

WARNER ROBINS AFB GA

Latitude = 32.63 N

WMO No. 722175

Longitude = 83.60 W

Elevation = 295 feet

Period of Record = 1967 to 1996

Average Pressure = 29.71 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	100	78	107	7.1	W
0.4% Occurrence	97	77	105	6.3	W
1.0% Occurrence	94	76	108	6.3	W
2.0% Occurrence	92	75	107	6.2	W
Mean Daily Range	21	-	-	-	-
97.5% Occurrence	32	29	19	4.8	NNW
99.0% Occurrence	28	25	14	5.0	NNW
99.6% Occurrence	24	21	11	6.1	NNW
Median of Extreme Lows	17	15	7	7.7	NNW
	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	81	93	141	5.6	SSW
0.4% Occurrence	79	91	131	5.2	W
1.0% Occurrence	78	89	127	5.2	W
2.0% Occurrence	77	88	123	5.2	W
	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	84	1.00	3.0	NNW
0.4% Occurrence	137	84	0.90	4.3	S
1.0% Occurrence	133	83	0.88	4.2	W
2.0% Occurrence	129	83	0.85	4.8	W
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		155	1519	1383	3065

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
11	4.0	90	4.8 + 1.7
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 (#)
66.7	0	7	28

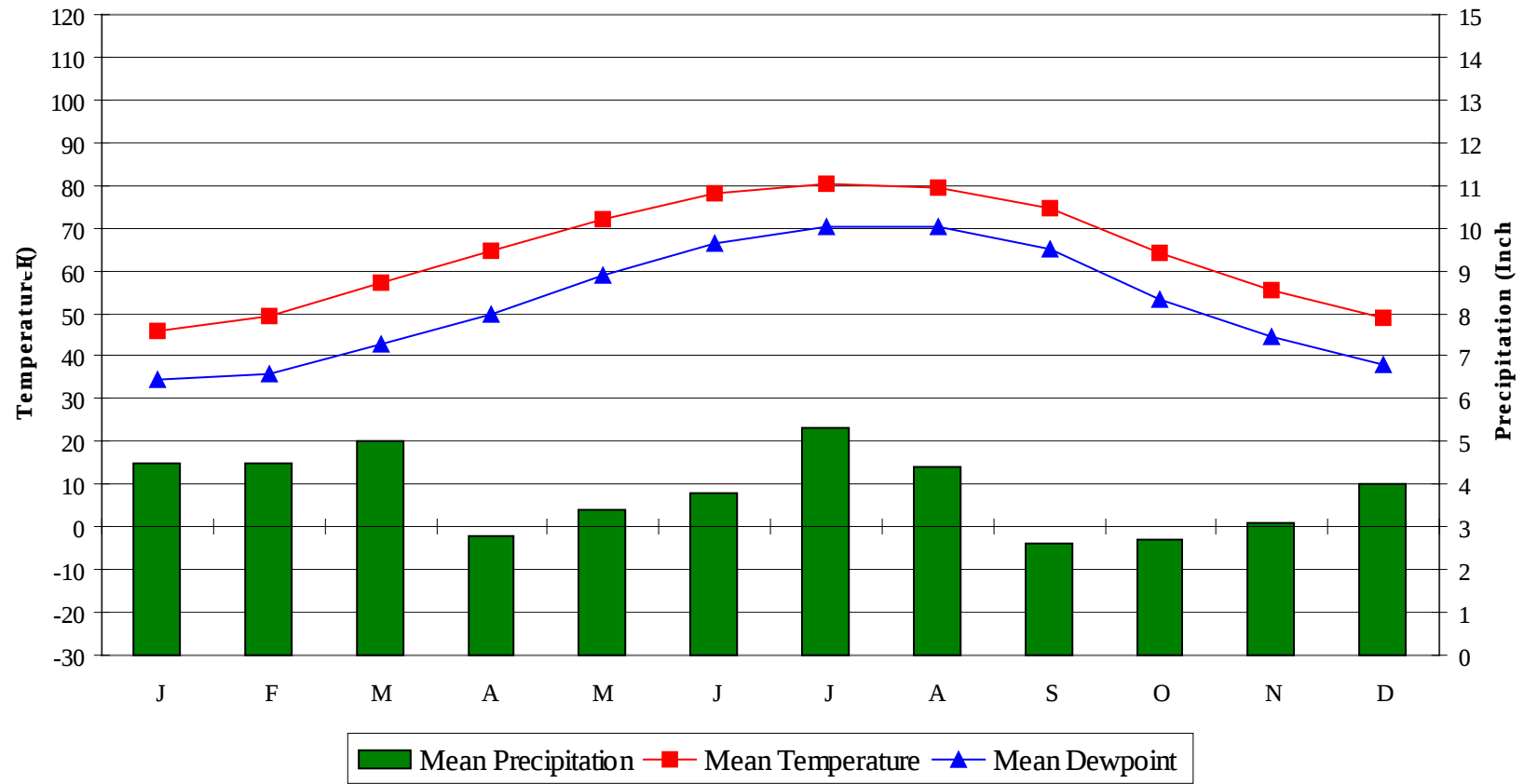
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

WARNER ROBINS AFB

GA

WMO No. 722175

Average Annual Climate

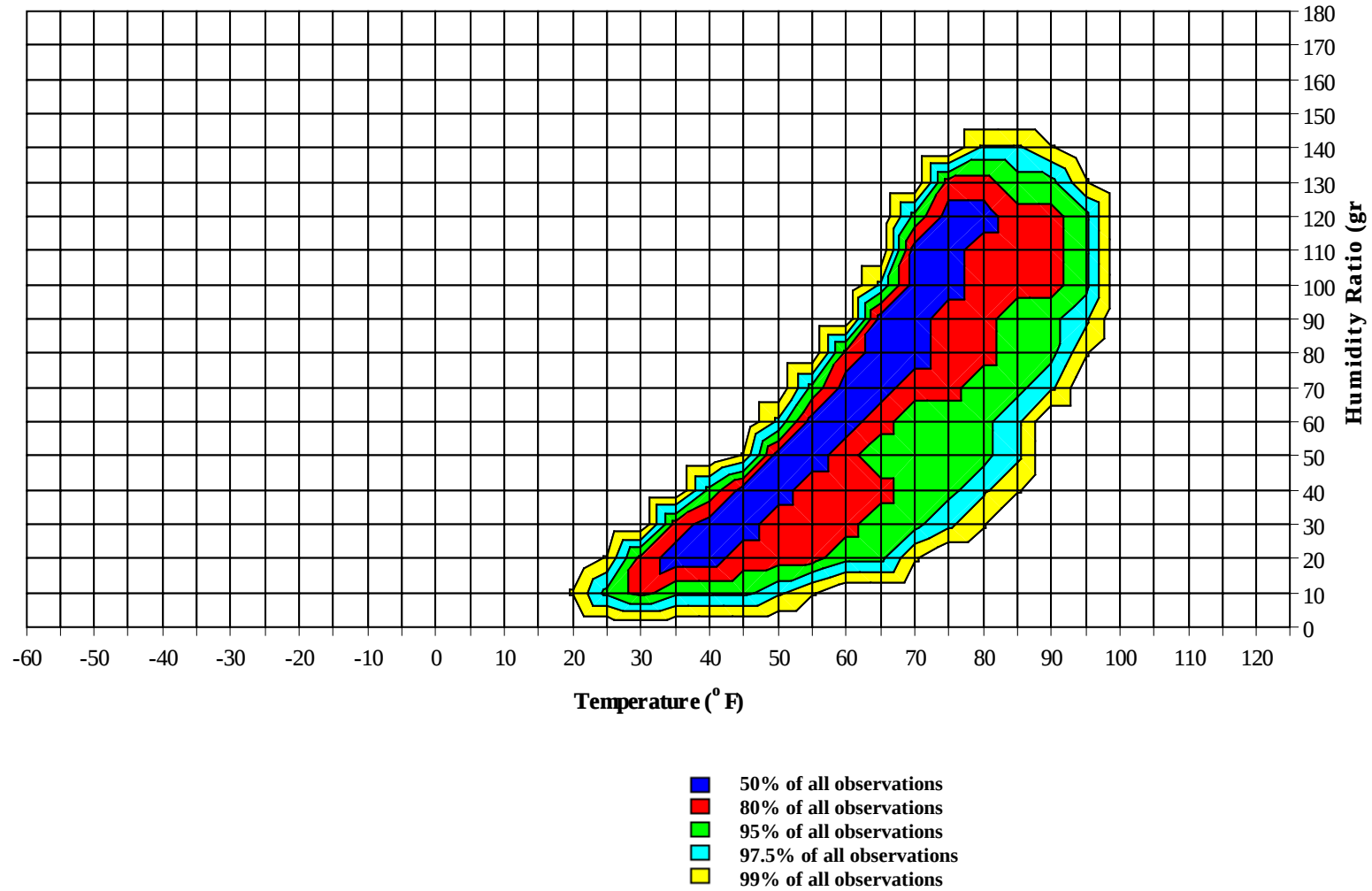


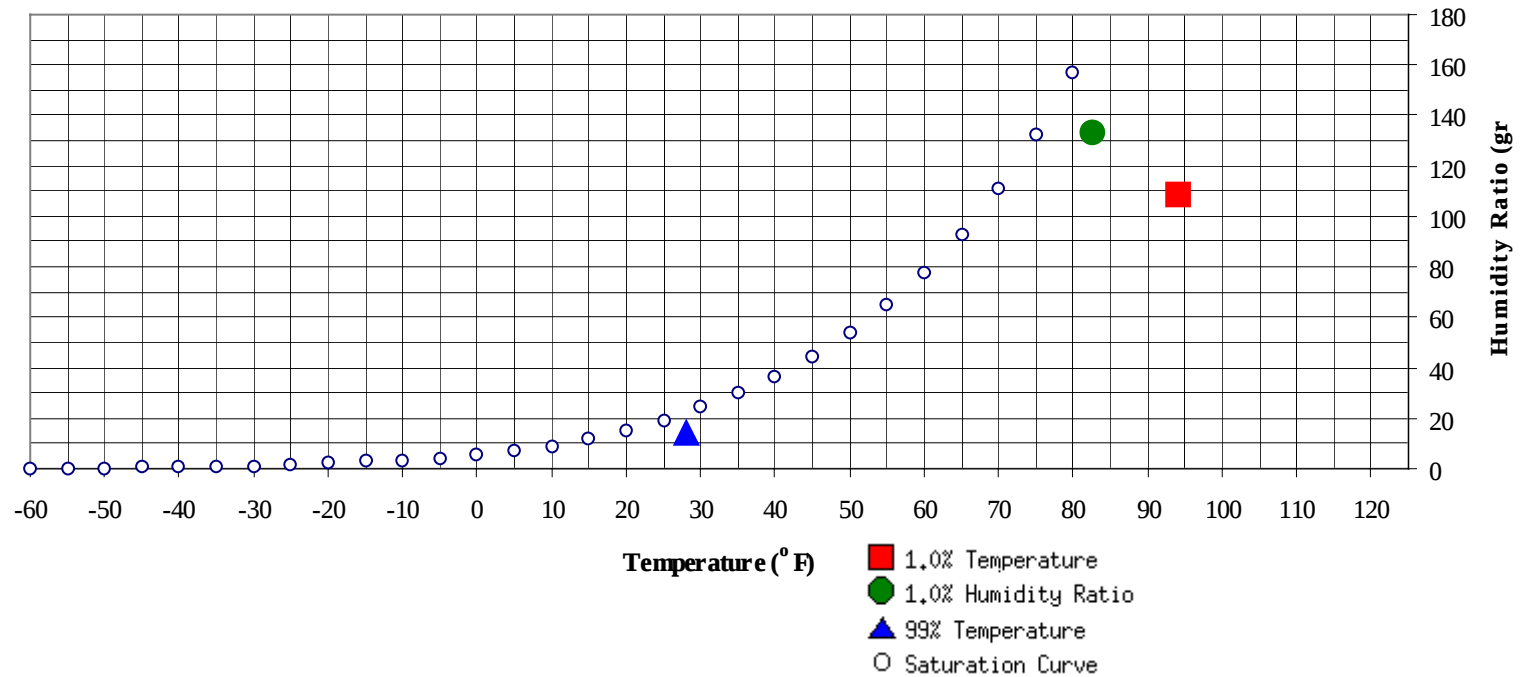
WARNER ROBINS AFB

GA

WMO No. 722175

Long Term Psychrometric Summary



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	28	14.1	8.9	Ratio	133	82.7	77.1	75	40.7

	(°F)	MCHR	MCWB	Enthalpy
		(gr/lb)	(°F)	(btu/lb)
1.0% Dry Bulb	94	108.5	76.2	39.7

WARNER ROBINS AFB

GA

WMO No. 722175

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		
105 / 109															
100 / 104															
95 / 99															
90 / 94															
85 / 89												1	0	1	65.8
80 / 84							1	0	1	66.4		10	5	14	63.8
75 / 79		2	0	2	65.0		5	2	7	63.2		25	13	38	61.7
70 / 74	0	8	3	12	61.8	0	16	7	24	59.7	2	36	26	64	60.0
65 / 69	4	17	11	32	59.2	4	24	18	46	57.8	14	39	37	90	57.9
60 / 64	12	27	24	63	56.2	16	31	30	77	55.1	29	42	46	117	55.0
55 / 59	16	33	28	77	51.1	18	30	30	77	50.2	41	34	43	118	51.1
50 / 54	24	38	39	100	46.8	24	35	36	95	45.7	45	29	33	107	46.6
45 / 49	34	41	44	120	42.3	32	31	35	99	41.8	42	17	24	84	42.4
40 / 44	40	35	37	112	37.7	38	25	31	94	37.3	35	10	14	58	37.8
35 / 39	39	24	30	93	33.1	36	16	19	72	33.0	26	3	6	35	33.2
30 / 34	39	14	20	72	28.7	31	7	11	50	28.6	11	1	1	13	29.1
25 / 29	26	6	9	41	24.2	18	2	3	23	24.5	3	0	1	4	24.7
20 / 24	10	2	2	14	19.7	5	1	1	6	19.4	1	0	0	1	19.0
15 / 19	3	1	1	4	14.6	2	0	0	2	15.0	0			0	15.7
10 / 14	1	0	0	1	9.6	0			0	12.5					
5 / 9	0	0	0	0	4.8										
0 / 4	0	0		0	1.3										
-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.

WARNER ROBINS AFB

GA

WMO No. 722175

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		
105 / 109												0	0	0	77.5
100 / 104												1	1	2	76.3
95 / 99			0	0	67.0		1	0	2	72.9		12	4	17	75.6
90 / 94		2	0	2	68.8		14	5	19	71.9		42	17	58	74.3
85 / 89		14	5	19	66.4		43	18	61	69.7	0	70	34	105	72.9
80 / 84		35	17	52	65.0	0	64	33	98	68.0	6	62	47	115	71.8
75 / 79	1	43	26	69	62.8	7	56	46	109	66.5	44	36	65	144	71.1
70 / 74	7	49	40	96	60.9	44	42	63	149	65.6	110	14	55	179	68.9
65 / 69	31	43	50	123	59.3	77	19	46	141	63.0	56	3	15	73	64.6
60 / 64	51	30	45	126	56.5	54	7	23	85	58.6	18	0	2	21	59.4
55 / 59	52	15	30	97	52.2	38	2	11	52	54.2	5	0	0	6	54.8
50 / 54	42	8	17	67	47.9	20	1	2	22	49.7	1	0	0	1	50.7
45 / 49	31	2	8	41	43.6	7	0	0	7	45.6					
40 / 44	18	1	2	21	39.1	0			0	41.6					
35 / 39	6		0	6	34.5										
30 / 34	1			1	30.4										
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															

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WARNER ROBINS AFB

GA

WMO No. 722175

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		
105 / 109		0	0	0	77.0										
100 / 104		4	1	4	77.4		2	0	2	77.9		0		0	77.2
95 / 99		21	8	29	77.1		14	5	19	77.3		4	1	5	75.3
90 / 94		61	25	86	76.3		51	19	70	76.4		26	6	32	74.7
85 / 89	1	68	36	106	75.3	0	75	36	111	75.3		55	18	72	73.3
80 / 84	16	55	58	129	74.5	7	61	55	123	74.4	1	61	35	97	71.8
75 / 79	89	29	79	197	72.8	78	34	84	196	73.0	22	47	64	132	71.0
70 / 74	124	8	39	172	70.2	133	10	43	186	70.2	97	27	67	191	68.8
65 / 69	15	1	2	18	65.7	25	2	5	31	65.2	61	13	29	103	64.0
60 / 64	2	0	0	3	60.7	5	0	1	6	60.9	32	5	15	52	59.3
55 / 59											18	1	5	24	54.8
50 / 54											8	0	1	9	50.3
45 / 49											2	0	0	2	46.1
40 / 44															
35 / 39															
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															

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WARNER ROBINS AFB

GA

WMO No. 722175

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		
105 / 109															
100 / 104															
95 / 99		0		0	78.3										
90 / 94		3	0	3	72.3										
85 / 89		13	3	15	70.0		0		0	67.6					
80 / 84	0	35	10	45	67.4		6	1	7	67.1		0	0	0	68.8
75 / 79	1	50	22	74	65.6		22	5	28	64.9		7	1	8	65.6
70 / 74	17	53	45	115	64.1	4	36	19	60	62.9	2	16	7	25	63.6
65 / 69	37	43	52	131	61.2	17	38	32	86	60.3	8	23	16	47	60.5
60 / 64	50	27	47	123	57.6	24	39	38	101	56.2	14	33	27	74	56.0
55 / 59	47	15	33	95	53.3	32	36	38	106	51.4	21	36	33	90	51.3
50 / 54	36	7	22	66	48.8	31	28	38	98	47.0	28	40	41	108	46.5
45 / 49	33	2	11	45	44.4	35	19	31	86	42.9	36	38	45	120	42.3
40 / 44	20	0	3	24	39.9	39	10	24	73	38.7	37	27	37	101	38.0
35 / 39	6		0	7	35.6	32	4	10	46	34.4	38	16	23	77	33.6
30 / 34	1			1	31.4	22	0	3	25	30.3	37	8	13	59	29.1
25 / 29						3	0	0	4	25.5	20	2	4	26	24.7
20 / 24						0		0	0	21.8	5	1	1	7	20.0
15 / 19											2	0	0	2	15.3
10 / 14											0	0		1	10.6
5 / 9															
0 / 4															
-5 / -1															

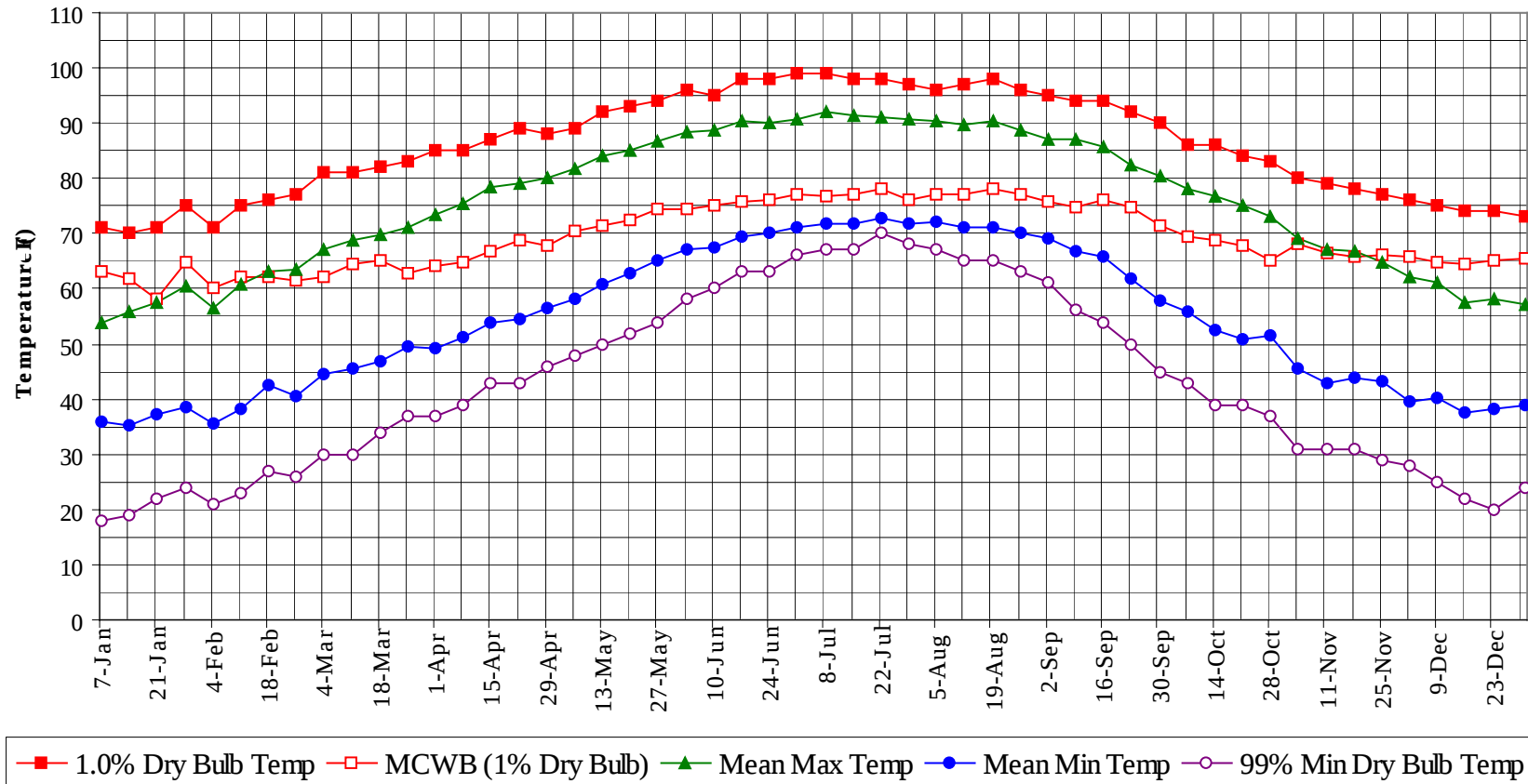
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

WARNER ROBINS AFB GA WMO No. 722175
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1967 to 1996

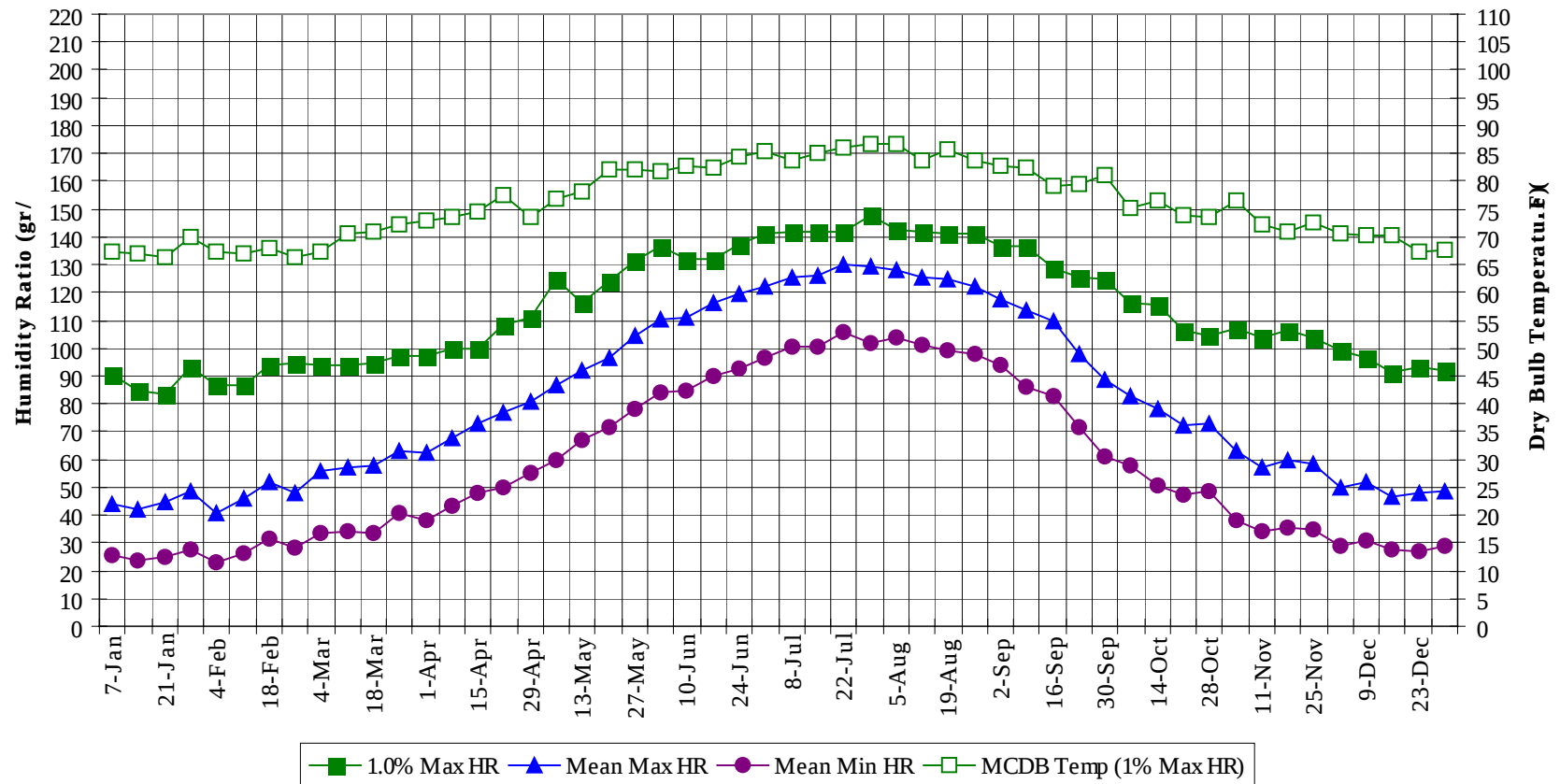
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
105 / 109		0	0	0	77.2
100 / 104		7	2	9	77.3
95 / 99		53	18	72	76.6
90 / 94		198	73	270	75.3
85 / 89	1	339	150	490	73.3
80 / 84	30	389	260	679	71.2
75 / 79	242	356	407	1004	69.7
70 / 74	541	315	415	1271	66.8
65 / 69	347	264	311	923	61.4
60 / 64	308	242	297	847	56.7
55 / 59	288	203	252	743	51.9
50 / 54	257	185	230	672	47.1
45 / 49	253	152	200	604	42.6
40 / 44	227	108	148	483	38.0
35 / 39	183	63	89	336	33.5
30 / 34	142	31	49	221	29.0
25 / 29	71	11	17	99	24.5
20 / 24	21	3	3	27	19.7
15 / 19	6	1	1	8	14.9
10 / 14	2	0	0	2	10.2
5 / 9	0	0	0	0	4.8
0 / 4	0	0		0	1.3
-5 / -1	0			0	-2.0

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



WARNER ROBINS AFB**GA****WMO No. 722175****Long Term Dry Bulb Temperature and Humidity Summary**

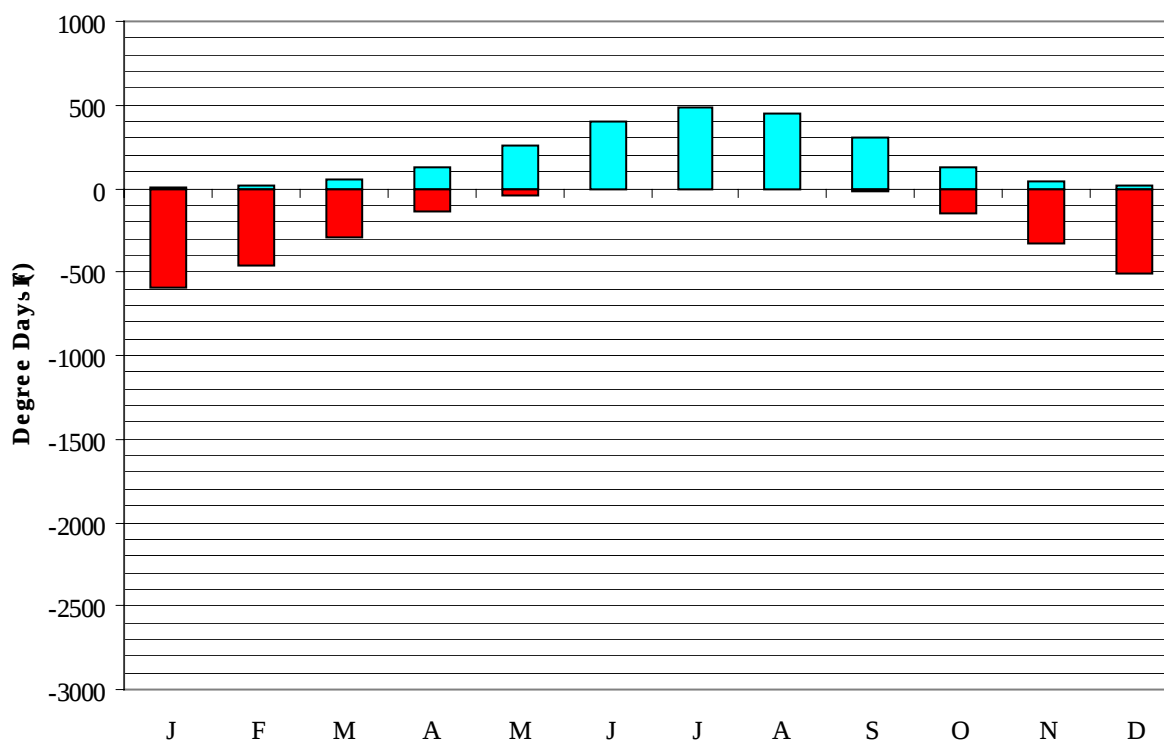
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	71.0	63.3	54.0	35.9	18.0	90.3	67.3	43.7	25.4
14-Jan	70.0	61.9	55.7	35.1	19.0	84.7	67.1	42.2	23.9
21-Jan	71.0	58.3	57.6	37.1	22.0	83.3	66.3	44.4	24.9
28-Jan	75.0	64.8	60.5	38.4	24.0	93.1	70.1	48.9	27.6
4-Feb	71.0	60.0	56.4	35.6	21.0	86.8	67.4	40.5	23.2
11-Feb	75.0	62.2	60.9	38.2	23.0	86.8	67.1	45.9	26.4
18-Feb	76.0	62.1	63.1	42.5	27.0	93.8	67.9	51.7	31.4
25-Feb	77.0	61.4	63.4	40.6	26.0	94.5	66.3	48.1	28.0
4-Mar	81.0	62.0	67.1	44.4	30.0	93.8	67.3	55.5	33.4
11-Mar	81.0	64.5	68.7	45.5	30.0	93.8	70.5	57.2	34.4
18-Mar	82.0	65.0	70.0	46.9	34.0	94.5	71.0	57.9	33.8
25-Mar	83.0	62.7	71.2	49.4	37.0	97.3	72.2	62.8	40.9
1-Apr	85.0	64.0	73.5	49.1	37.0	97.3	73.0	62.3	38.4
8-Apr	85.0	64.8	75.4	51.2	39.0	100.1	73.5	67.9	43.5
15-Apr	87.0	66.8	78.5	53.9	43.0	100.1	74.5	73.0	47.9
22-Apr	89.0	68.7	79.0	54.4	43.0	108.5	77.4	76.8	50.1
29-Apr	88.0	67.8	80.1	56.5	46.0	111.3	73.5	81.1	55.2
6-May	89.0	70.5	81.7	58.1	48.0	124.6	77.0	86.9	59.8
13-May	92.0	71.6	84.0	61.0	50.0	116.2	78.3	91.9	66.9
20-May	93.0	72.5	85.2	62.9	52.0	123.9	82.2	96.2	71.5
27-May	94.0	74.4	86.8	65.2	54.0	131.6	82.2	104.6	78.3
3-Jun	96.0	74.4	88.3	67.2	58.0	136.5	81.8	110.6	84.1
10-Jun	95.0	75.0	88.7	67.3	60.0	132.3	82.7	110.8	84.5
17-Jun	98.0	75.8	90.4	69.5	63.0	132.3	82.6	116.6	90.3
24-Jun	98.0	76.0	90.1	70.0	63.0	137.2	84.5	119.7	92.8
1-Jul	99.0	77.0	90.6	71.2	66.0	141.4	85.5	122.4	96.2
8-Jul	99.0	76.8	92.0	71.9	67.0	142.1	83.9	125.6	100.2
15-Jul	98.0	77.0	91.4	71.9	67.0	142.1	85.1	126.3	100.4
22-Jul	98.0	78.0	91.0	72.8	70.0	142.1	86.1	129.8	105.7
29-Jul	97.0	76.2	90.6	71.9	68.0	147.7	86.5	129.2	101.7
5-Aug	96.0	76.9	90.4	72.0	67.0	142.8	86.8	128.2	103.5
12-Aug	97.0	77.0	89.6	71.2	65.0	142.1	83.6	125.2	100.9
19-Aug	98.0	78.1	90.6	71.2	65.0	141.4	85.8	124.5	99.4
26-Aug	96.0	77.0	88.8	70.3	63.0	141.4	83.9	122.1	97.6
2-Sep	95.0	75.8	87.1	69.0	61.0	136.5	82.6	117.4	93.7
9-Sep	94.0	74.8	87.2	66.7	56.0	136.5	82.4	113.5	86.4
16-Sep	94.0	76.0	85.9	65.7	54.0	128.8	79.3	110.0	83.1
23-Sep	92.0	74.8	82.5	61.8	50.0	125.3	79.4	97.8	71.5
30-Sep	90.0	71.5	80.6	57.8	45.0	124.6	81.0	88.8	61.3
7-Oct	86.0	69.6	77.9	55.8	43.0	116.2	75.2	82.7	57.7
14-Oct	86.0	68.7	76.7	52.6	39.0	115.5	76.6	77.9	50.7
21-Oct	84.0	67.9	75.0	50.9	39.0	106.4	74.0	72.3	47.2
28-Oct	83.0	65.1	73.1	51.4	37.0	104.3	73.5	72.9	48.8
4-Nov	80.0	68.2	69.0	45.7	31.0	107.1	76.6	63.1	38.3
11-Nov	79.0	66.6	67.3	42.9	31.0	103.6	72.4	57.4	34.0
18-Nov	78.0	65.8	66.8	43.9	31.0	106.4	71.0	59.8	35.4
25-Nov	77.0	66.1	64.7	43.1	29.0	103.6	72.5	58.4	34.8
2-Dec	76.0	65.6	62.1	39.5	28.0	99.4	70.5	50.0	28.8
9-Dec	75.0	64.8	61.1	40.2	25.0	96.6	70.3	52.1	30.7
16-Dec	74.0	64.5	57.6	37.7	22.0	91.0	70.3	46.8	27.4
23-Dec	74.0	65.3	58.2	38.1	20.0	93.1	67.4	47.8	27.2
31-Dec	73.0	65.5	57.1	39.0	24.0	91.7	67.6	48.6	28.9

WARNER ROBINS AFB

GA

WMO No. 722175

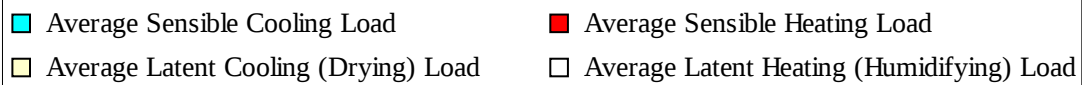
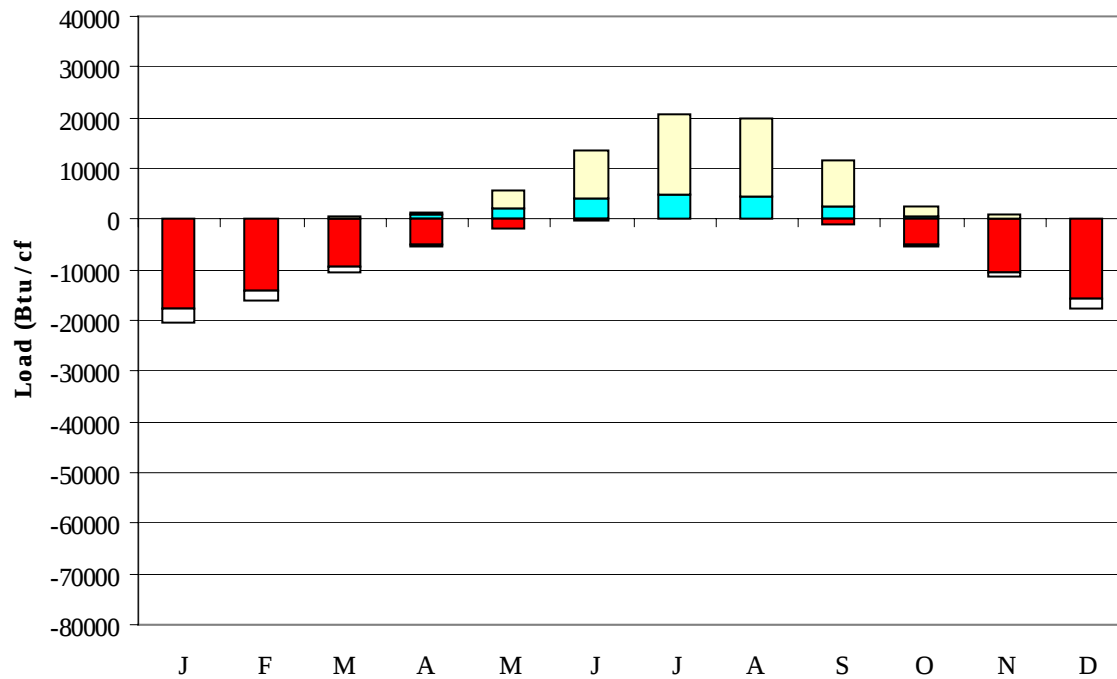
Degree Days, Heating and Cooling (Base 65°F)



■ Mean Cooling Degree Days ■ Mean Heating Degree Days

	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	6	594
FEB	14	458
MAR	54	295
APR	126	142
MAY	255	44
JUN	396	5
JUL	480	0
AUG	450	1
SEP	306	20
OCT	128	146
NOV	42	329
DEC	14	513
ANN	2271	2547

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



	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	3	-17703	88	-2775
FEB	14	-13896	133	-2200
MAR	182	-9523	294	-1106
APR	770	-5021	732	-303
MAY	2073	-1832	3770	-5
JUN	3945	-274	9799	0
JUL	5043	-25	15432	0
AUG	4445	-59	15393	0
SEP	2583	-906	8941	-1
OCT	708	-5123	1958	-112
NOV	98	-10397	754	-900
DEC	12	-15532	245	-2078
ANN	19876	-80291	57539	-9480

Average Annual Solar Radiation – Nearest Available Site

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

City: MACON
 State: GA
 WBAN No: 3813
 Lat(N): 32.7
 Long(W): 83.65
 Elev(ft): 361

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 0.331
 Vert Gap: 0.261

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	840	1110	1440	1810	1970	2010	1900	1780	1520	1310	960	780	1460
	Std Dev	64	101	119	108	133	137	183	116	112	122	75	68	42
	Minimum	700	930	1230	1610	1640	1730	1390	1580	1280	1080	750	650	1360
	Maximum	980	1350	1640	2060	2270	2320	2230	1990	1790	1560	1090	910	1540
	Diffuse	370	460	580	690	830	900	910	830	710	490	390	340	630
Clear Day	Global	1200	1530	1940	2320	2520	2580	2510	2310	1990	1580	1230	1080	1900
NORTH	Global	240	300	380	460	560	630	590	500	420	330	260	220	410
	Diffuse	240	300	380	440	510	540	520	480	420	330	260	220	390
Clear Day	Global	230	280	350	440	580	690	630	490	390	320	250	210	410
EAST	Global	520	680	840	1010	1050	1070	1020	960	860	780	600	490	820
	Diffuse	290	360	460	550	610	640	630	590	520	410	320	270	470
Clear Day	Global	830	1010	1190	1330	1360	1360	1330	1270	1150	980	820	740	1110
SOUTH	Global	1130	1200	1120	940	740	650	670	820	1000	1270	1240	1140	990
	Diffuse	380	440	500	540	550	550	550	570	560	500	420	370	490
Clear Day	Global	2000	1940	1640	1180	830	700	750	1010	1410	1740	1900	1940	1420
WEST	Global	550	700	860	1020	1050	1030	970	960	870	800	610	510	830
	Diffuse	300	370	470	560	620	650	630	600	520	420	320	270	480
Clear Day	Global	830	1010	1190	1330	1360	1360	1330	1270	1150	980	820	740	1110

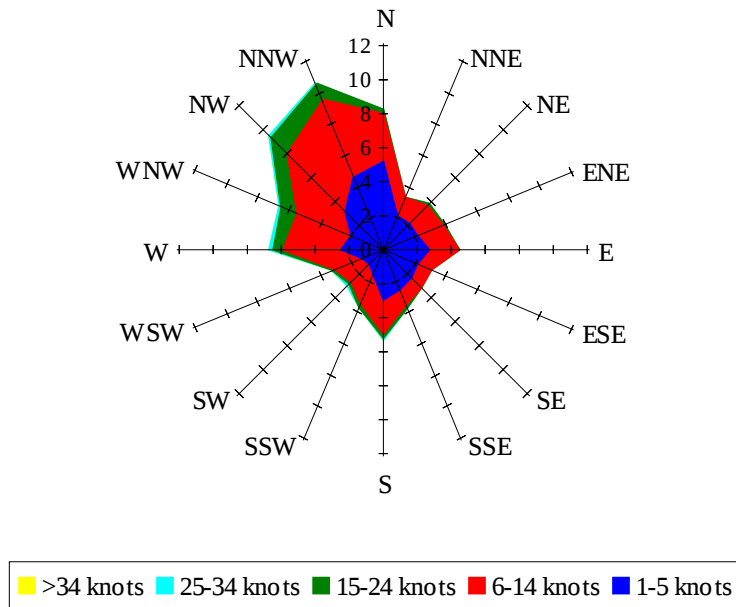
Average Annual Solar Heat and Illumination – Nearest Available Site

(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	570	780	1030	1320	1430	1460	1380	1300	1100	930	660	520	1040
NORTH	Unshaded	170	210	260	310	370	400	380	340	290	230	180	150	280
	Shaded	160	190	240	290	340	380	360	320	270	220	170	140	260
EAST	Unshaded	360	480	590	720	750	760	720	680	610	550	410	340	580
	Shaded	340	440	550	660	680	690	650	630	560	510	390	320	540
SOUTH	Unshaded	840	860	750	580	440	400	420	500	650	890	910	850	670
	Shaded	820	820	640	440	360	360	360	400	540	810	890	840	600
WEST	Unshaded	380	490	610	730	750	730	680	680	610	570	430	350	580
	Shaded	360	460	570	670	680	670	620	620	570	530	400	330	540

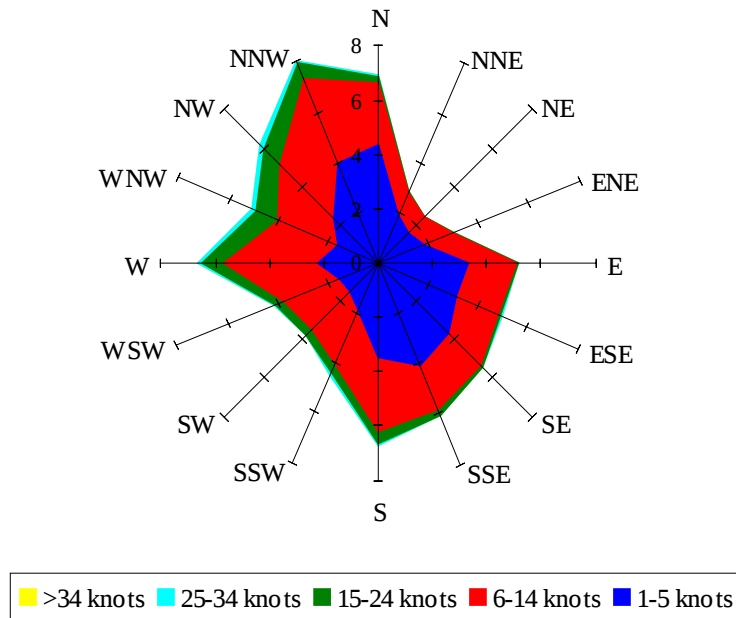
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	32	73	91	79	43	32	77	100	100	76
	M.Cloudy	19	45	58	52	27	22	52	77	77	55
NORTH	M.Clear	9	14	16	15	10	22	17	18	18	17
	M.Cloudy	8	15	18	17	10	13	17	20	19	17
EAST	M.Clear	72	69	22	15	10	61	78	45	18	17
	M.Cloudy	24	36	21	17	10	28	46	37	19	17
SOUTH	M.Clear	28	62	76	66	36	10	18	33	34	20
	M.Cloudy	13	33	44	39	19	9	18	30	30	19
WEST	M.Clear	9	14	16	60	77	10	17	18	41	74
	M.Cloudy	8	15	18	36	34	9	17	20	35	48
M.Clear	(% hrs)	38	38	36	36	38	41	46	36	31	34
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	17	63	88	87	59	13	47	60	47	13
	M.Cloudy	11	38	61	64	41	8	26	35	28	8
NORTH	M.Clear	7	15	18	18	15	5	10	12	10	5
	M.Cloudy	5	14	19	19	14	4	10	13	11	4
EAST	M.Clear	44	76	43	18	15	41	52	13	10	5
	M.Cloudy	14	34	32	19	14	10	21	13	11	4
SOUTH	M.Clear	10	44	65	64	42	31	78	92	78	31
	M.Cloudy	6	24	42	44	26	8	28	37	31	10
WEST	M.Clear	7	15	18	43	71	5	10	13	52	42
	M.Cloudy	5	14	19	33	40	4	10	13	23	12
M.Clear	(% hrs)	41	44	37	34	41	38	38	39	38	38

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



Percent Calm = 18.49

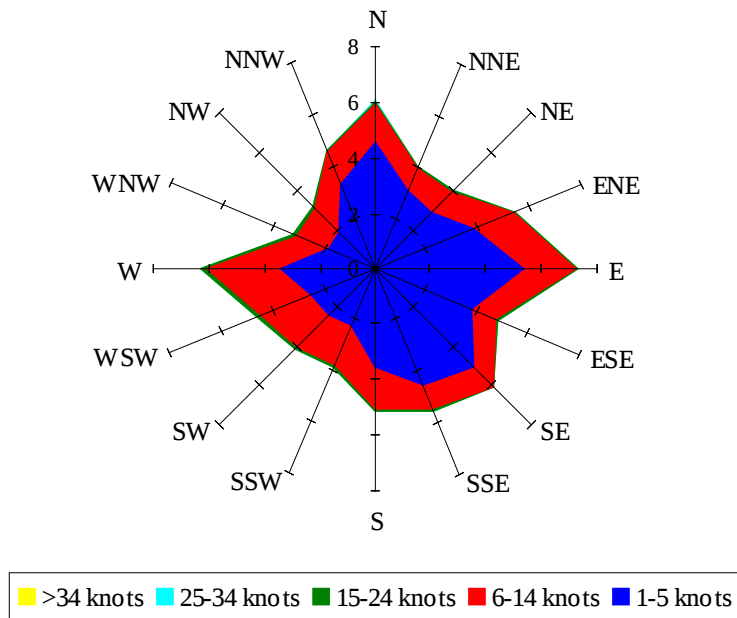
Wind Summary - March, April, and May **Labels of Percent Frequency on North Axis**



Percent Calm = 18.61

Wind Summary - June, July, and August

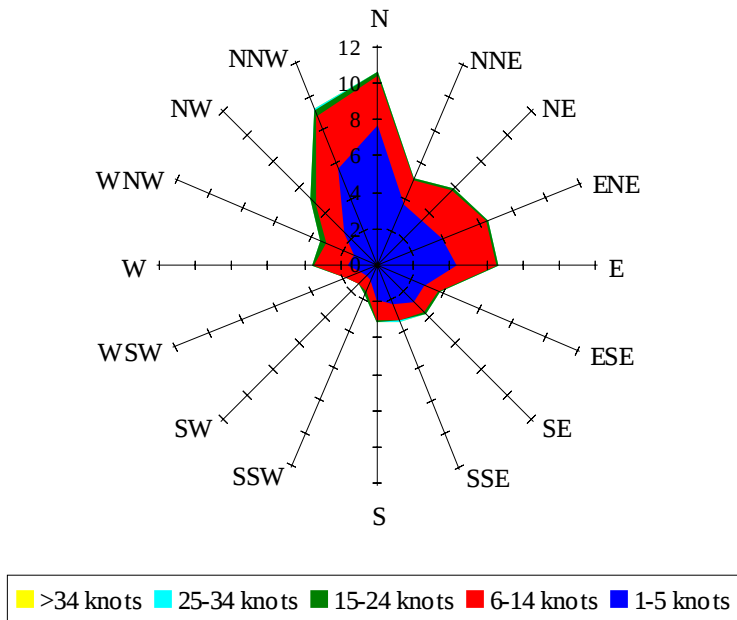
Labels of Percent Frequency on North Axis



Percent Calm = 22.15

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 26.00