	107	114	80	62	31
	Minimum	700	930	1180	1510	1710	1700	1640	1530	1300	1020	710	650	1340
	Maximum	950	1220	1620	2040	2150	2190	2070	1990	1730	1520	1070	880	1480
	Diffuse	400	490	620	730	860	920	920	860	710	510	420	370	650
Clear Day	Global	1220	1540	1960	2320	2520	2570	2510	2310	2000	1600	1250	1100	1910
NORTH	Global	250	310	380	460	560	630	590	510	420	340	270	230	410
	Diffuse	250	310	380	450	510	540	530	490	420	340	270	230	390
Clear Day	Global	230	280	350	440	590	690	630	490	400	320	250	210	410
EAST	Global	500	650	790	940	1000	1050	1030	1000	870	770	560	470	800
	Diffuse	290	360	460	540	610	650	640	610	520	420	320	270	480
Clear Day	Global	840	1010	1210	1330	1360	1360	1340	1270	1160	990	830	770	1120
SOUTH	Global	1040	1120	1040	890	710	640	660	810	990	1230	1140	1050	940
	Diffuse	390	450	510	540	550	550	550	580	560	500	430	370	500
Clear Day	Global	2020	1940	1630	1170	820	690	740	1000	1390	1740	1910	1970	1420
WEST	Global	520	670	820	970	1020	1020	950	930	850	780	590	490	800
	Diffuse	300	370	470	550	620	650	630	610	530	420	330	280	480
Clear Day	Global	840	1010	1210	1330	1360	1360	1340	1270	1160	990	830	770	1120

Average Annual Solar Heat and Illumination – Nearest Available Site

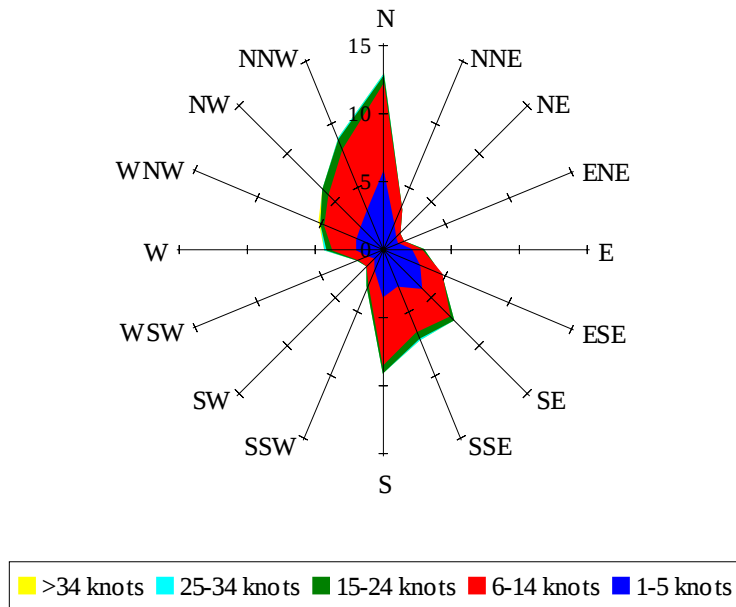
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	550	750	990	1250	1370	1430	1360	1280	1090	920	640	510	1010
NORTH	Unshaded	170	210	260	310	370	410	380	340	290	230	180	160	280
	Shaded	160	200	250	290	340	380	360	320	270	220	170	150	260
EAST	Unshaded	350	450	560	660	710	740	730	710	620	540	390	330	570
	Shaded	330	420	520	610	650	680	670	650	570	510	360	310	520
SOUTH	Unshaded	770	800	700	550	430	400	410	500	640	860	840	780	640
	Shaded	750	760	600	430	360	360	360	400	530	790	820	770	580
WEST	Unshaded	360	470	580	690	730	720	670	650	600	550	410	340	570
	Shaded	340	440	540	630	670	660	610	600	560	510	380	320	520

AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9											
		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	48	82	90	70	27	48	86	102	95	63
	M.Cloudy	26	50	55	42	17	31	61	77	73	46
NORTH	M.Clear	11	15	16	14	8	23	18	17	18	19
	M.Cloudy	11	17	18	15	7	16	19	20	20	17
EAST	M.Clear	78	55	16	14	8	74	70	28	18	16
	M.Cloudy	27	32	18	15	7	34	46	26	20	16
SOUTH	M.Clear	40	67	74	58	23	13	24	34	30	16
	M.Cloudy	17	36	41	31	11	12	22	30	27	16
WEST	M.Clear	11	15	27	71	66	13	18	17	55	74
	M.Cloudy	11	17	23	35	23	12	19	20	44	46
M.Clear	(% hrs)	33	34	33	32	37	44	40	28	28	33

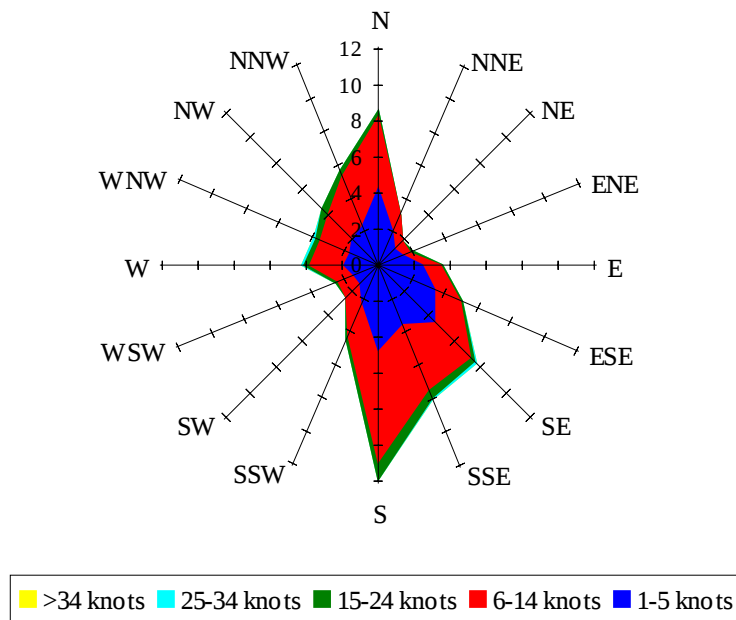
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	32	74	91	80	46	26	55	59	37	4
	M.Cloudy	20	48	63	56	32	14	30	35	21	3
NORTH	M.Clear	10	16	18	17	13	7	12	12	9	2
	M.Cloudy	9	17	19	18	12	6	12	13	9	2
EAST	M.Clear	64	69	26	17	13	55	41	12	9	2
	M.Cloudy	24	38	24	18	12	14	19	13	9	2
SOUTH	M.Clear	21	52	68	59	31	51	85	90	65	10
	M.Cloudy	11	31	43	38	19	13	30	35	21	3
WEST	M.Clear	10	16	18	57	70	7	12	27	56	15
	M.Cloudy	9	17	19	37	35	6	12	17	19	4
M.Clear	(% hrs)	45	45	35	34	38	33	34	33	35	37

Wind Summary - December, January, and February **Labels of Percent Frequency on North Axis**



Percent Calm = 19.63

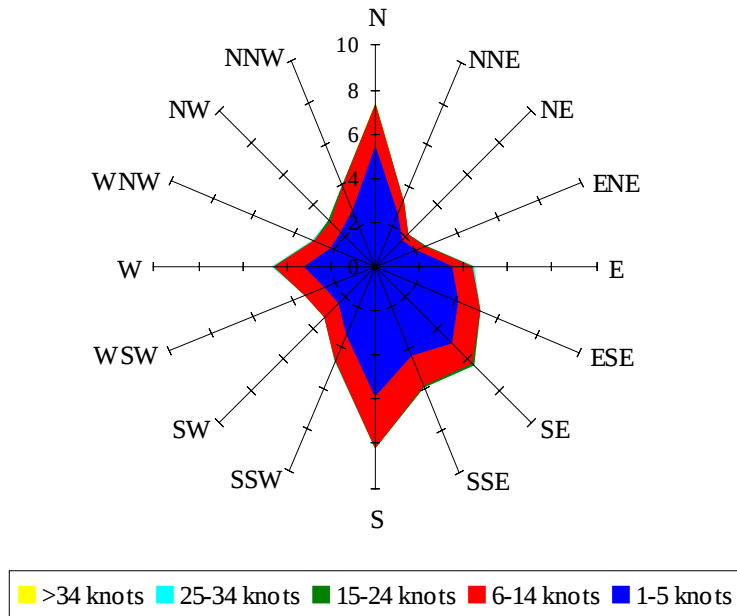
Wind Summary - March, April, and May **Labels of Percent Frequency on North Axis**



Percent Calm = 21.27

Wind Summary - June, July, and August

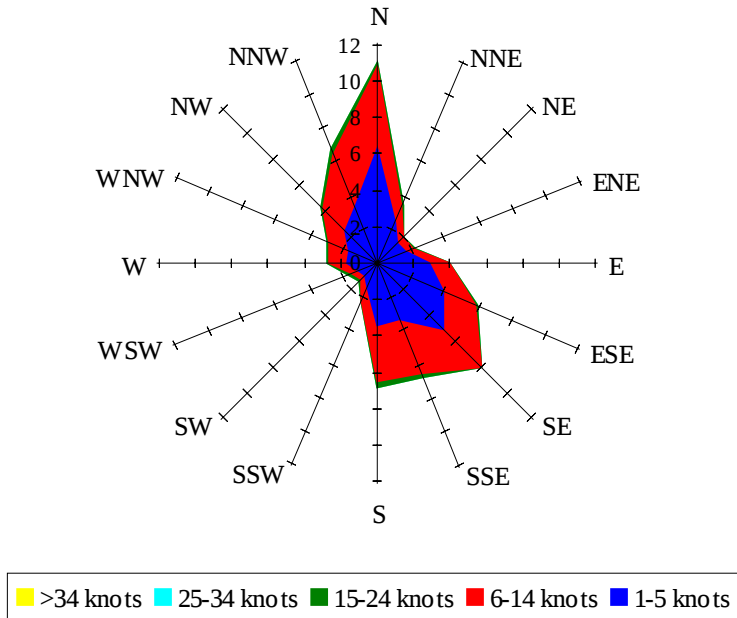
Labels of Percent Frequency on North Axis



Percent Calm = 29.78

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 28.21