

INDIAN MTN AK

Latitude = 66.00 N

Longitude = 153.70 W

Period of Record = 1967 to 1996

WMO No. 701730

Elevation = 1276 feet

Average Pressure = 28.41 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	82	61	52	6.5	E
0.4% Occurrence	77	59	52	5.2	E
1.0% Occurrence	73	58	50	5.6	E
2.0% Occurrence	70	57	50	5.3	ENE
Mean Daily Range	14	-	-	-	-
97.5% Occurrence	-30	-30	1	0.7	SW
99.0% Occurrence	-37	-37	1	0.5	S
99.6% Occurrence	-43	-43	0	0.2	SE
Median of Extreme Lows	-43	-43	0	0.2	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	64	76	72	4.2	E
0.4% Occurrence	61	72	65	4.5	E
1.0% Occurrence	59	69	60	4.4	E
2.0% Occurrence	58	68	58	4.5	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	81	67	0.52	2.4	ESE
0.4% Occurrence	73	65	0.47	3.7	WSW
1.0% Occurrence	68	64	0.44	3.2	W
2.0% Occurrence	63	62	0.41	3.4	WSW
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		0	15	0	1

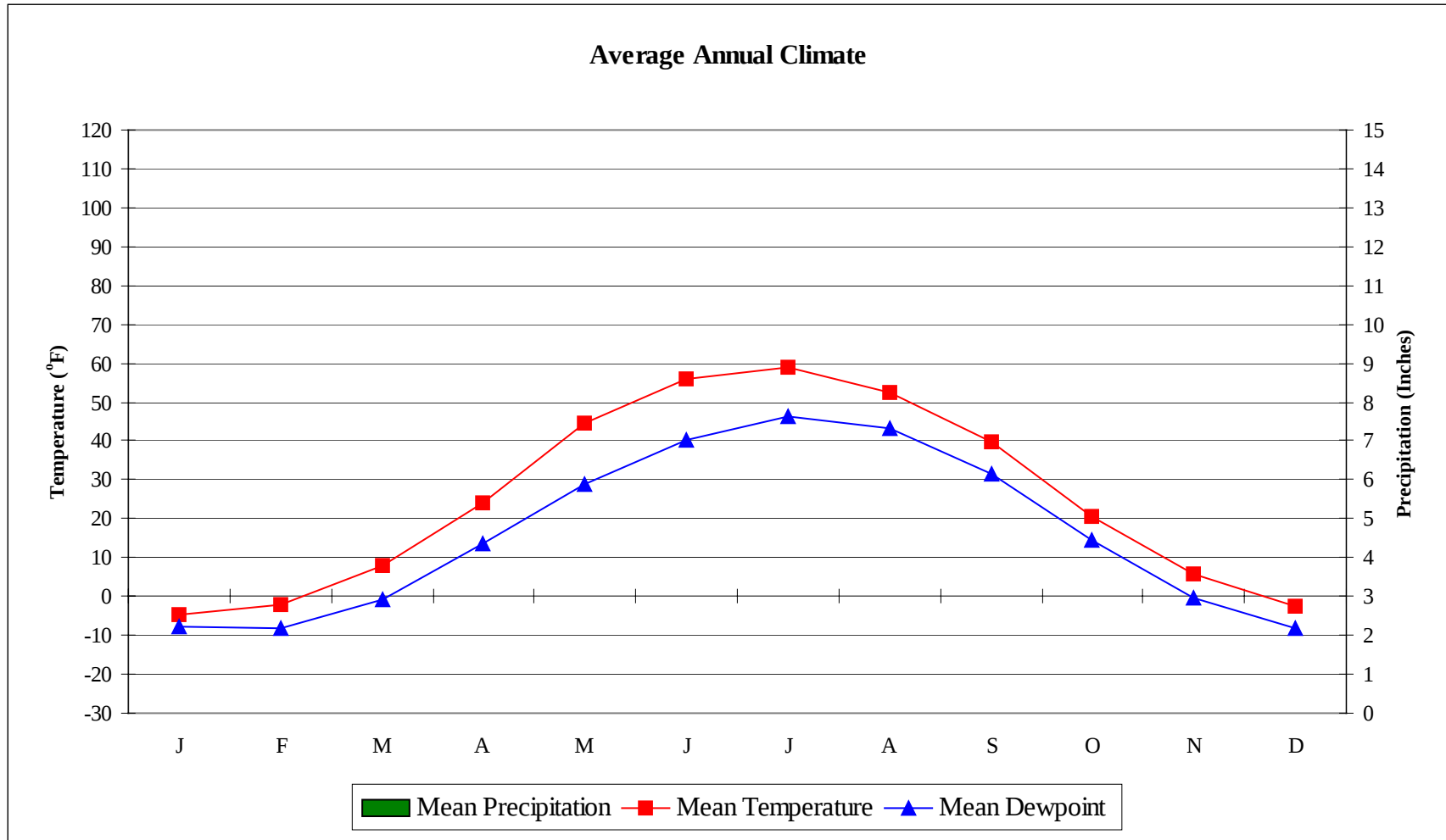
Other Site Data

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
3	0.6	90	0.0 + 0.0
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 (#)
28.0	N/A	N/A	33

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

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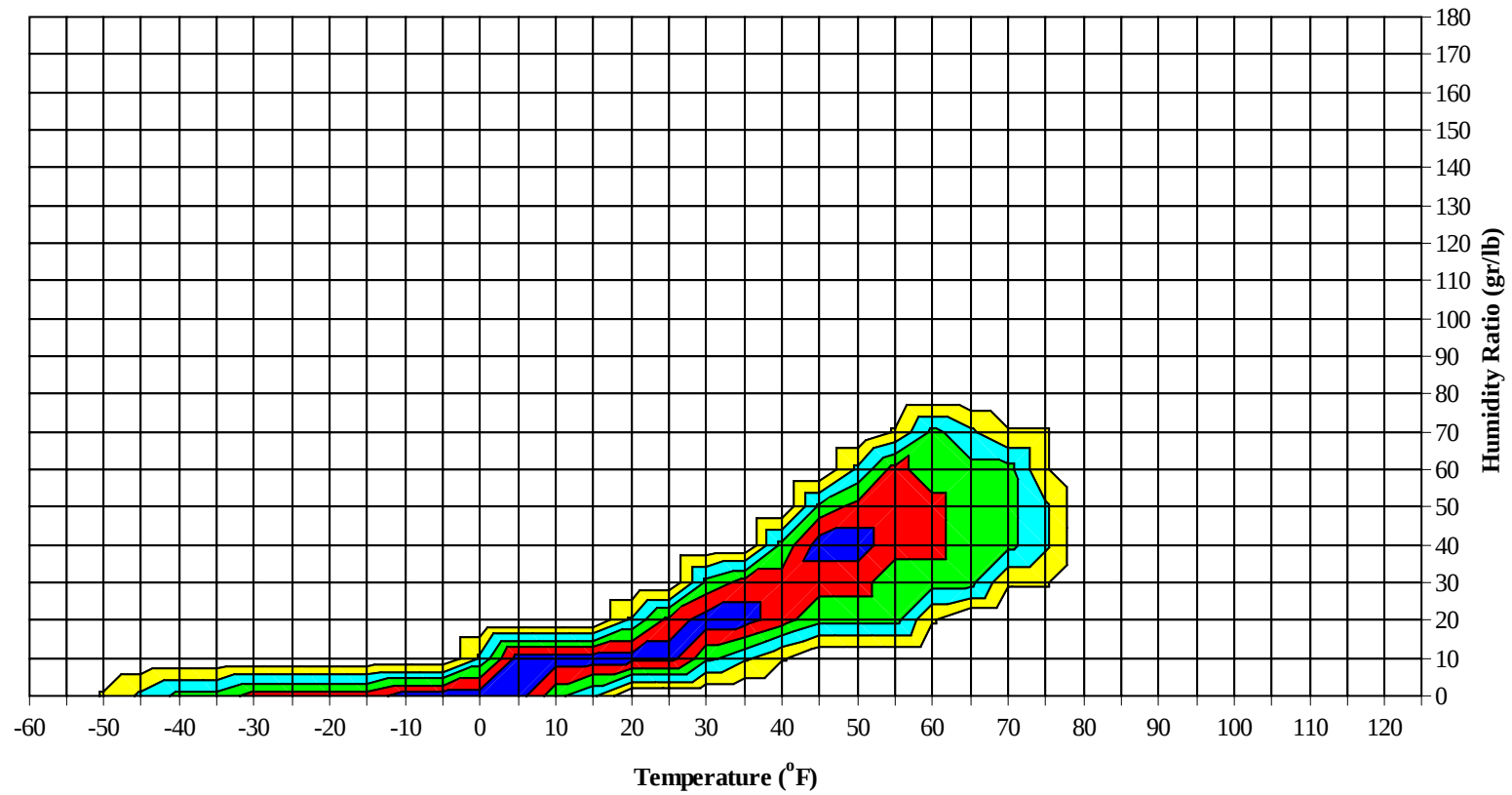


No Precipitation Data Available

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Long Term Psychrometric Summary

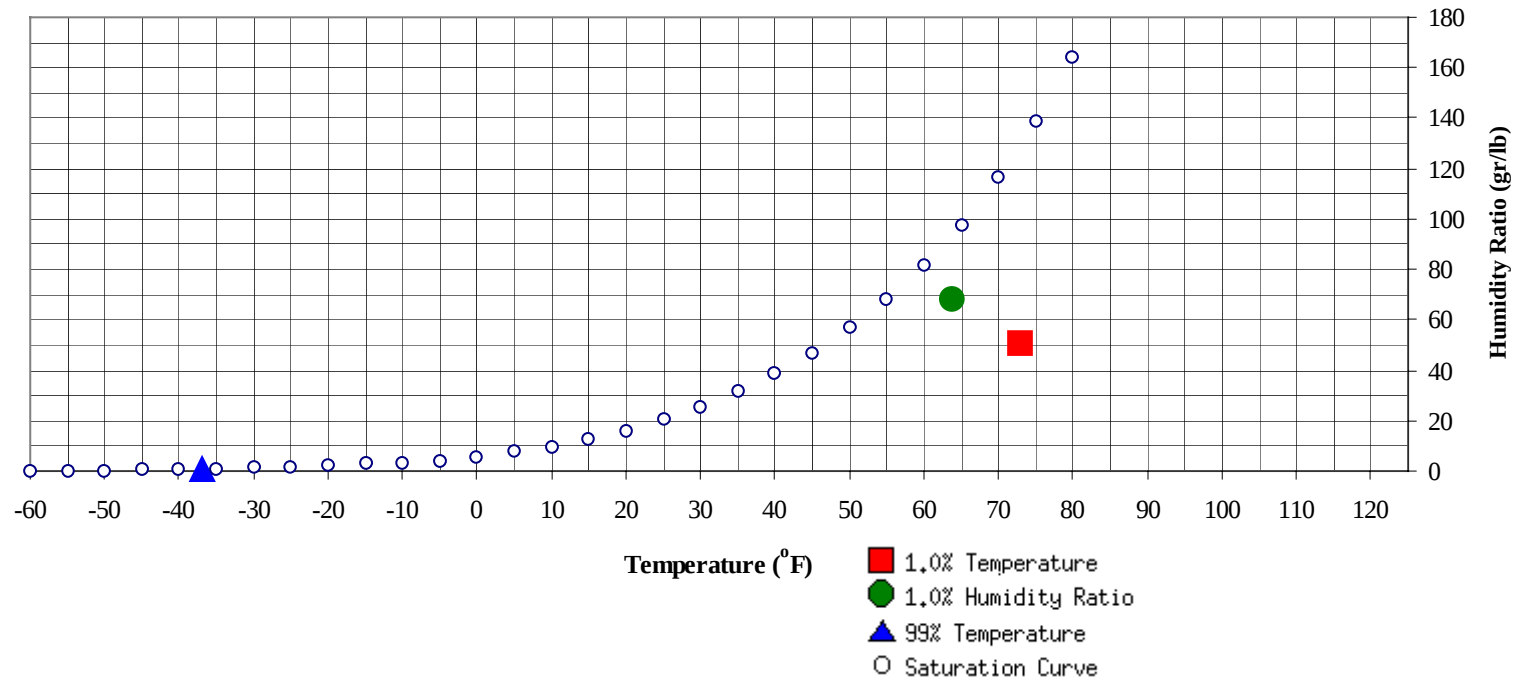


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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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)
	-37	0.7	-8.8		67.9	63.7	58.3	55	25.9

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	73	50.5	57.8	25.4

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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		
85 / 89															
80 / 84															
75 / 79															
70 / 74															
65 / 69															
60 / 64															
55 / 59															
50 / 54															
45 / 49															
40 / 44	0			0	39.0							0	0	0	34.5
35 / 39	0	0	0	0	32.8	1	1	0	2	34.2		4	2	6	31.9
30 / 34	3	3	1	7	29.5	4	5	6	15	30.1	4	12	12	28	28.3
25 / 29	7	7	9	23	24.9	7	11	9	27	24.7	13	26	24	63	23.9
20 / 24	12	15	15	41	20.1	11	14	12	37	20.0	21	27	28	77	19.6
15 / 19	22	18	19	60	15.5	14	16	15	44	15.2	29	37	32	99	15.0
10 / 14	22	24	23	69	10.8	19	19	21	59	10.6	34	34	33	101	10.4
5 / 9	24	23	26	74	6.0	21	24	24	68	5.9	33	34	30	96	5.6
0 / 4	22	23	26	71	0.8	23	25	27	75	1.0	29	23	27	80	1.0
-5 / -1	22	24	20	66	-3.1	19	21	19	59	-3.3	19	16	15	51	-3.2
-10 / -6	19	20	19	58	-7.4	23	21	24	67	-7.6	17	13	14	45	-7.5
-15 / -11	21	16	18	55	-12.0	21	20	20	61	-12.2	17	9	12	38	-12.3
-20 / -16	13	14	13	39	-17.0	14	15	14	43	-16.9	11	6	8	25	-17.1
-25 / -21	13	14	13	40	-22.0	14	13	10	36	-22.0	9	5	6	20	-22.0
-30 / -26	10	11	11	32	-27.2	12	8	10	30	-27.0	7	1	2	11	-26.6
-35 / -31	12	11	11	34	-32.0	8	5	9	22	-31.8	3	1	1	5	-31.4
-40 / -36	12	12	13	36	-36.7	9	4	4	16	-36.4	1	0	0	1	-36.0
-45 / -41	8	8	6	23	-40.5	5	2	1	8						
-50 / -46	4	4	4	12		2	1	0	3						
-55 / -51	2	1	1	4		0	0		0						
-60 / -56	1	1	0	2											

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 = 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		
85 / 89												0	0	0	61.2
80 / 84												3	1	4	60.3
75 / 79							1	0	1	55.0		0	9	7	57.9
70 / 74						0	2	2	4	53.8		1	24	17	55.7
65 / 69						0	8	6	13	51.5		5	44	33	53.5
60 / 64						1	22	19	41	48.6		13	53	48	51.2
55 / 59						4	36	32	71	45.9		39	46	50	49.1
50 / 54		3	1	4	43.1	16	46	43	105	43.1		61	36	46	46.4
45 / 49	0	9	9	18	38.6	31	51	47	129	39.9		67	18	27	43.2
40 / 44	4	28	24	55	35.7	51	42	46	139	36.5		40	6	8	39.1
35 / 39	15	36	34	85	32.5	66	25	33	124	32.8		12	2	2	34.6
30 / 34	33	36	39	108	28.5	53	10	13	76	29.2		3	0	0	29.9
25 / 29	40	38	36	115	24.0	18	4	5	26	24.4					
20 / 24	35	28	31	94	19.6	5	1	2	8	19.7					
15 / 19	33	28	26	87	14.9	4	1	1	6	15.5					
10 / 14	28	18	19	65	10.4	1	0	0	1	10.9					
5 / 9	16	10	10	36	5.8	0	0	0	0	5.4					
0 / 4	13	5	5	22	1.1	0			0	2.3					
-5 / -1	9	1	3	12	-2.9	0			0	-1.0					
-10 / -6	6	1	3	10	-7.1										
-15 / -11	4	0	1	6	-11.9										
-20 / -16	2	0	0	2	-16.5										
-25 / -21	1	0	0	1	-21.4										
-30 / -26															
-35 / -31															
-40 / -36															
-45 / -41															
-50 / -46															
-55 / -51															
-60 / -56															

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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		
85 / 89		0	0	0	63.1										
80 / 84		5	4	8	61.5		1	0	1	62.7					
75 / 79		19	13	32	59.7		4	3	7	60.7					
70 / 74	2	37	27	66	58.1	0	12	9	22	58.2		0	0	0	57.0
65 / 69	6	54	43	103	56.3	2	25	16	43	56.3		1	0	1	54.3
60 / 64	27	53	52	132	54.0	8	41	32	80	54.0		7	5	11	50.6
55 / 59	65	40	53	158	51.7	23	59	52	134	51.4	1	17	14	32	47.6
50 / 54	75	29	38	141	48.6	59	57	64	180	48.4	8	35	26	69	45.3
45 / 49	51	11	16	78	44.9	75	34	43	153	44.4	29	53	43	125	42.6
40 / 44	17	2	2	22	40.4	47	11	19	78	39.9	51	45	51	147	39.0
35 / 39	4	0	0	4	35.5	23	3	8	34	35.3	56	33	38	127	34.5
30 / 34	0			0	31.1	8	0	1	10	30.4	47	30	37	114	29.8
25 / 29						3		0	3	26.1	28	14	19	62	24.7
20 / 24						0			0	23.8	13	5	6	24	20.0
15 / 19											5	1	1	7	15.6
10 / 14											2	0	0	2	11.2
5 / 9											1	0		1	6.1
0 / 4											0			0	2.5
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															
-35 / -31															
-40 / -36															
-45 / -41															
-50 / -46															
-55 / -51															
-60 / -56															

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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		
85 / 89															
80 / 84															
75 / 79															
70 / 74															
65 / 69															
60 / 64															
55 / 59															
50 / 54		0	0	0	42.8										
45 / 49	1	2	2	5	40.5										
40 / 44	2	7	6	14	37.7										
35 / 39	10	17	16	44	34.2	1	1	0	2	34.6	0	0	0	0	32.3
30 / 34	32	41	38	110	30.1	5	7	6	17	30.1	3	2	2	7	29.3
25 / 29	39	47	44	130	25.1	8	9	9	27	25.0	6	7	5	18	25.1
20 / 24	44	44	41	128	20.3	17	18	16	51	20.2	12	11	11	34	20.3
15 / 19	38	36	35	109	15.6	27	29	29	86	15.7	17	18	17	52	15.7
10 / 14	29	25	27	81	10.8	38	40	37	115	10.6	29	25	26	81	10.5
5 / 9	22	13	17	52	6.4	36	38	42	116	5.9	26	27	29	82	5.9
0 / 4	13	7	8	28	1.4	30	31	35	96	1.1	30	30	30	90	1.0
-5 / -1	7	5	6	17	-3.0	24	22	21	67	-3.1	27	27	26	80	-3.1
-10 / -6	5	3	5	12	-7.1	20	17	15	53	-7.2	24	25	23	72	-7.5
-15 / -11	4	2	2	8	-12.1	12	11	12	35	-12.0	18	20	19	57	-11.8
-20 / -16	3	1	1	5	-17.0	8	8	7	23	-16.6	10	11	11	32	-17.1
-25 / -21	1	0	0	1	-22.0	7	5	5	16	-22.0	13	12	12	37	-22.1
-30 / -26	0			0	-25.0	4	3	4	10	-26.7	13	14	14	41	-27.1
-35 / -31						2	2	1	5	-32.0	14	11	16	41	-31.7
-40 / -36						0	0	0	0	-36.0	5	5	5	14	-36.0
-45 / -41						1	0	0	1		1	1	1	3	
-50 / -46											1	1	0	2	
-55 / -51															
-60 / -56															

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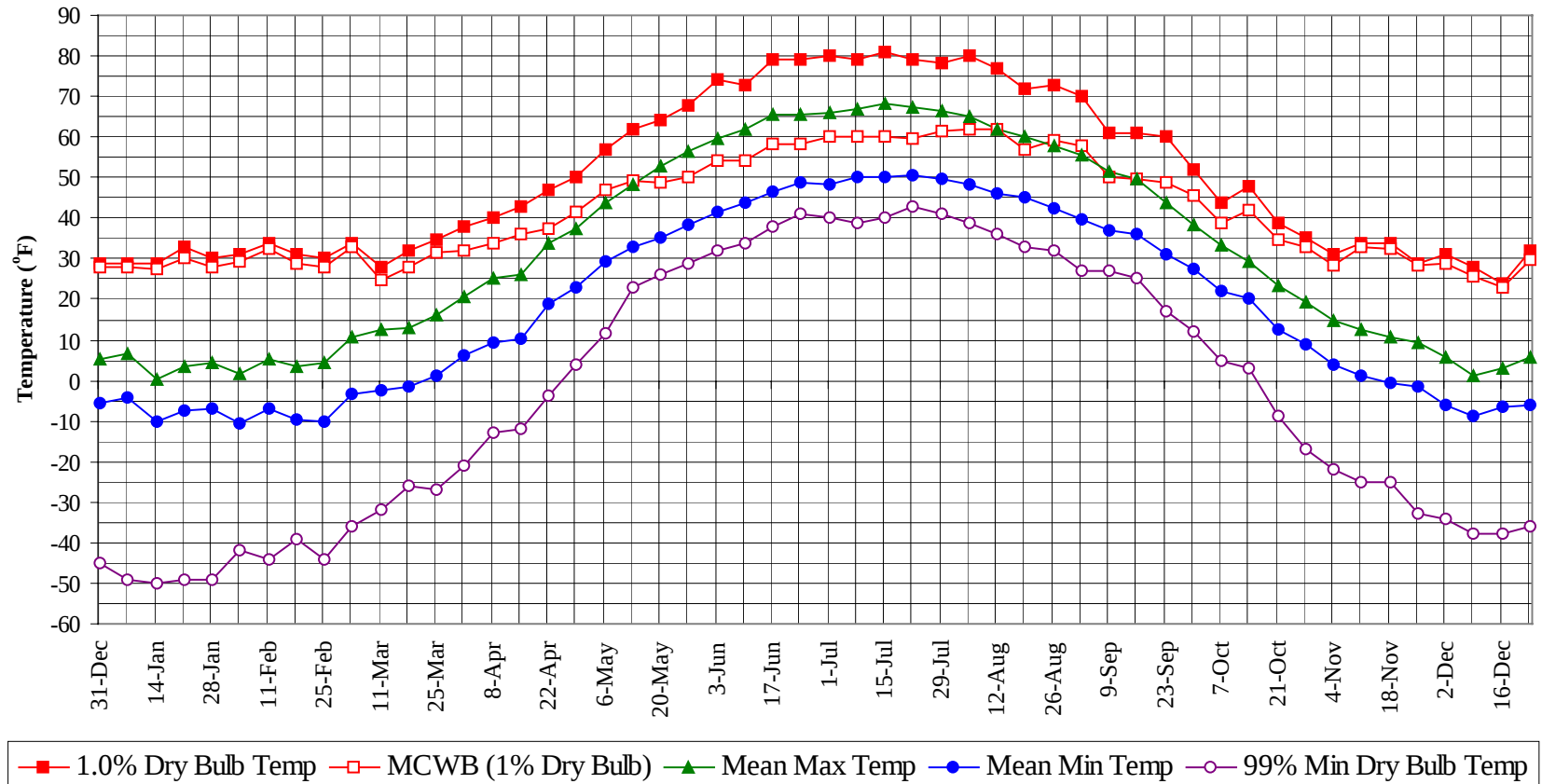
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1967 to 1996

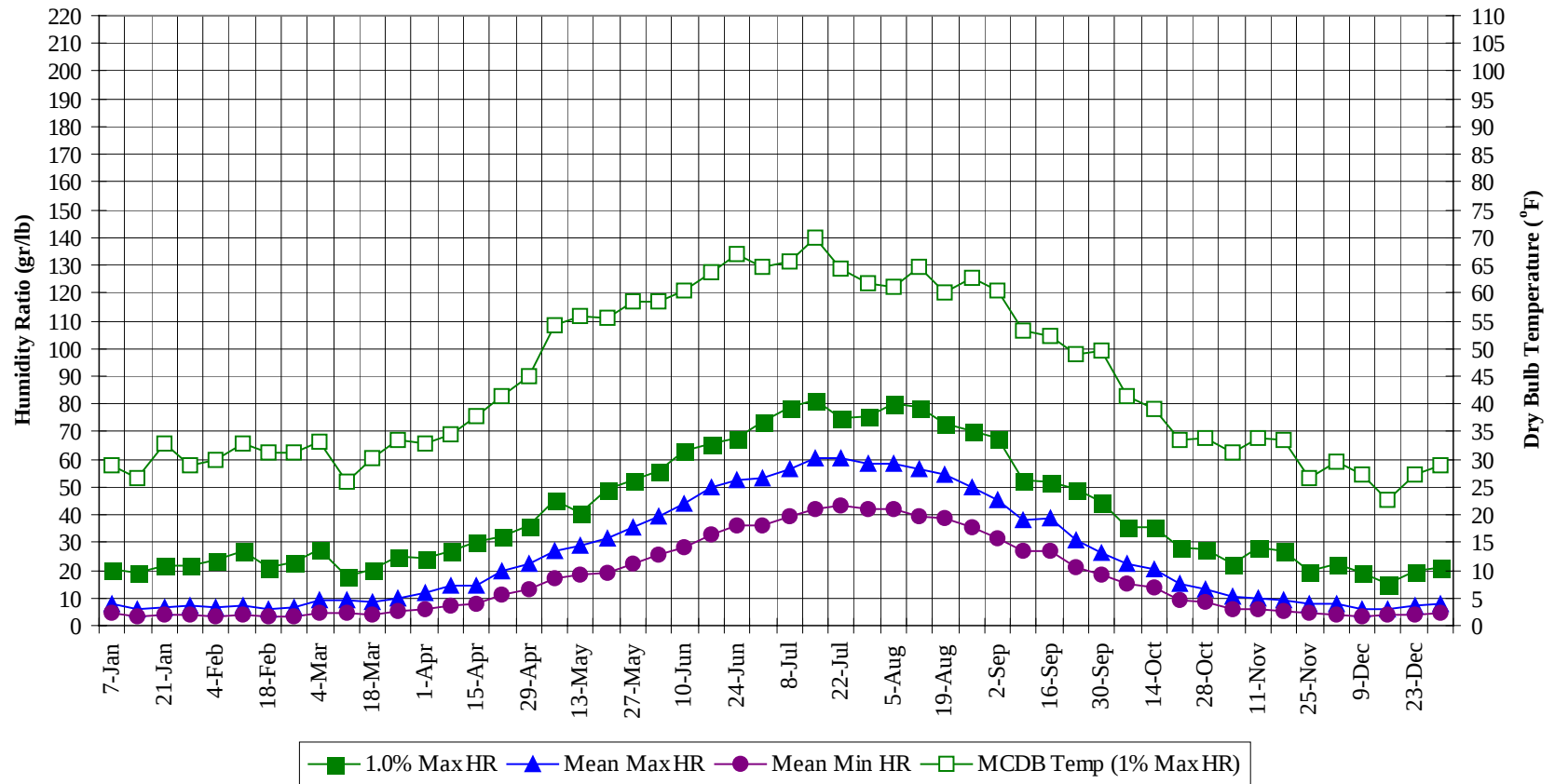
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
85 / 89		1	0	1	62.1
80 / 84		8	5	13	61.2
75 / 79	0	32	24	55	59.2
70 / 74	3	75	54	132	57.2
65 / 69	13	129	98	240	55.0
60 / 64	49	173	157	378	52.5
55 / 59	131	199	204	534	49.9
50 / 54	219	208	227	654	46.8
45 / 49	256	181	195	632	42.8
40 / 44	213	142	159	514	38.2
35 / 39	190	122	136	447	33.7
30 / 34	195	148	159	503	29.5
25 / 29	173	164	163	500	24.6
20 / 24	169	163	163	495	20.0
15 / 19	190	183	175	547	15.4
10 / 14	202	186	184	572	10.6
5 / 9	179	167	172	518	5.9
0 / 4	158	143	153	454	1.0
-5 / -1	125	114	107	347	-3.1
-10 / -6	112	99	99	311	-7.4
-15 / -11	95	78	80	253	-12.1
-20 / -16	59	53	52	164	-16.9
-25 / -21	57	48	44	149	-22.0
-30 / -26	46	36	39	121	-27.0
-35 / -31	38	30	35	103	-31.8
-40 / -36	26	20	20	66	-36.4
-45 / -41	14	11	9	35	-40.5
-50 / -46	7	5	5	17	
-55 / -51	2	1	1	4	
-60 / -56	1	1	0	2	

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary

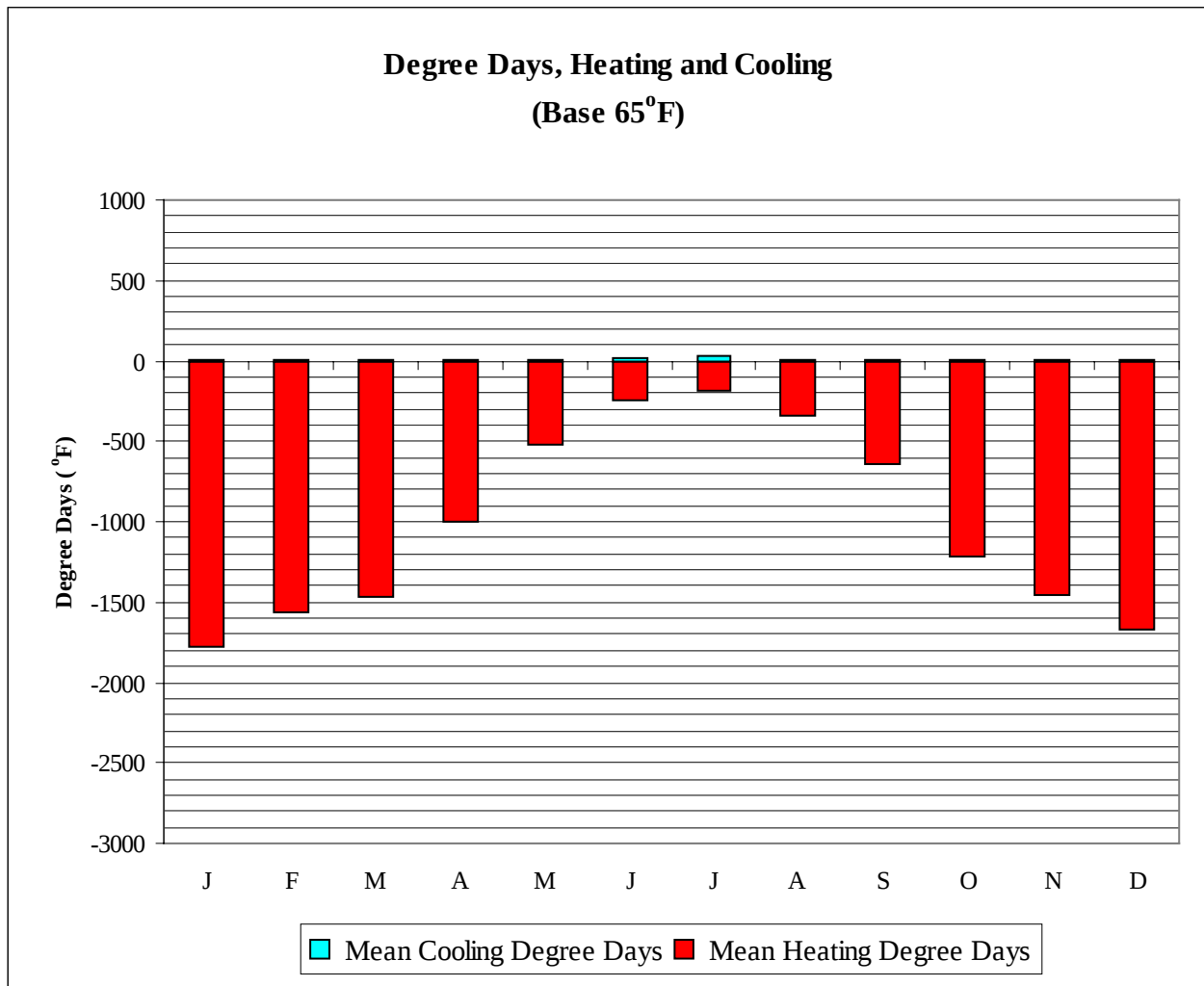


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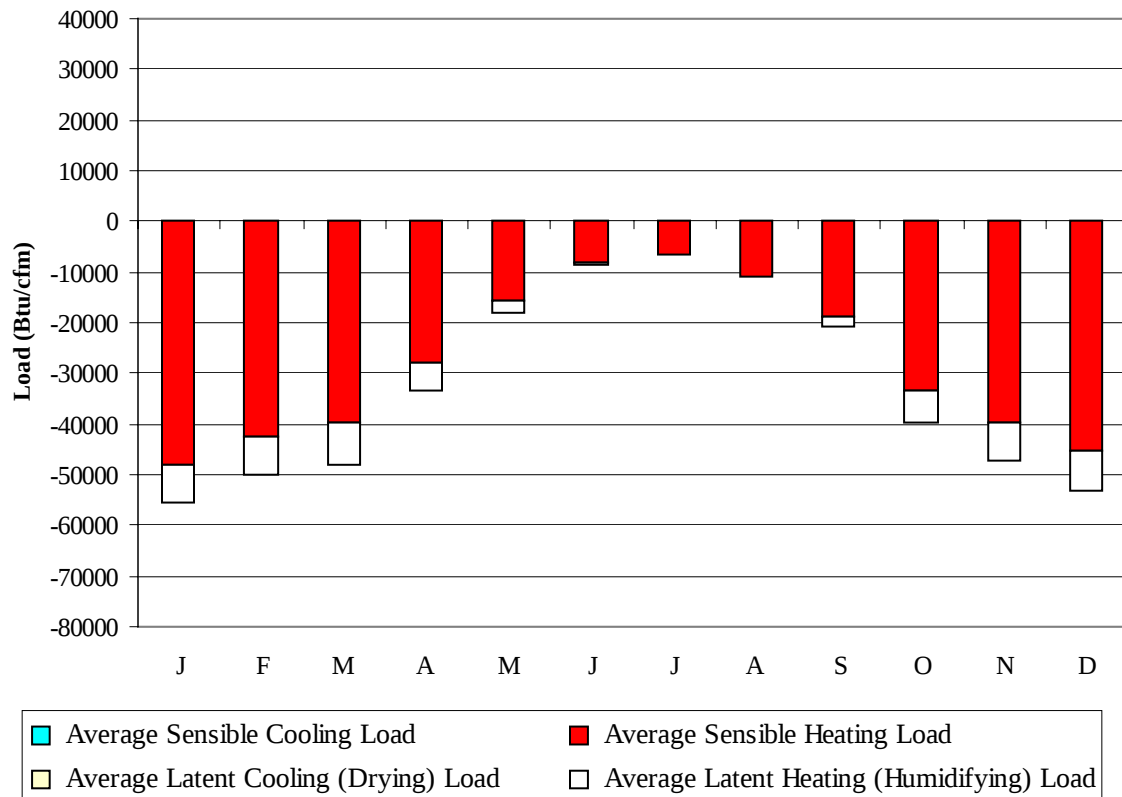
Long Term Dry Bulb Temperature and Humidity Summary

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	29.0	27.7	6.5	-4.5	-49.0	20.3	28.9	8.0	4.7
14-Jan	29.0	27.6	0.3	-10.3	-50.0	18.9	26.6	5.8	3.5
21-Jan	33.0	30.3	3.5	-7.5	-49.0	21.7	32.9	6.6	3.7
28-Jan	30.0	27.7	4.5	-7.0	-49.0	21.7	28.9	7.4	4.1
4-Feb	31.0	29.3	1.8	-10.4	-42.0	23.8	29.8	6.7	3.5
11-Feb	34.0	32.3	5.1	-6.9	-44.0	26.6	33.0	7.1	3.9
18-Feb	31.0	28.9	3.3	-9.9	-39.0	21.0	31.1	6.0	3.1
25-Feb	30.0	28.0	4.6	-10.2	-44.0	23.1	31.3	6.9	3.5
4-Mar	34.0	32.8	10.9	-3.3	-36.0	27.3	33.2	9.1	4.8
11-Mar	28.0	24.6	12.5	-2.3	-32.0	17.5	25.8	8.9	4.7
18-Mar	32.0	28.1	13.0	-1.5	-26.0	20.3	30.2	8.6	4.3
25-Mar	34.5	31.5	16.1	1.3	-27.0	25.2	33.5	9.9	5.1
1-Apr	38.0	31.8	20.9	6.2	-21.0	24.5	32.9	11.8	6.1
8-Apr	40.0	33.7	25.3	9.5	-13.0	26.6	34.4	14.3	7.6
15-Apr	43.0	36.1	26.1	10.3	-12.0	30.1	37.7	14.2	7.7
22-Apr	47.0	37.6	34.0	18.8	-4.0	32.2	41.4	19.5	11.3
29-Apr	50.0	41.6	37.3	22.9	4.0	36.4	45.1	22.3	13.3
6-May	57.0	47.1	44.0	29.5	11.5	45.5	54.1	27.0	17.1
13-May	62.0	49.0	48.3	32.9	23.0	40.6	55.7	28.9	18.1
20-May	64.0	48.9	52.7	35.1	26.0	49.0	55.6	31.3	19.1
27-May	68.0	50.3	56.6	38.1	29.0	52.5	58.4	35.6	22.3
3-Jun	74.0	54.1	59.7	41.3	32.0	56.0	58.3	39.6	25.5
10-Jun	73.0	54.4	62.1	43.7	34.0	63.0	60.5	43.7	28.6
17-Jun	79.0	58.1	65.5	46.7	38.0	65.8	63.6	50.1	32.9
24-Jun	79.0	58.5	65.6	48.7	41.0	67.9	66.9	52.6	35.8
1-Jul	80.0	60.0	66.1	48.2	40.0	73.5	64.8	53.5	36.3
8-Jul	79.0	59.9	66.7	49.9	39.0	79.1	65.7	56.7	39.3
15-Jul	81.0	59.9	68.3	50.3	40.0	81.2	70.1	60.4	42.3
22-Jul	79.0	59.5	67.2	50.5	43.0	74.9	64.5	60.7	43.4
29-Jul	78.0	61.3	66.3	49.7	41.0	75.6	61.8	58.3	41.9
5-Aug	80.0	61.8	65.2	48.4	39.0	79.8	61.0	58.2	41.9
12-Aug	77.0	61.8	61.8	46.2	36.0	79.1	64.8	56.6	39.7
19-Aug	72.0	57.1	60.0	45.0	33.0	72.8	60.2	54.3	38.9
26-Aug	73.0	59.1	57.9	42.3	32.0	70.0	62.8	50.2	35.3
2-Sep	70.0	57.9	55.8	39.8	27.0	67.9	60.3	45.4	31.7
9-Sep	61.0	50.2	51.5	36.9	27.0	52.5	53.3	38.4	26.7
16-Sep	61.0	49.7	49.6	36.1	25.0	51.8	52.2	38.6	27.2
23-Sep	60.0	48.8	43.6	31.1	17.0	49.0	48.8	31.1	21.3
30-Sep	52.0	45.4	38.2	27.6	12.0	44.8	49.7	26.3	18.4
7-Oct	44.0	38.9	33.1	22.3	5.0	35.7	41.4	22.4	15.1
14-Oct	48.0	42.1	29.1	20.2	3.0	35.7	39.1	20.2	13.8
21-Oct	39.0	34.6	23.5	12.6	-9.0	28.0	33.5	15.2	9.4
28-Oct	35.0	32.8	19.1	8.8	-17.0	27.3	33.9	13.1	8.3
4-Nov	31.0	28.5	15.0	3.8	-22.0	22.4	31.1	10.6	6.0
11-Nov	34.0	33.1	12.5	1.1	-25.0	28.0	33.9	9.8	5.6
18-Nov	34.0	32.3	10.5	-0.7	-25.0	26.6	33.6	9.1	5.1
25-Nov	29.0	28.6	9.1	-1.3	-33.0	19.6	26.5	8.1	4.4
2-Dec	31.0	29.0	5.8	-5.9	-34.0	22.4	29.7	7.6	4.2
9-Dec	28.0	25.8	1.1	-8.9	-38.0	18.9	27.3	6.1	3.5
16-Dec	24.0	23.1	3.1	-6.7	-38.0	15.4	22.6	6.1	3.7
23-Dec	32.0	29.8	5.8	-6.0	-36.0	19.6	27.3	7.5	4.1
31-Dec	29.0	27.8	5.5	-5.5	-45.0	21.0	28.8	7.8	4.5



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1779
FEB	0	1566
MAR	0	1464
APR	0	1005
MAY	2	525
JUN	21	249
JUL	33	188
AUG	11	344
SEP	0	643
OCT	0	1215
NOV	0	1458
DEC	0	1665
ANN	66	12101

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	0	-48091	0	-7326
FEB	0	-42390	0	-7420
MAR	0	-39912	0	-7939
APR	0	-27919	0	-5588
MAY	0	-15516	0	-2398
JUN	43	-8113	1	-391
JUL	75	-6427	6	-45
AUG	16	-10835	2	-264
SEP	0	-18646	0	-1957
OCT	0	-33593	0	-6227
NOV	0	-39671	0	-7743
DEC	0	-45086	0	-7884
ANN	134	-336199	9	-55182

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

No Solar Radiation
Data Available

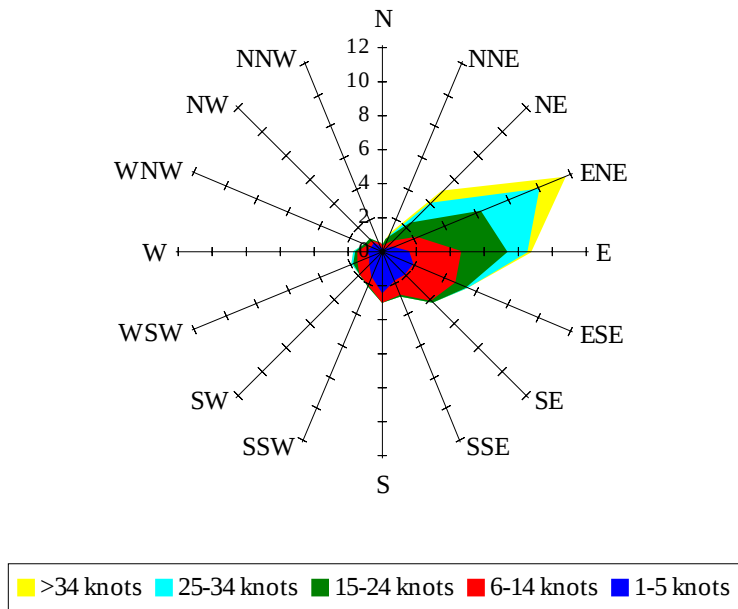


Average Annual Solar Heat and Illumination – Nearest Available Site

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

Wind Summary - December, January, and February

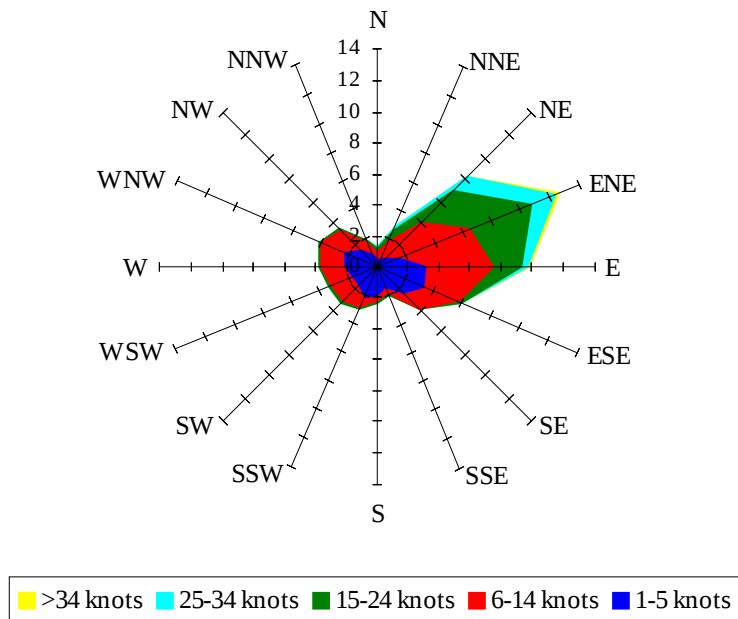
Labels of Percent Frequency on North Axis



Percent Calm = 48.50

Wind Summary - March, April, and May

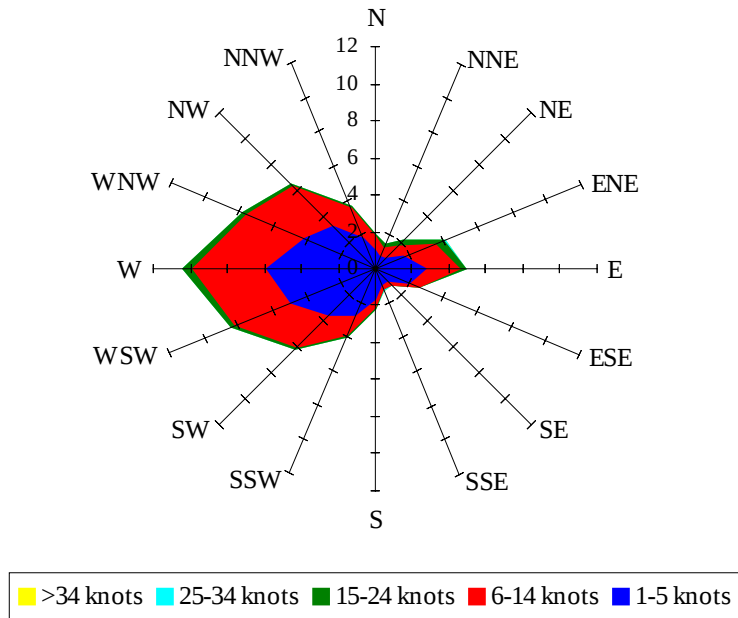
Labels of Percent Frequency on North Axis



Percent Calm = 29.02

Wind Summary - June, July, and August

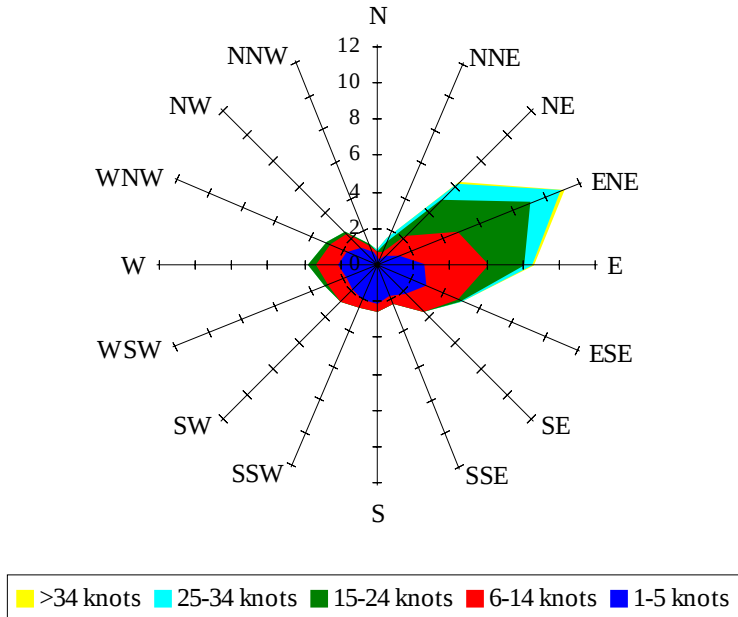
Labels of Percent Frequency on North Axis



Percent Calm = 31.70

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 40.01