

NANDI/NADI FJ

Latitude = 17.70 S

Longitude = 177.45 E

Period of Record = 1973 to 1996

WMO No. 916800

Elevation = 59 feet

Average Pressure = 29.75 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	94	79	125	13.1	N
0.4% Occurrence	91	77	123	12.2	WNW
1.0% Occurrence	90	77	122	12.0	WNW
2.0% Occurrence	89	77	123	11.6	WNW
Mean Daily Range	14	-	-	-	-
97.5% Occurrence	64	62	78	4.3	ESE
99.0% Occurrence	63	61	76	4.3	ESE
99.6% Occurrence	61	59	71	3.9	ESE
Median of Extreme Lows	57	55	63	3.3	E
	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	88	151	11.0	WNW
0.4% Occurrence	80	87	141	9.8	W
1.0% Occurrence	80	87	141	9.8	W
2.0% Occurrence	79	85	137	8.8	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	161	85	1.06	10.3	NNW
0.4% Occurrence	151	84	0.99	7.9	WNW
1.0% Occurrence	144	83	0.95	7.8	W
2.0% Occurrence	142	83	0.94	7.2	N
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		6	3443	4153	7418

Other Site Data

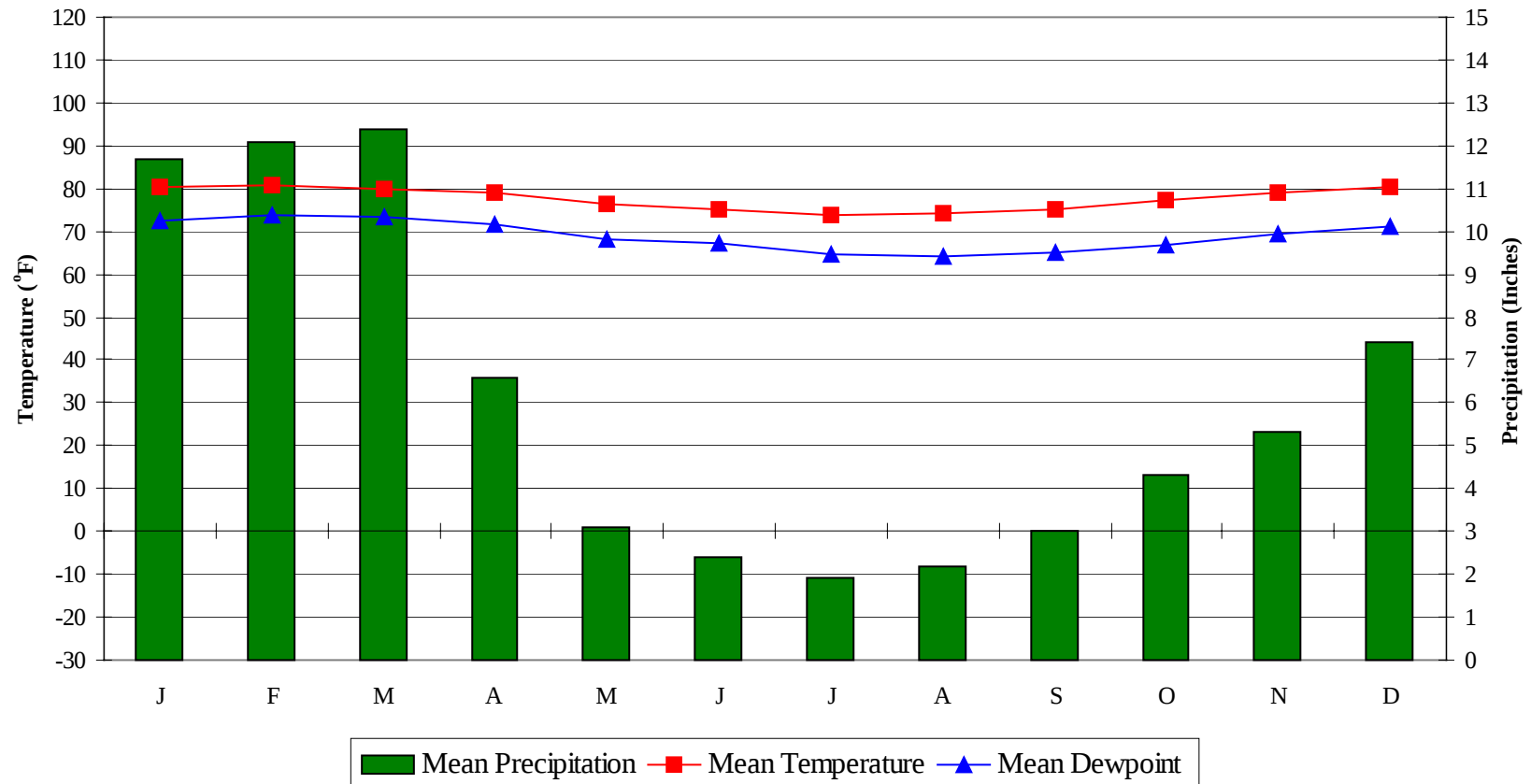
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
10	N/A	N/A	4.7 + 2.8
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
80.0	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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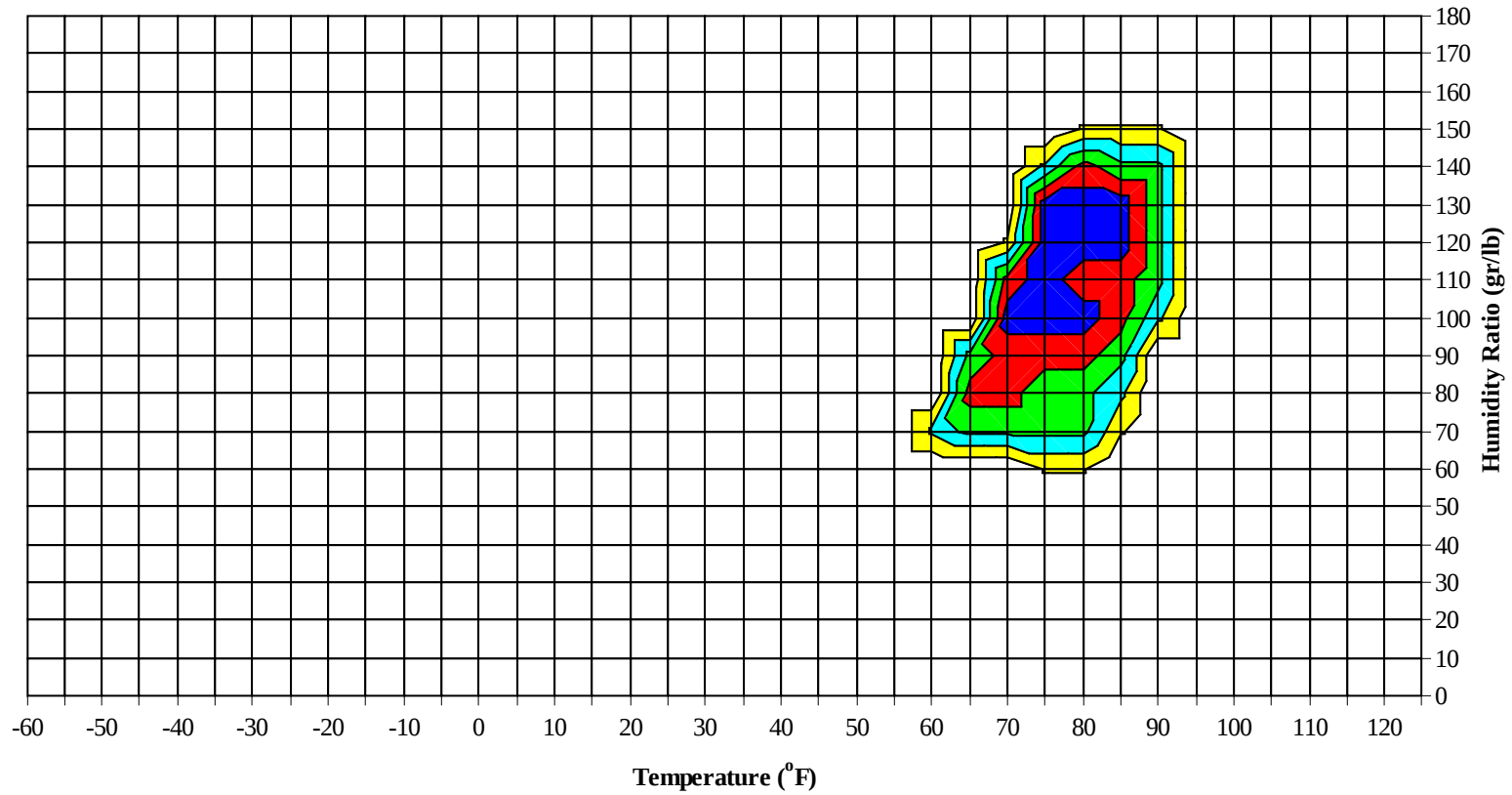
Average Annual Climate



NANDI/NADI FJ

WMO No. 916800

Long Term Psychrometric Summary

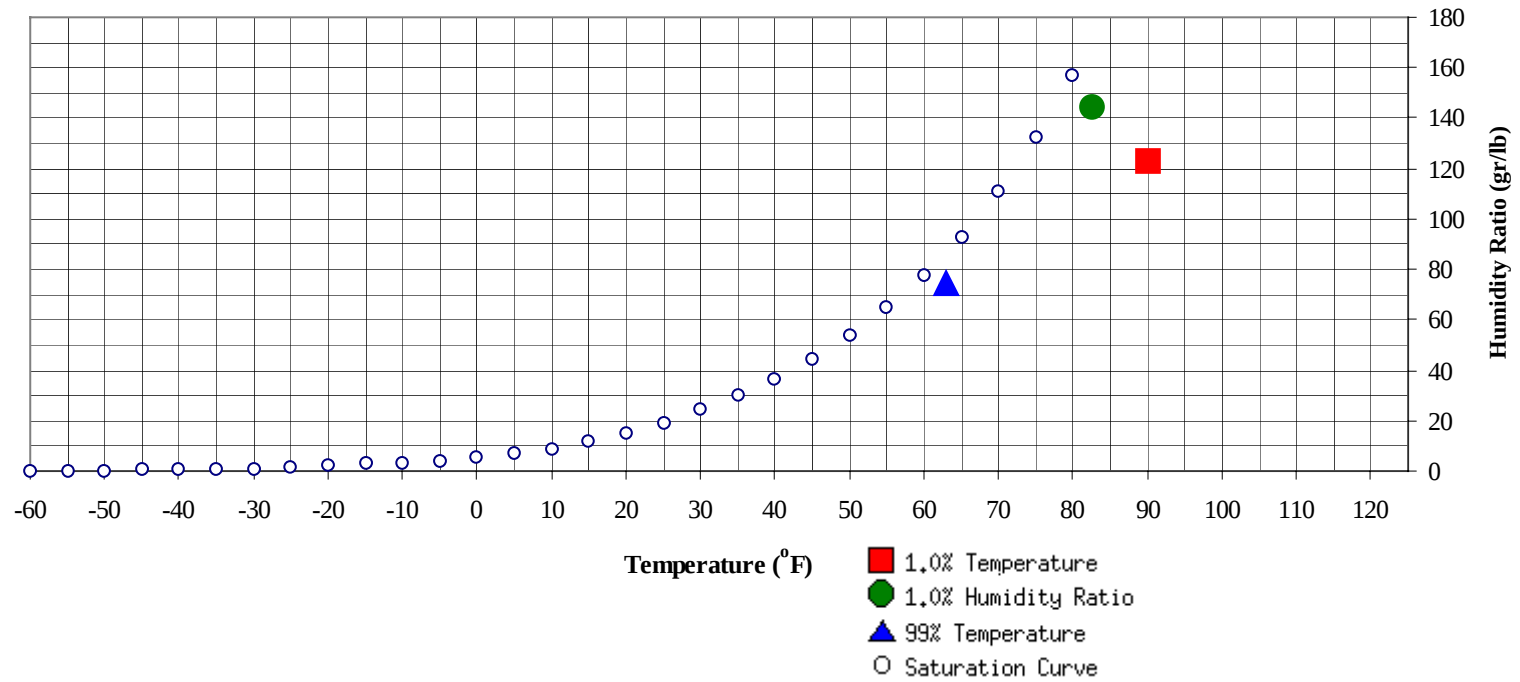


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

NANDI/NADI FJ

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Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)	1.0% Humidity Ratio	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
99% Dry Bulb	63	74.4	26.7		144.2	82.7	78.8	77.4	42.5

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	90	123	77.5	40.9

NANDI/NADI FJ

WMO No. 916800

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			0	0	78.0								0	0	83.0
95 / 99	0	0	0	0	77.7	0	0		0	81.5			0	0	81.0
90 / 94	0	23	1	24	77.4	0	23	1	24	78.8			17	0	78.5
85 / 89	0	124	30	154	76.8	0	106	24	130	77.5	0	113	19	132	77.6
80 / 84	8	82	70	161	75.7	10	78	65	153	76.6	13	93	70	177	76.5
75 / 79	121	17	131	269	74.2	129	17	123	269	74.8	134	23	141	298	74.7
70 / 74	113	2	16	131	70.7	82	0	11	93	71.0	97	1	17	115	71.2
65 / 69	6		0	6	66.4	3			3	66.6	4			4	66.3
60 / 64															
55 / 59															
50 / 54															
45 / 49															
40 / 44															
35 / 39															
30 / 34															

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. 916800

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	82.0										
95 / 99			0	0				0	0	80.0					
90 / 94		8	0	8	78.0		1	0	1	76.0		1		1	75.5
85 / 89	0	100	5	104	76.7	0	49	0	49	75.0		23		23	74.6
80 / 84	5	101	60	166	75.2	1	132	35	168	73.1	1	120	20	142	72.6
75 / 79	79	30	132	241	73.7	22	58	96	175	71.8	13	70	83	166	71.3
70 / 74	136	2	42	180	70.3	135	9	95	239	69.1	101	24	97	223	68.8
65 / 69	19		1	20	65.9	74	0	19	93	65.1	88	1	33	122	65.1
60 / 64	1		0	1	62.9	16		3	19	61.3	33	0	6	40	61.2
55 / 59						0			0	57.5	3			3	57.1
50 / 54															
45 / 49															
40 / 44															
35 / 39															
30 / 34															

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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		0	0	0	77.5							0		0	78.0
90 / 94		0	0	0	75.0		1		1	74.6		2		2	73.9
85 / 89	0	16	0	16	73.6	0	19	0	19	72.6		28	0	28	73.3
80 / 84	1	118	12	131	71.3	1	113	14	128	70.9	1	135	28	165	71.6
75 / 79	8	82	72	162	69.6	8	86	72	167	69.2	11	62	80	152	69.5
70 / 74	80	31	103	214	67.7	73	27	105	205	67.4	97	11	96	204	67.8
65 / 69	89	2	44	135	64.4	100	2	46	147	64.1	92	2	31	125	64.2
60 / 64	59	0	16	74	60.3	60		10	70	60.5	36		5	41	60.4
55 / 59	11	0	2	13	56.1	5		1	6	56.1	3		0	3	55.5
50 / 54		0		0		0			0	52.0					
45 / 49		0		0		0			0						
40 / 44		0		0		0			0						
35 / 39		0		0		0			0						
30 / 34		0		0											

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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						0			0	78.0					
90 / 94		4	0	4	76.2	12			12	76.6	21	0	21	76.7	
85 / 89	0	59	0	59	74.1	102	5		107	75.2	130	17	147	75.9	
80 / 84	1	149	48	199	72.2	5	108	75	188	73.6	11	83	83	177	74.7
75 / 79	17	31	99	147	70.7	63	15	114	191	72.6	108	12	122	242	73.4
70 / 74	153	4	88	244	68.4	146	3	45	194	69.3	117	2	26	145	69.8
65 / 69	62	0	11	73	64.1	23		2	25	64.7	12		0	12	65.5
60 / 64	15		2	17	60.4	3		0	3	60.7	0			0	62.0
55 / 59	0			0	57.0										
50 / 54															
45 / 49															
40 / 44															
35 / 39															
30 / 34															

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.

NANDI/NADI FJ

WMO No. 916800

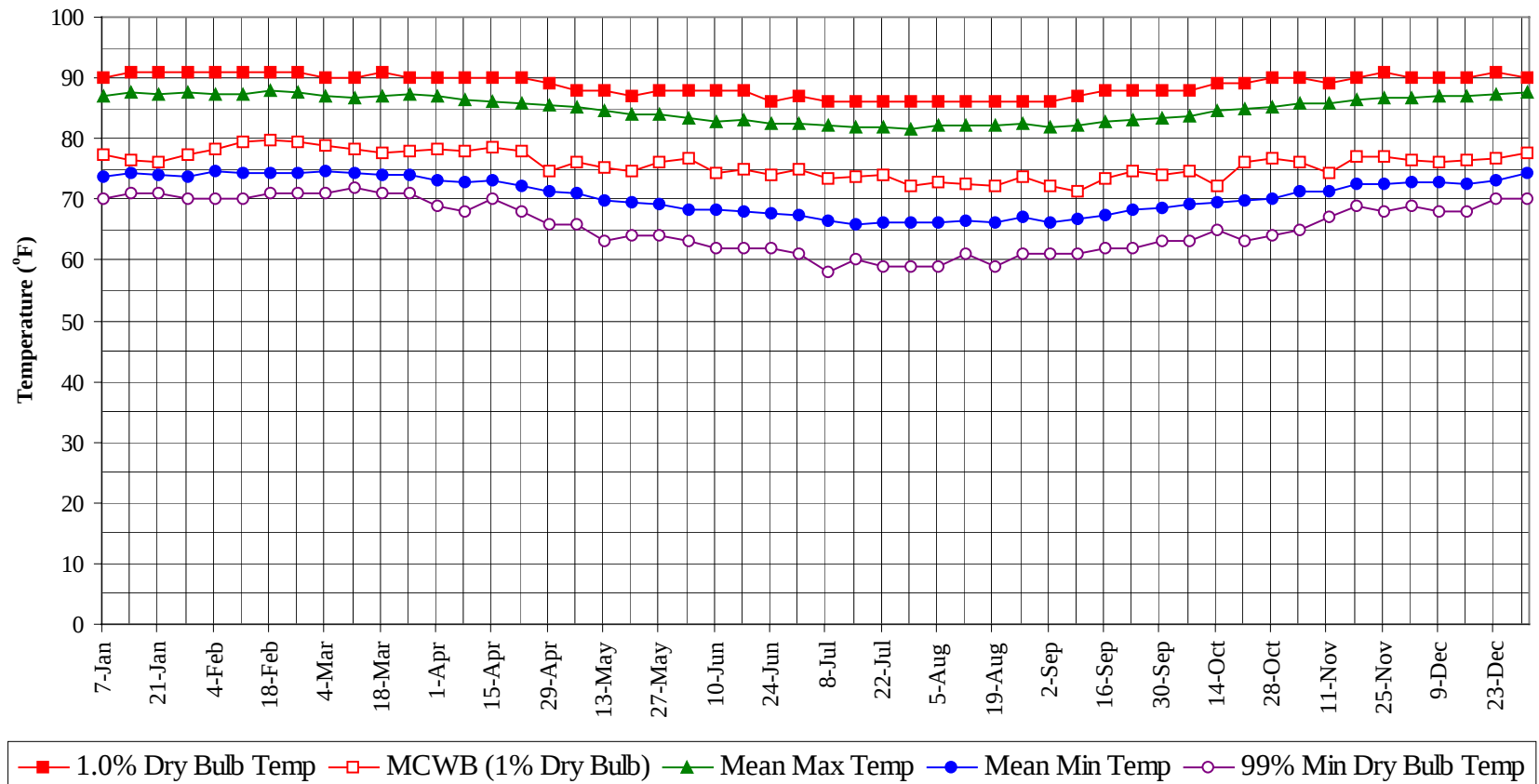
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

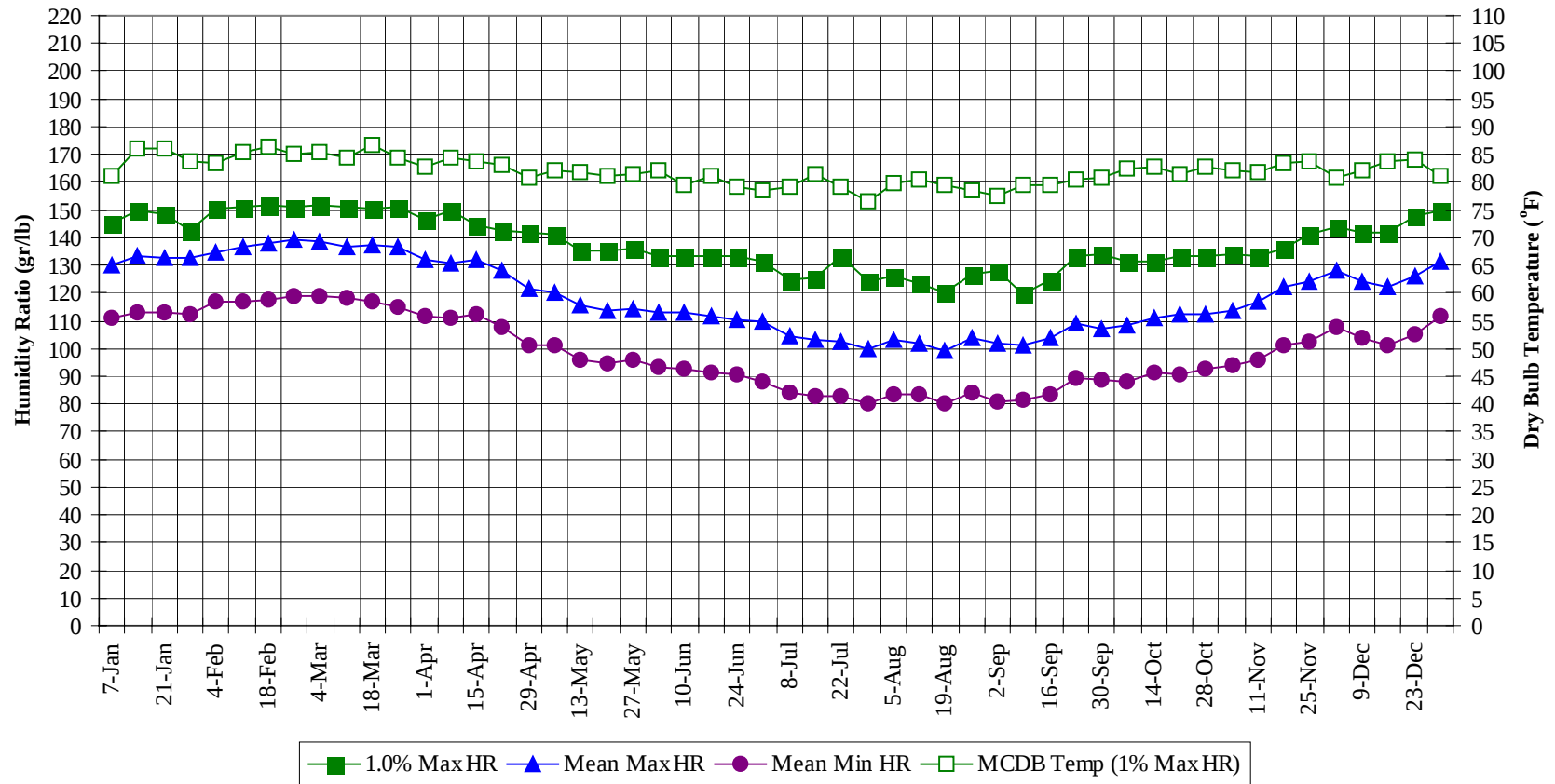
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
100 / 104		0	0	0	80.3
95 / 99	0	1	0	1	78.9
90 / 94	0	112	2	114	77.5
85 / 89	1	865	100	967	76.1
80 / 84	61	1312	579	1952	73.7
75 / 79	704	508	1263	2476	72.4
70 / 74	1326	116	743	2185	68.9
65 / 69	577	6	190	773	64.6
60 / 64	227	0	41	268	60.6
55 / 59	23	0	2	25	56.1
50 / 54	0	0		0	52.0
45 / 49	0	0		0	
40 / 44	0	0		0	
35 / 39	0	0		0	
30 / 34		0		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.

Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



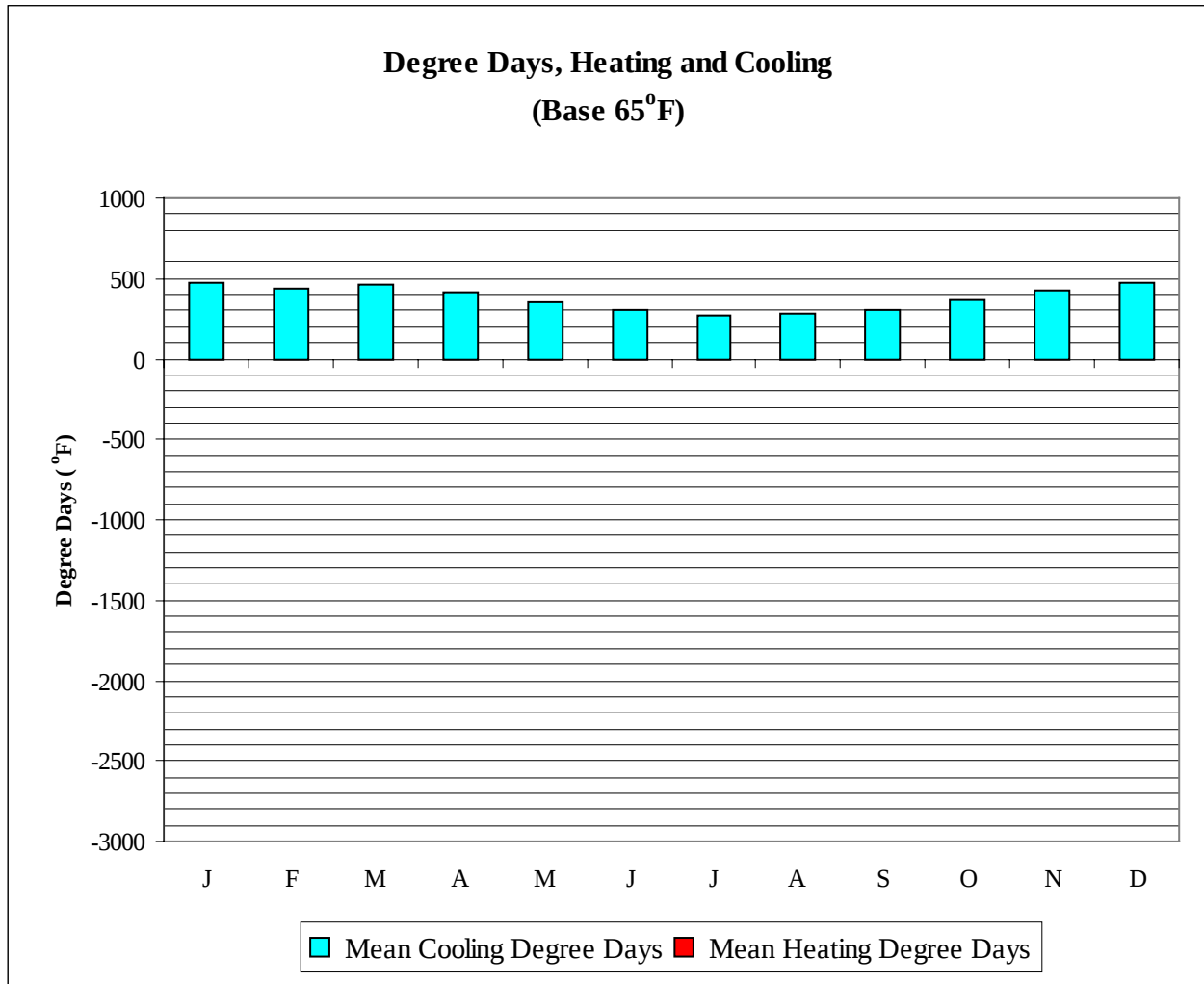
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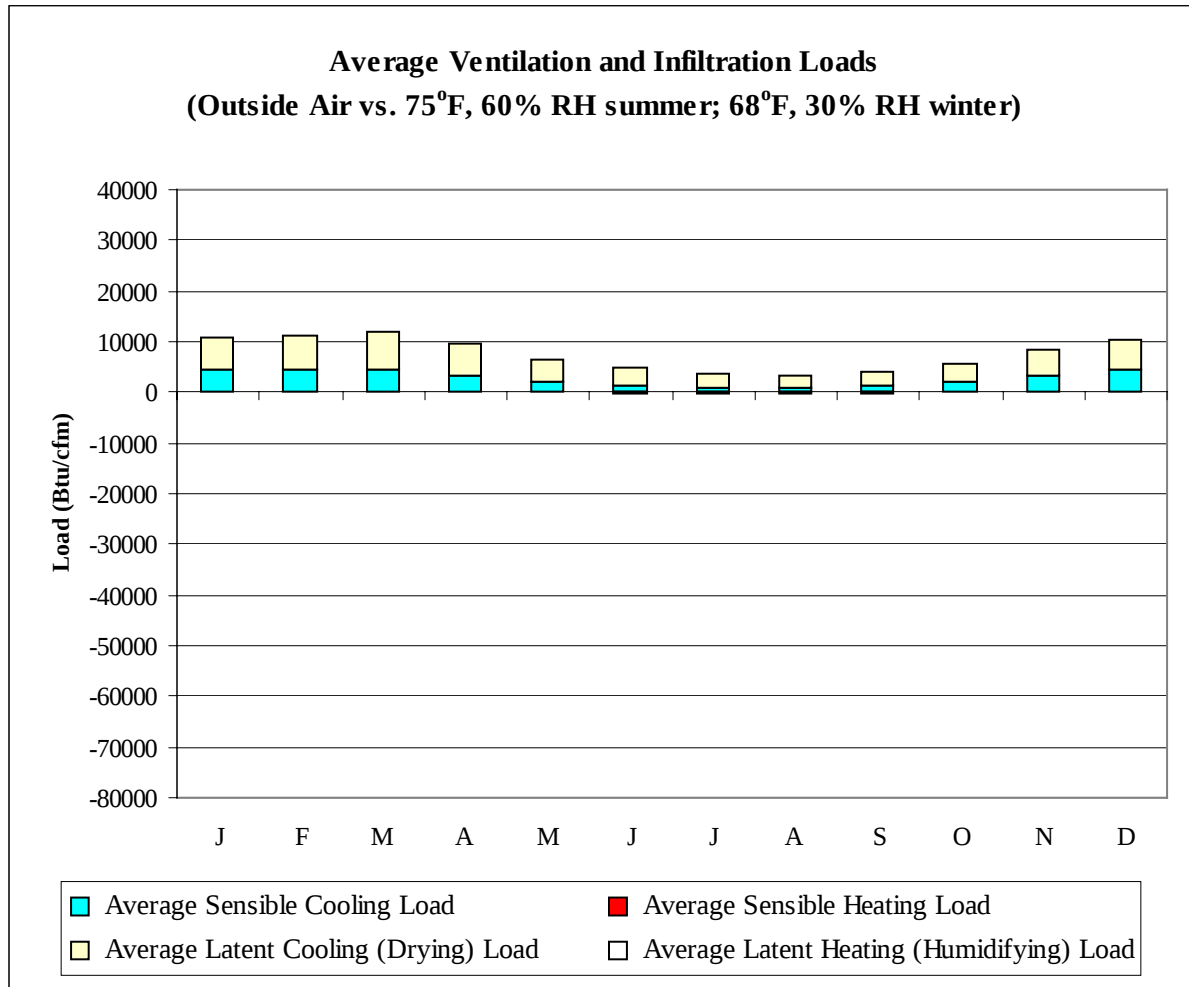
WMO No. 916800

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	90.0	77.3	87.0	73.7	70.0	144.9	81.0	129.9	111.1
14-Jan	91.0	76.4	87.5	74.2	71.0	149.8	86.0	133.5	113.2
21-Jan	91.0	76.1	87.4	74.0	71.0	148.4	86.0	132.8	112.6
28-Jan	91.0	77.2	87.5	73.6	70.0	142.8	83.7	132.9	112.4
4-Feb	91.0	78.2	87.4	74.6	70.0	150.5	83.4	134.9	116.9
11-Feb	91.0	79.3	87.3	74.2	70.0	151.2	85.3	136.8	116.9
18-Feb	91.0	79.7	87.8	74.4	71.0	151.9	86.3	137.7	117.6
25-Feb	91.0	79.4	87.6	74.4	71.0	151.2	85.0	139.2	118.8
4-Mar	90.0	78.7	87.1	74.7	71.0	151.9	85.3	138.7	118.7
11-Mar	90.0	78.3	86.7	74.4	72.0	151.2	84.3	136.4	118.5
18-Mar	91.0	77.8	87.1	74.2	71.0	150.5	86.5	137.0	117.0
25-Mar	90.0	78.0	87.3	74.0	71.0	151.2	84.3	136.4	115.2
1-Apr	90.0	78.2	87.0	73.2	69.0	146.3	82.8	131.8	111.7
8-Apr	90.0	77.8	86.5	72.9	68.0	149.8	84.3	130.9	110.8
15-Apr	90.0	78.4	86.2	73.1	70.0	144.2	83.6	132.1	112.2
22-Apr	90.0	77.9	85.8	72.3	68.0	142.8	83.2	128.0	107.8
29-Apr	89.0	74.6	85.6	71.3	66.0	142.1	80.9	121.8	101.5
6-May	88.0	76.1	85.2	70.9	66.0	141.4	82.0	120.3	100.9
13-May	88.0	75.2	84.5	69.8	63.0	135.1	81.7	115.3	95.8
20-May	87.0	74.6	83.9	69.5	64.0	135.1	81.0	113.5	94.6
27-May	88.0	76.1	83.9	69.3	64.0	135.8	81.5	114.4	95.8
3-Jun	88.0	76.8	83.3	68.4	63.0	133.0	82.1	113.1	93.3
10-Jun	88.0	74.3	82.9	68.4	62.0	133.0	79.5	112.7	92.6
17-Jun	88.0	75.0	83.2	67.9	62.0	133.0	81.2	111.4	91.0
24-Jun	86.0	74.0	82.3	67.7	62.0	133.0	79.0	110.6	90.3
1-Jul	87.0	75.0	82.4	67.2	61.0	131.6	78.5	109.4	88.3
8-Jul	86.0	73.3	82.2	66.5	58.0	124.6	79.1	104.1	84.0
15-Jul	86.0	73.8	82.0	66.0	60.0	125.3	81.5	103.3	83.1
22-Jul	86.0	74.1	81.8	66.2	59.0	133.0	79.3	102.4	82.8
29-Jul	86.0	72.3	81.7	66.1	59.0	123.9	76.6	99.6	80.0
5-Aug	86.0	72.9	82.2	66.1	59.0	126.0	79.7	102.8	83.2
12-Aug	86.0	72.6	82.1	66.5	61.0	123.2	80.5	102.0	83.3
19-Aug	86.0	72.1	82.0	66.2	59.0	120.4	79.6	98.9	80.0
26-Aug	86.0	73.8	82.4	66.9	61.0	126.7	78.3	103.5	83.8
2-Sep	86.0	72.3	82.0	66.3	61.0	128.1	77.5	101.5	81.0
9-Sep	87.0	71.3	82.2	66.7	61.0	119.7	79.3	101.1	81.2
16-Sep	88.0	73.4	82.8	67.4	62.0	124.6	79.4	103.5	83.7
23-Sep	88.0	74.5	83.2	68.4	62.0	133.0	80.5	109.2	89.1
30-Sep	88.0	74.0	83.5	68.4	63.0	133.7	80.7	107.3	88.4
7-Oct	88.0	74.8	83.5	69.1	63.0	131.6	82.5	108.3	87.9
14-Oct	89.0	72.3	84.5	69.5	65.0	131.6	82.6	110.9	91.4
21-Oct	89.0	76.3	84.8	69.8	63.0	133.0	81.5	112.1	90.5
28-Oct	90.0	76.7	85.2	70.0	64.0	133.0	82.8	112.5	92.4
4-Nov	90.0	76.1	85.8	71.2	65.0	133.7	82.1	113.7	94.1
11-Nov	89.0	74.3	85.9	71.4	67.0	133.0	81.8	116.8	95.7
18-Nov	90.0	77.1	86.3	72.4	69.0	135.8	83.4	122.1	100.9
25-Nov	91.0	77.0	86.8	72.4	68.0	141.4	83.6	123.8	102.5
2-Dec	90.0	76.3	86.8	72.9	69.0	143.5	80.8	128.1	107.6
9-Dec	90.0	76.2	87.1	73.0	68.0	142.1	82.0	123.9	103.7
16-Dec	90.0	76.4	87.0	72.4	68.0	142.1	83.6	121.9	100.9
23-Dec	91.0	76.8	87.5	73.1	70.0	147.7	84.2	126.0	105.2
31-Dec	90.0	77.6	87.5	74.2	70.0	149.8	81.2	131.5	111.5



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	478	0
FEB	441	0
MAR	467	0
APR	415	0
MAY	358	0
JUN	301	1
JUL	275	3
AUG	286	2
SEP	310	1
OCT	366	0
NOV	423	0
DEC	470	0
ANN	4589	7



	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	4559	0	6324	-1
FEB	4337	0	6851	0
MAR	4379	0	7652	0
APR	3342	-4	6182	0
MAY	2059	-47	4260	0
JUN	1287	-95	3606	0
JUL	947	-211	2594	-1
AUG	1010	-178	2342	0
SEP	1377	-103	2748	0
OCT	2250	-34	3213	0
NOV	3458	-6	4999	0
DEC	4291	-2	6122	0
ANN	33296	-680	56893	-2

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

No Solar Radiation
Data Available

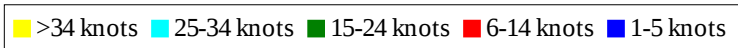
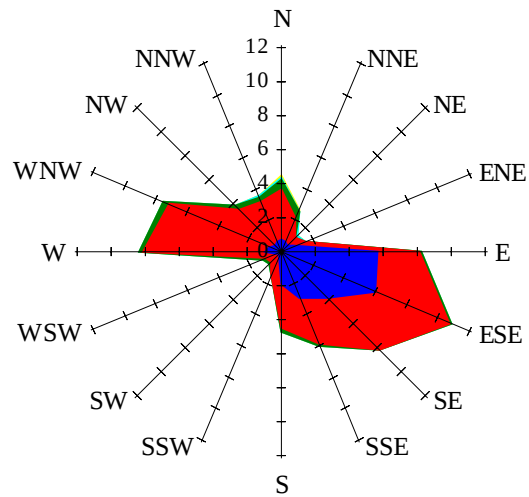


Average Annual Solar Heat and Illumination – Nearest Available Site

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

Wind Summary - December, January, and February

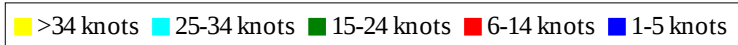
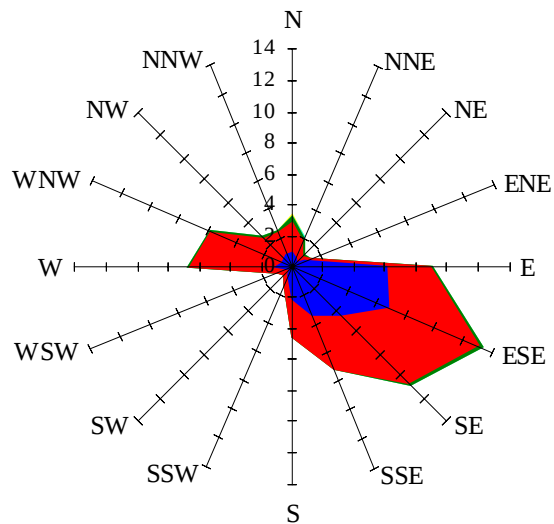
Labels of Percent Frequency on North Axis



Percent Calm = 25.98

Wind Summary - March, April, and May

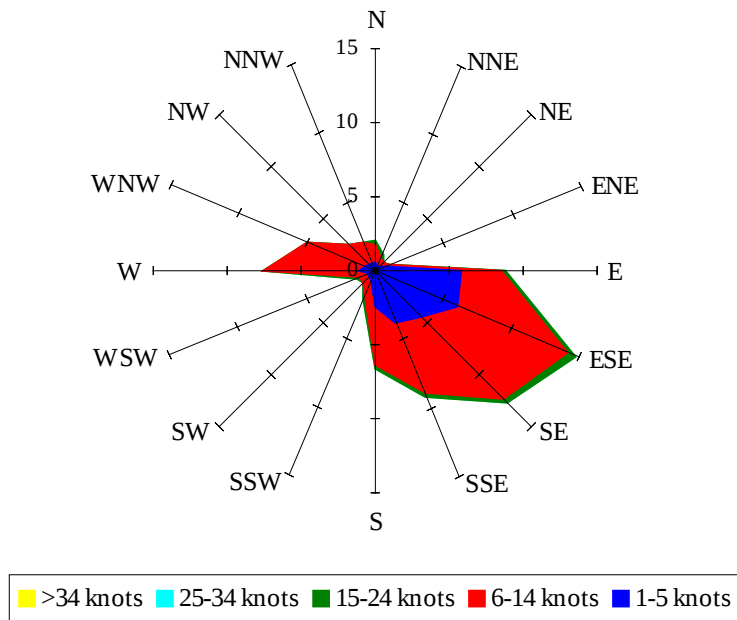
Labels of Percent Frequency on North Axis



Percent Calm = 27.09

Wind Summary - June, July, and August

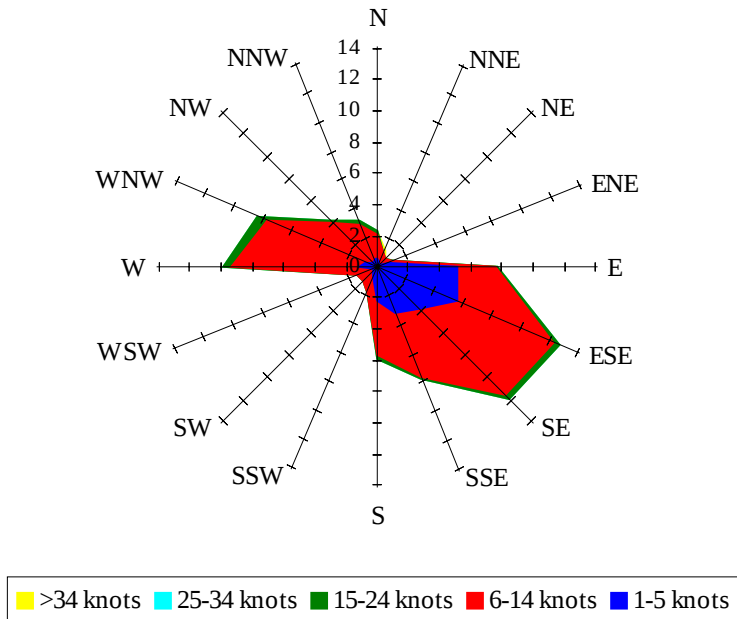
Labels of Percent Frequency on North Axis



Percent Calm = 21.50

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 19.22