

DIEGO GARCIA BT

Latitude = 7.30 S

WMO No. 619670

Longitude = 72.40 E

Elevation = 10 feet

Period of Record = 1973 to 1996

Average Pressure = 29.81 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	93	83	153	6.7	E
0.4% Occurrence	90	80	137	7.2	E
1.0% Occurrence	89	79	135	7.6	E
2.0% Occurrence	88	79	134	7.7	E
Mean Daily Range	8	-	-	-	-
97.5% Occurrence	75	73	118	8.9	SE
99.0% Occurrence	74	73	118	8.7	SE
99.6% Occurrence	73	71	114	8.9	SE
Median of Extreme Lows	72	71	114	8.9	SE
	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	85	88	176	6.6	E
0.4% Occurrence	82	86	156	7.9	E
1.0% Occurrence	82	86	156	7.9	E
2.0% Occurrence	81	85	151	8.0	E
	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	187	87	1.23	5.2	S
0.4% Occurrence	162	85	1.07	7.7	E
1.0% Occurrence	160	84	1.06	8.1	E
2.0% Occurrence	151	83	0.99	8.1	ESE
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		1	5358	7725	8533

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
10	N/A	N/A	18.8 + 4.7
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 (#)
83.5	N/A	N/A	0

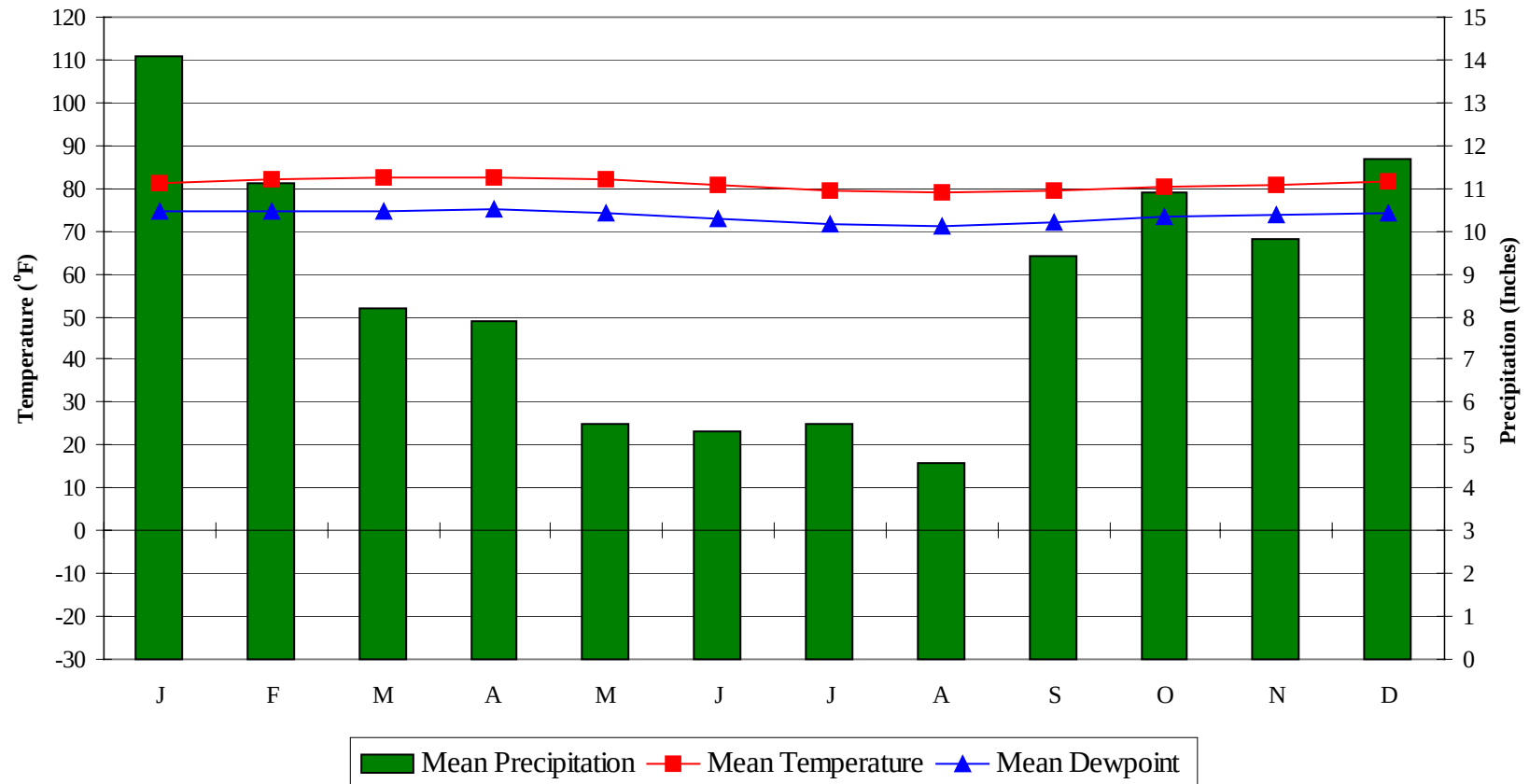
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

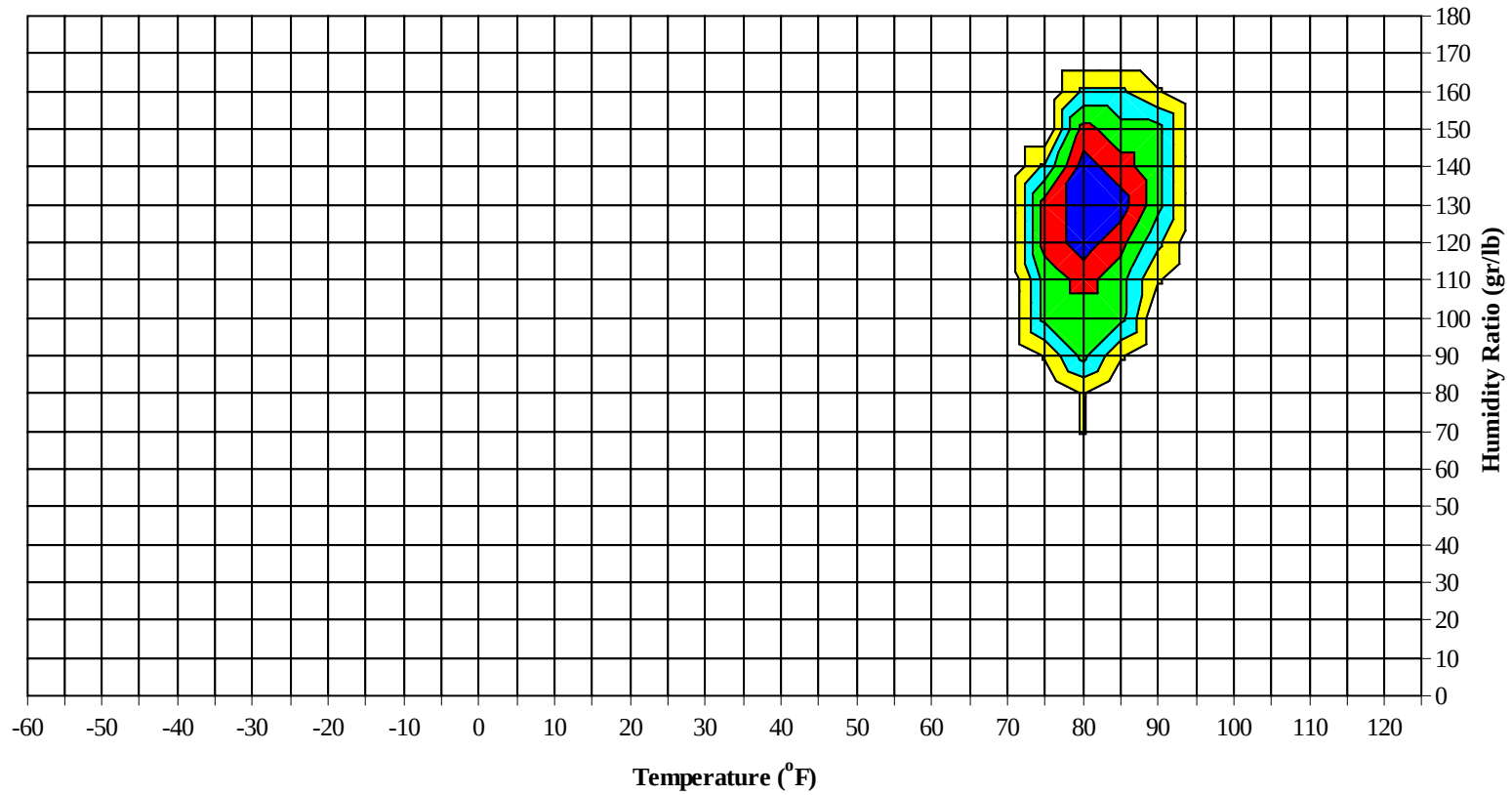


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Long Term Psychrometric Summary



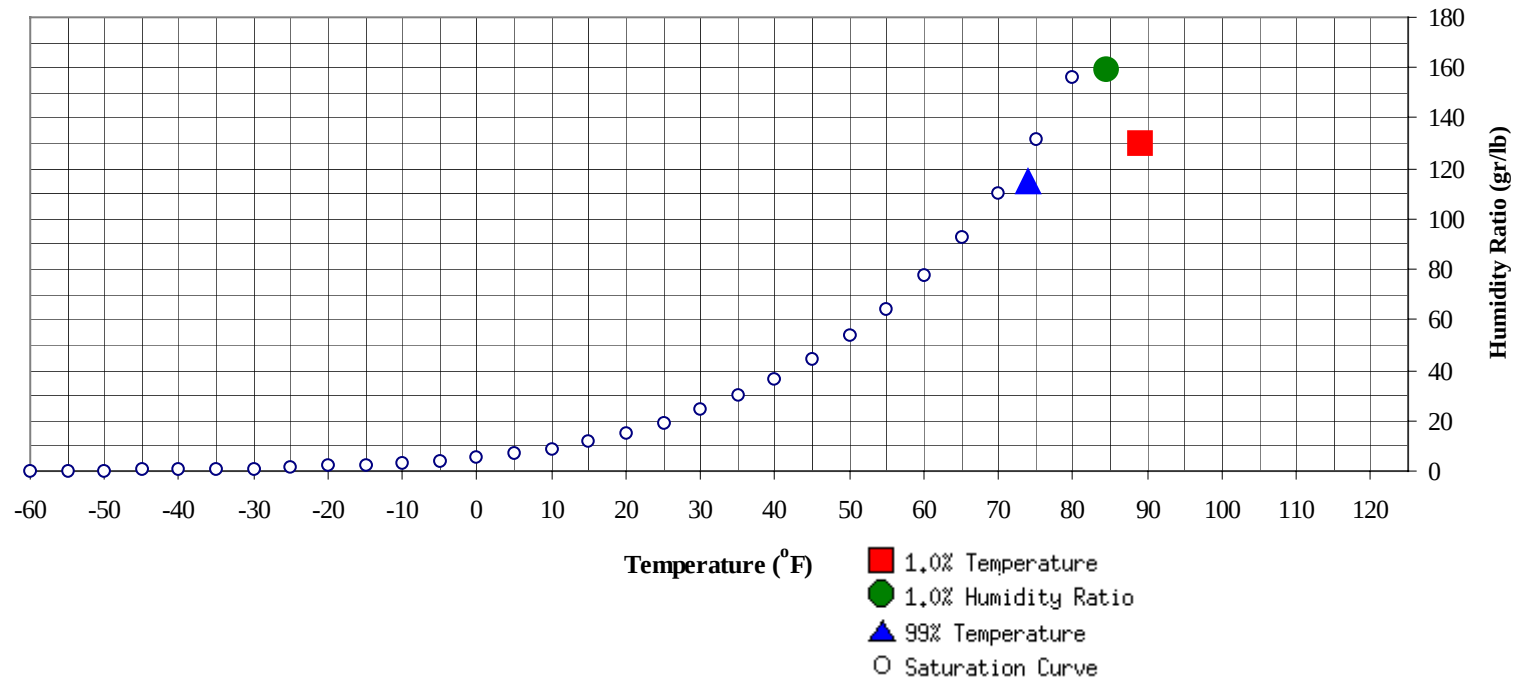
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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Psychrometric Summary of Peak Design Values



99% Dry Bulb	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)	1.0% Humidity Ratio	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
	74	115.1	35.7		159.6	84.4	81.7	80.6	45.3

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	89	129.8	78.3	41.8

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Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)**Period of Record = 1973 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								0	0	79.0		0	0	0	84.0
90 / 94	0	6	0	6	80.3		9	0	9	79.9		22	1	23	80.3
85 / 89	2	74	8	84	78.3	3	91	14	108	78.5	6	123	22	151	78.7
80 / 84	120	133	157	410	76.6	131	104	157	392	76.7	164	88	185	437	76.8
75 / 79	124	33	81	238	75.1	87	18	52	158	75.2	77	13	40	130	75.1
70 / 74	2	2	2	6	71.9	3	1	1	5	71.9	1	1	0	2	71.9
65 / 69															

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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Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)**Period of Record = 1973 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											
95 / 99		0		0	84.0										
90 / 94		18	0	18	79.4		6	0	6	78.0	0	1	0	1	78.8
85 / 89	8	128	18	154	78.7	4	114	7	125	78.1	1	47	1	49	77.4
80 / 84	164	82	190	437	76.9	148	114	186	449	76.3	85	172	121	378	75.7
75 / 79	67	11	31	109	75.3	94	13	54	161	74.8	148	19	116	283	74.1
70 / 74	1	0	1	2	71.4	2	0	1	3	71.7	6	1	2	9	70.7
65 / 69															

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Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)**Period of Record = 1973 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															
95 / 99															
90 / 94		0	0	0	80.0		0		0	79.0		0		0	80.9
85 / 89	0	23	0	23	76.4	0	10	0	10	76.3	0	25	1	26	76.5
80 / 84	36	189	60	285	75.2	21	205	41	267	74.9	37	183	64	285	75.3
75 / 79	202	33	183	418	73.3	219	31	202	452	73.0	196	29	171	396	73.5
70 / 74	10	3	5	18	71.3	8	2	5	15	70.8	7	2	4	13	71.7
65 / 69						0			0	68.0	0		0	0	69.0

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.

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Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)**Period of Record = 1973 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	80.6		3	0	3	82.8		0	6	0	84.8
85 / 89	1	46	2	49	77.4	3	70	5	78	78.0	6	95	10	111	78.1
80 / 84	64	165	94	323	76.0	91	141	133	365	76.3	118	121	156	395	76.4
75 / 79	176	35	148	358	74.3	144	24	101	270	74.7	123	24	81	228	75.0
70 / 74	7	2	4	13	71.8	2	1	1	4	72.0	2	1	1	4	71.4
65 / 69		0	0	0	67.7								0	0	67.0

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.

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

Period of Record = 1973 to 1996

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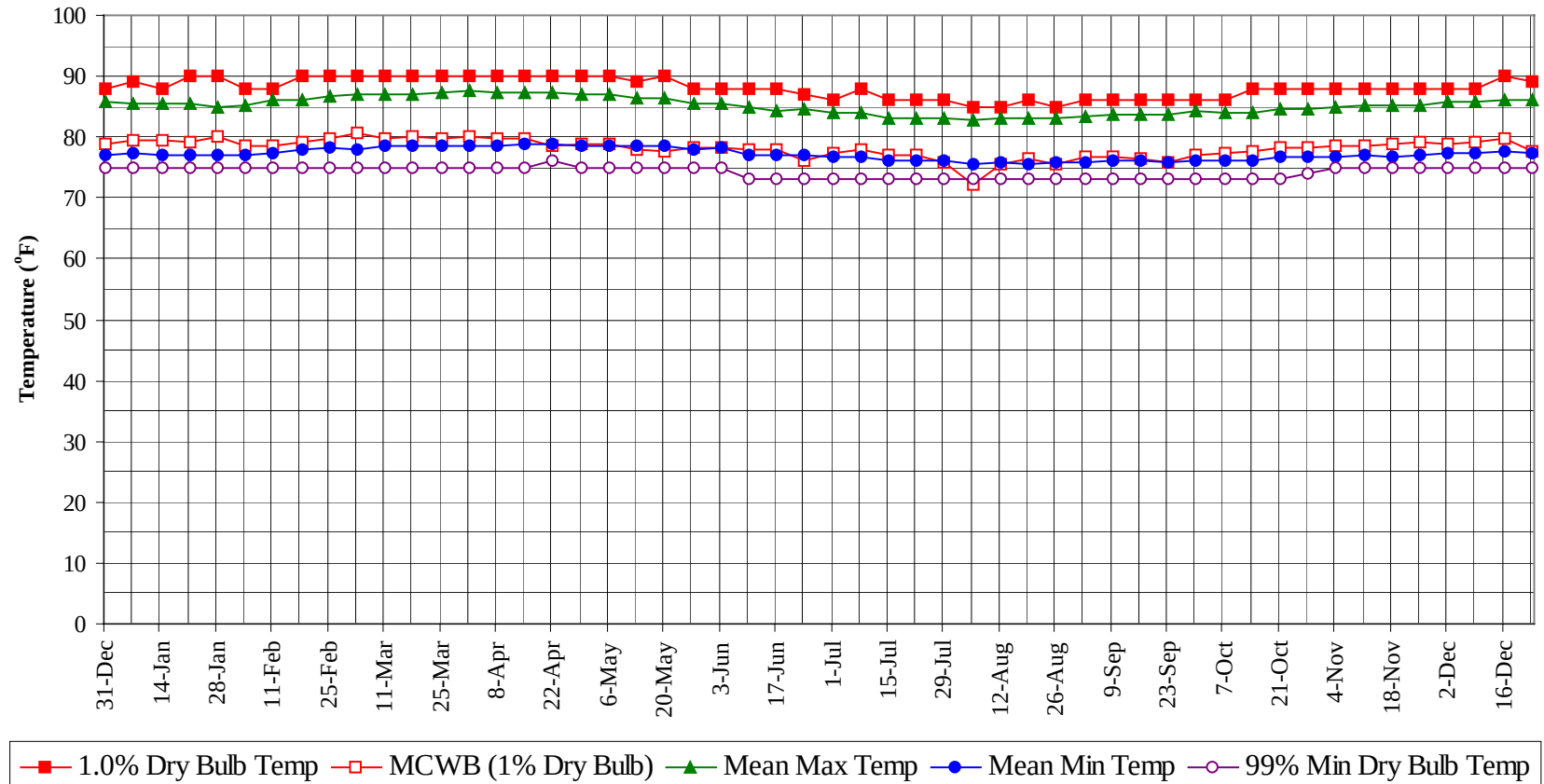
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary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

DIEGO GARCIA

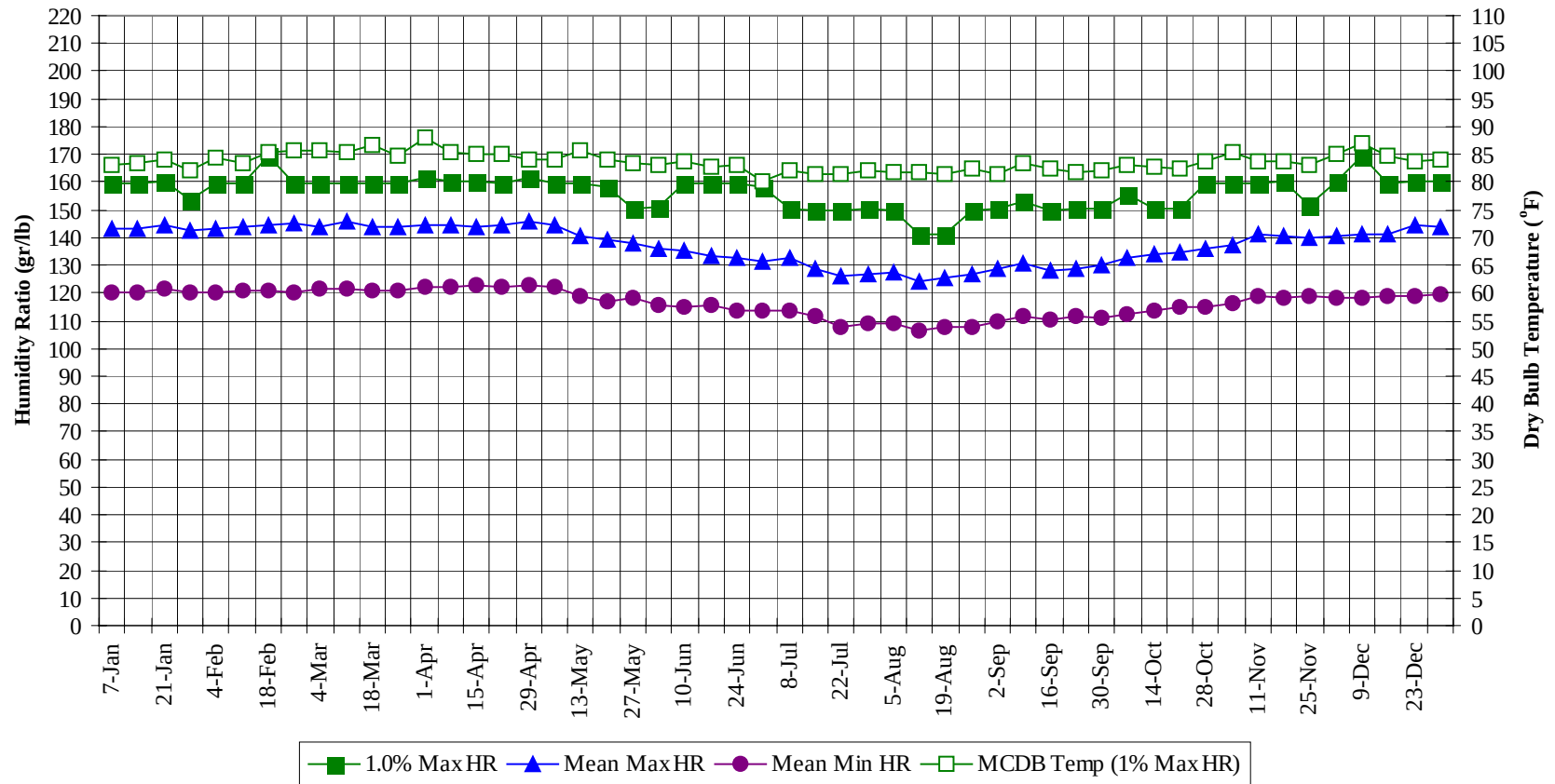
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Annual Summary of Temperatures

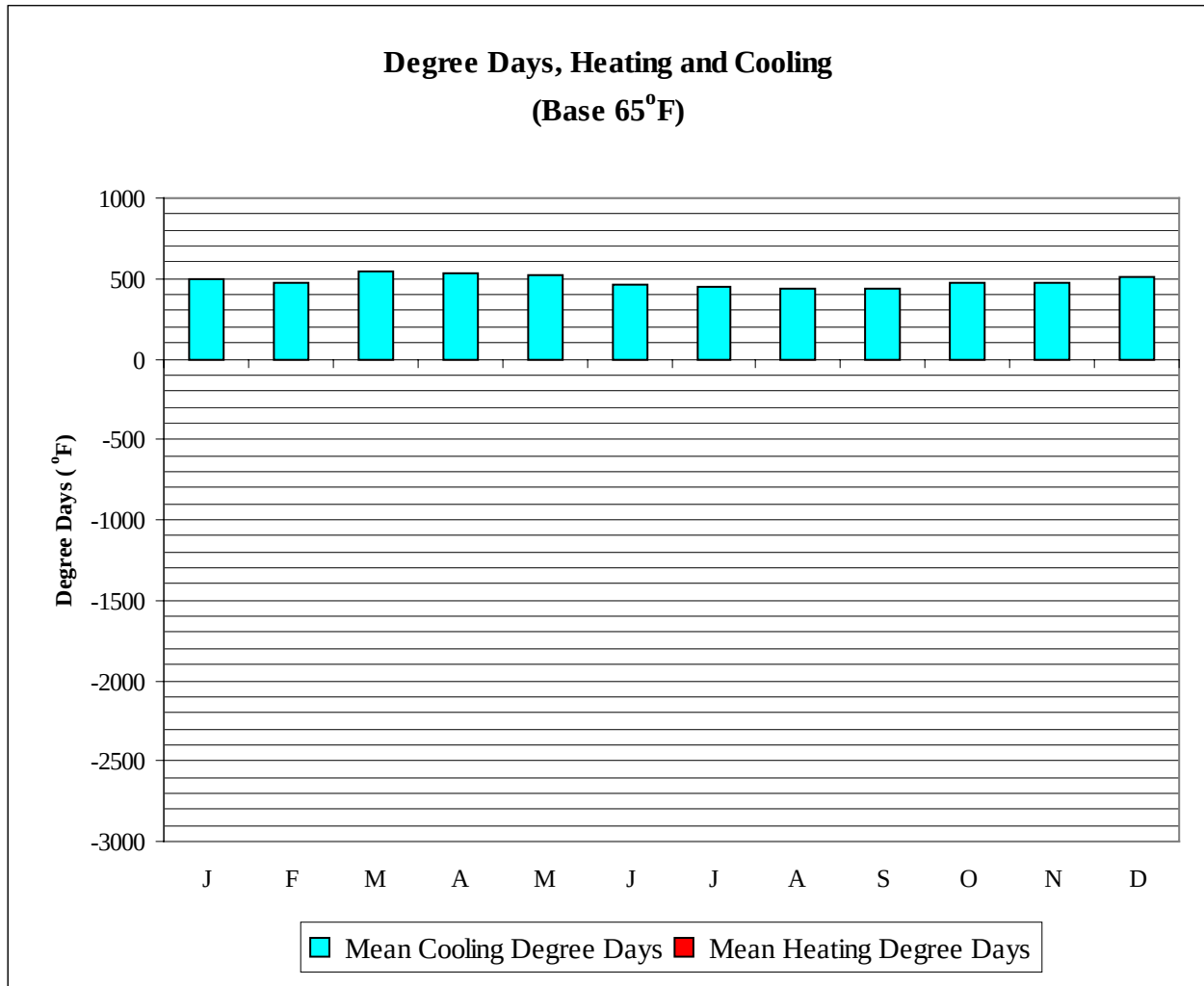


Long Term Humidity and Dry Bulb Temperature Summary



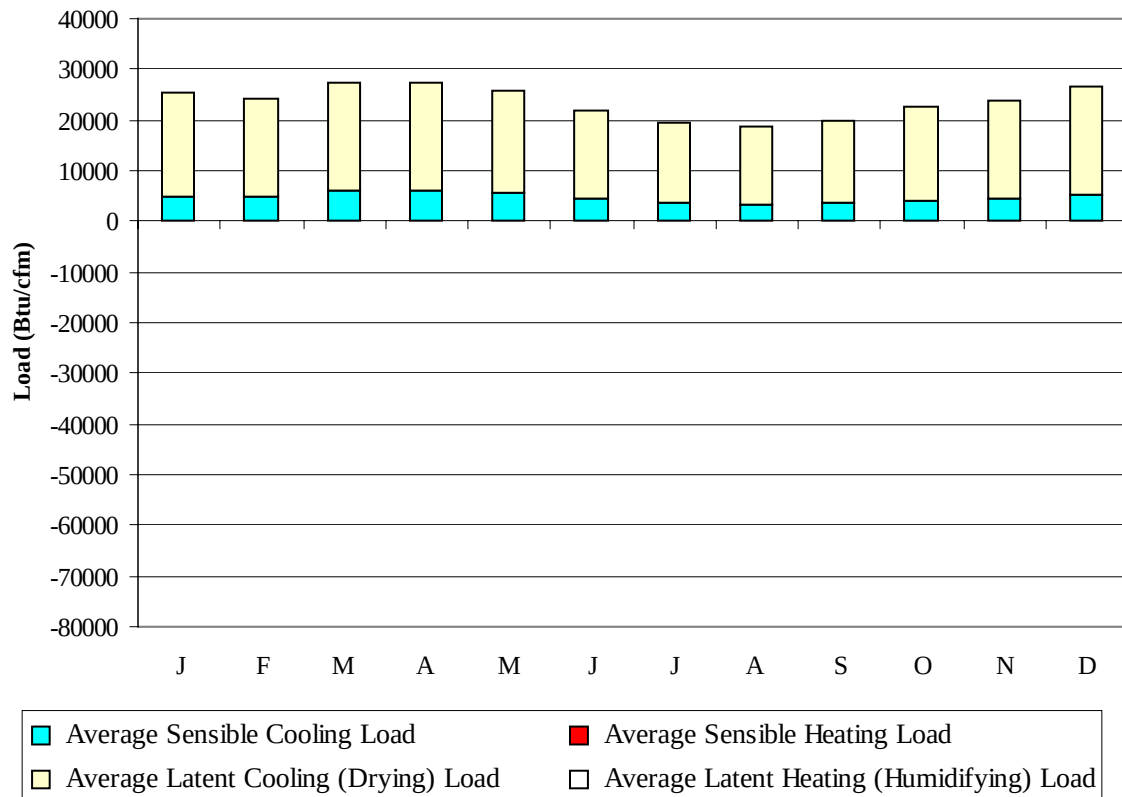
DIEGO GARCIA**BT****WMO No. 619670****Long Term Dry Bulb Temperature and Humidity Summary**

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	89.0	79.5	85.4	77.2	75.0	159.6	83.2	143.2	120.1
14-Jan	88.0	79.4	85.5	77.0	75.0	159.6	83.4	142.9	120.2
21-Jan	90.0	79.2	85.4	77.1	75.0	160.3	84.0	144.5	121.3
28-Jan	90.0	80.1	85.0	77.1	75.0	154.0	82.0	142.5	120.2
4-Feb	88.0	78.6	85.2	77.1	75.0	159.6	84.4	143.3	120.4
11-Feb	88.0	78.7	86.0	77.4	75.0	159.6	83.5	143.5	120.8
18-Feb	90.0	79.1	86.1	77.8	75.0	169.4	85.3	144.8	120.6
25-Feb	90.0	79.7	86.7	78.2	75.0	159.6	85.8	145.1	120.1
4-Mar	90.0	80.5	87.0	78.1	75.0	159.6	85.6	144.1	121.3
11-Mar	90.0	79.8	87.0	78.4	75.0	159.6	85.2	145.5	121.2
18-Mar	90.0	80.1	87.0	78.5	75.0	159.6	86.8	143.5	121.0
25-Mar	90.0	79.7	87.4	78.5	75.0	159.6	84.8	144.0	121.1
1-Apr	90.0	80.1	87.5	78.5	75.0	161.7	88.0	144.7	122.4
8-Apr	90.0	79.8	87.4	78.7	75.0	160.3	85.3	144.6	122.2
15-Apr	90.0	79.7	87.3	78.9	75.0	160.3	84.9	144.1	123.1
22-Apr	90.0	78.5	87.2	78.9	76.0	159.6	85.0	144.2	121.9
29-Apr	90.0	78.9	86.9	78.7	75.0	161.7	84.2	145.5	122.6
6-May	90.0	79.0	86.9	78.5	75.0	159.6	84.2	144.3	122.3
13-May	89.0	78.0	86.3	78.5	75.0	159.6	85.7	140.8	118.7
20-May	90.0	77.7	86.4	78.7	75.0	158.2	84.0	139.2	117.2
27-May	88.0	78.2	85.5	78.1	75.0	150.5	83.5	138.1	118.3
3-Jun	88.0	78.4	85.6	78.2	75.0	151.2	83.2	135.7	115.6
10-Jun	88.0	78.0	85.0	77.2	73.0	159.6	83.8	135.4	114.7
17-Jun	88.0	77.9	84.4	77.2	73.0	159.6	82.8	133.2	115.3
24-Jun	87.0	76.0	84.5	77.1	73.0	159.6	83.1	133.0	113.7
1-Jul	86.0	77.3	84.1	76.7	73.0	158.2	80.0	131.4	113.8
8-Jul	88.0	77.9	83.9	76.6	73.0	150.5	82.2	132.5	113.8
15-Jul	86.0	77.1	83.1	76.2	73.0	149.8	81.3	129.0	111.3
22-Jul	86.0	77.0	83.0	76.0	73.0	149.8	81.4	125.8	108.0
29-Jul	86.0	75.7	83.1	76.1	73.0	150.5	82.1	126.9	108.9
5-Aug	85.0	72.2	82.9	75.6	73.0	149.8	81.7	127.6	108.9
12-Aug	85.0	75.4	83.0	75.7	73.0	141.4	81.6	124.1	106.3
19-Aug	86.0	76.3	83.1	75.6	73.0	141.4	81.5	125.4	107.4
26-Aug	85.0	75.5	82.9	75.9	73.0	149.8	82.4	126.6	107.8
2-Sep	86.0	76.6	83.3	76.0	73.0	150.5	81.3	128.6	109.6
9-Sep	86.0	76.7	83.7	76.1	73.0	153.3	83.3	130.6	111.6
16-Sep	86.0	76.3	83.8	76.1	73.0	149.8	82.3	128.0	110.0
23-Sep	86.0	76.0	83.7	75.9	73.0	150.5	81.8	129.0	111.5
30-Sep	86.0	77.0	84.1	76.2	73.0	150.5	82.1	130.2	111.2
7-Oct	86.0	77.4	83.9	76.0	73.0	155.4	83.0	132.4	112.5
14-Oct	88.0	77.6	84.1	76.1	73.0	150.5	82.7	134.1	113.9
21-Oct	88.0	78.2	84.7	76.9	73.0	150.5	82.6	134.6	114.8
28-Oct	88.0	78.3	84.7	76.8	74.0	159.6	83.6	136.0	114.7
4-Nov	88.0	78.6	84.8	76.8	75.0	159.6	85.2	137.1	116.1
11-Nov	88.0	78.5	85.1	77.1	75.0	159.6	83.9	140.9	119.0
18-Nov	88.0	79.0	85.3	76.8	75.0	160.3	83.9	140.8	118.0
25-Nov	88.0	79.2	85.2	77.1	75.0	151.9	83.1	139.9	118.8
2-Dec	88.0	79.0	85.7	77.4	75.0	160.3	85.2	140.3	117.9
9-Dec	88.0	79.1	85.9	77.2	75.0	169.4	87.1	141.5	118.4
16-Dec	90.0	79.7	86.0	77.5	75.0	159.6	84.8	141.5	118.8
23-Dec	89.0	77.8	86.1	77.3	75.0	160.3	83.8	144.4	118.7
31-Dec	88.0	78.7	85.8	77.0	75.0	160.3	83.9	143.7	119.4



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	498	0
FEB	473	0
MAR	542	0
APR	528	0
MAY	520	0
JUN	466	0
JUL	447	0
AUG	435	0
SEP	438	0
OCT	469	0
NOV	469	0
DEC	506	0
ANN	5790	0

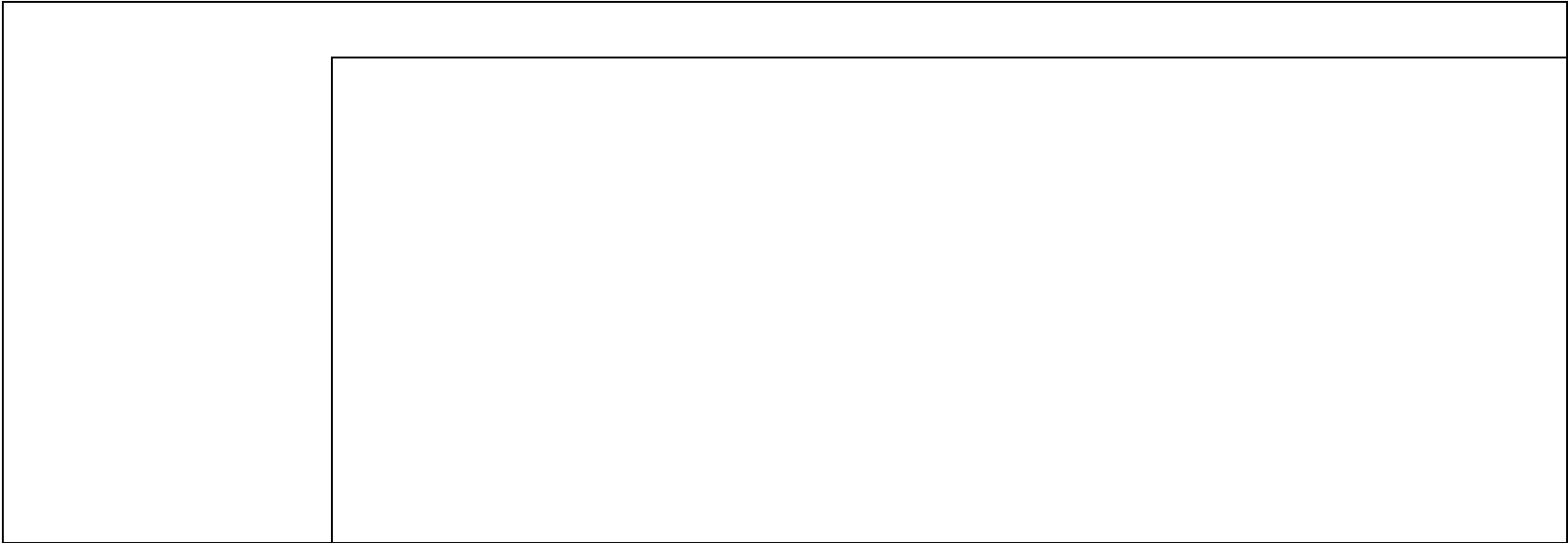
Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



	Average Sensible Cooling Load	Average Sensible Heating Load	Average Latent Cooling Load	Average Latent Heating Load
	(Btu/cfm)	(Btu/cfm)	(Btu/cfm)	(Btu/cfm)
JAN	4910	0	20353	0
FEB	4968	0	19050	0
MAR	6021	0	21375	0
APR	5937	0	21418	0
MAY	5520	0	20251	0
JUN	4344	0	17480	0
JUL	3608	0	15751	0
AUG	3326	0	15360	0
SEP	3631	0	16110	0
OCT	4189	0	18347	0
NOV	4522	0	19426	0
DEC	5131	0	21260	0
ANN	56107	0	226181	0

Average Annual Solar Radiation – Nearest Available Site
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

No Solar Radiation
Data Available

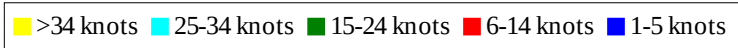
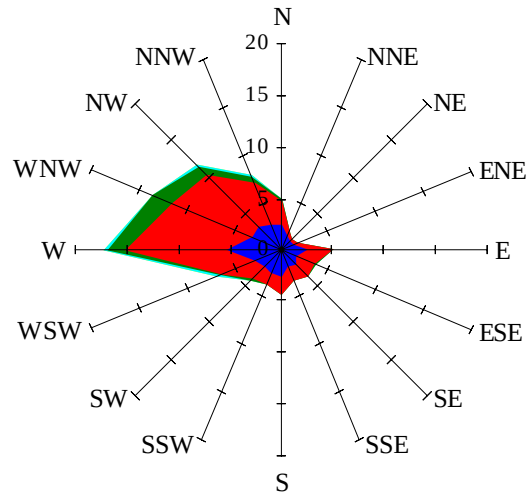


Average Annual Solar Heat and Illumination – Nearest Available Site

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

Wind Summary - December, January, and February

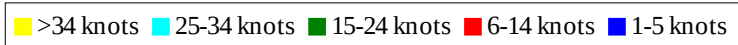
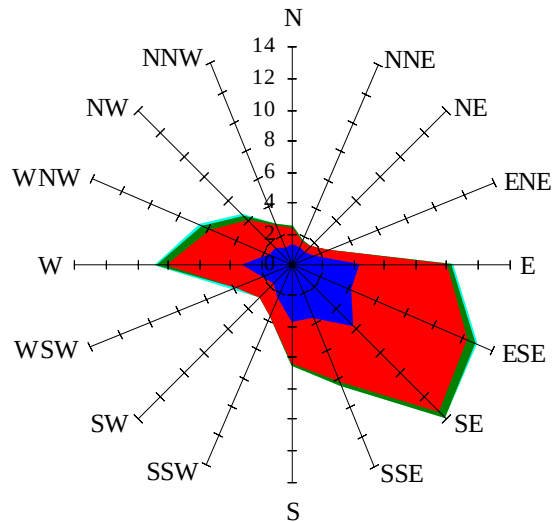
Labels of Percent Frequency on North Axis



Percent Calm = 6.66

Wind Summary - March, April, and May

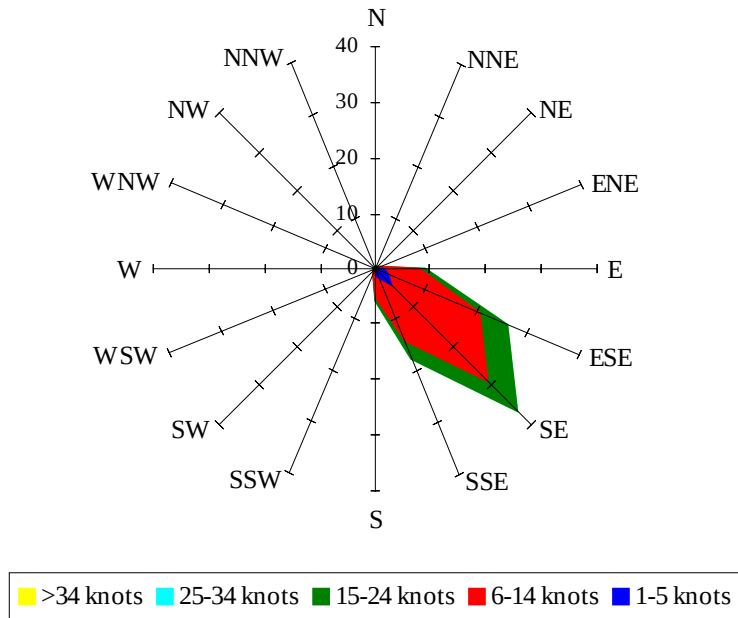
Labels of Percent Frequency on North Axis



Percent Calm = 7.34

Wind Summary - June, July, and August

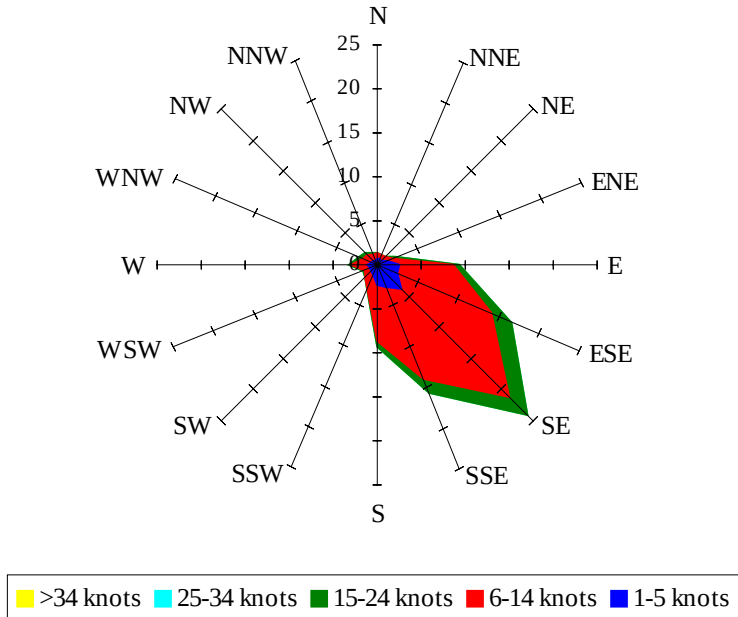
Labels of Percent Frequency on North Axis



Percent Calm = 0.87

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 3.03