

HURLBURT FIELD (AF) FL

Latitude = 30.43 N

Longitude = 86.68 W

Period of Record = 1967 to 1996

WMO No. 747770

Elevation = 39 feet

Average Pressure = 29.98 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	96	79	124	7.7	N
0.4% Occurrence	92	78	126	8.1	SSW
1.0% Occurrence	90	78	127	8.1	S
2.0% Occurrence	89	78	127	7.9	S
Mean Daily Range	16	-	-	-	-
97.5% Occurrence	37	34	22	6.4	N
99.0% Occurrence	32	29	17	6.4	N
99.6% Occurrence	29	26	15	6.7	N
Median of Extreme Lows	23	20	9	9.0	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	83	89	158	7.6	SSW
0.4% Occurrence	82	88	152	7.6	SSW
1.0% Occurrence	81	87	147	7.4	SSW
2.0% Occurrence	80	86	141	7.1	SSW
	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	166	87	1.10	8.9	SSW
0.4% Occurrence	156	86	1.04	7.1	SW
1.0% Occurrence	151	85	1.00	7.0	SW
2.0% Occurrence	145	85	0.97	7.0	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		22	1923	2319	4028

Other Site Data

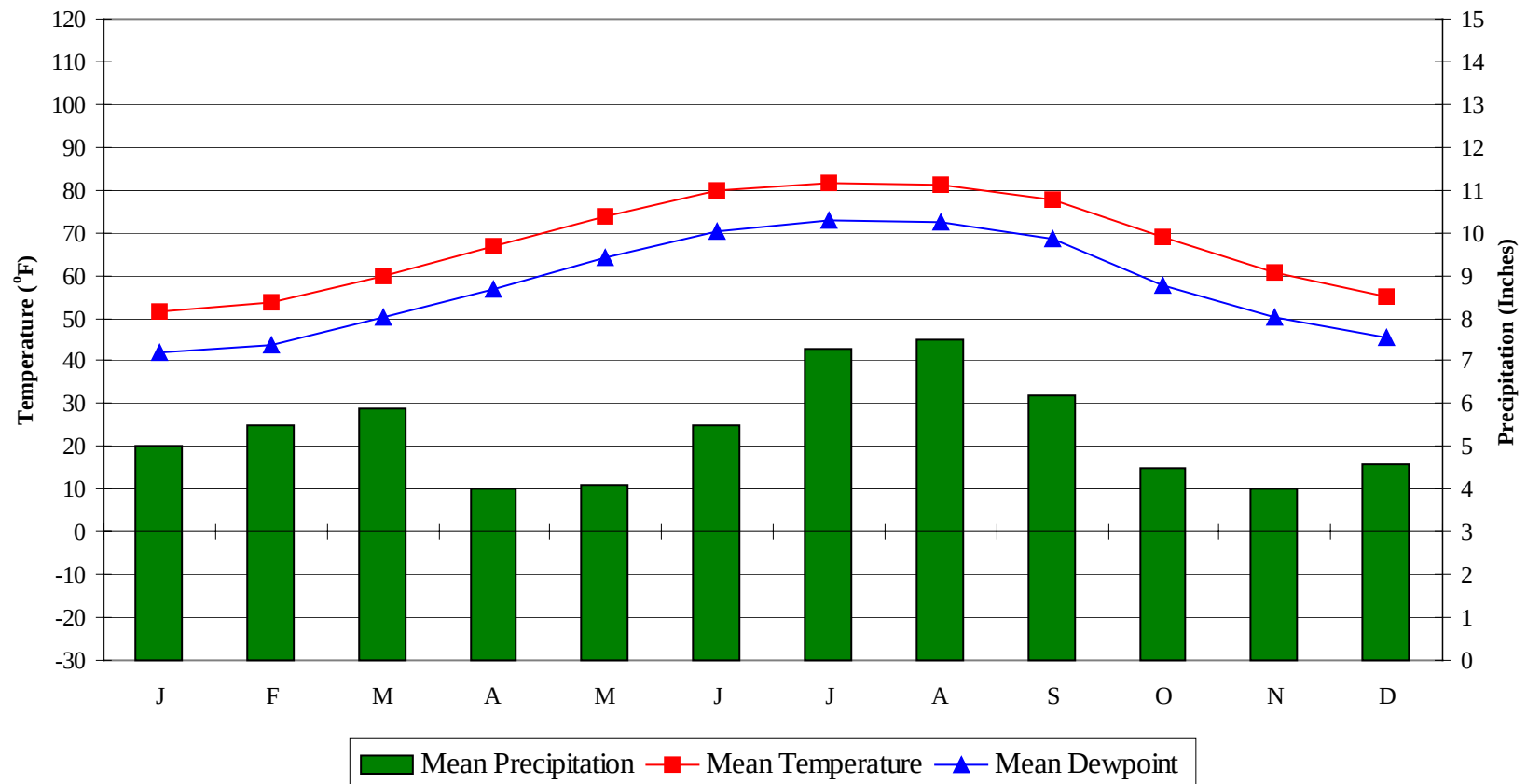
Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
10	4.5	140	7.2 + 1.8
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
70.2	0	0	11

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

HURLBURT FIELD (AF) FL

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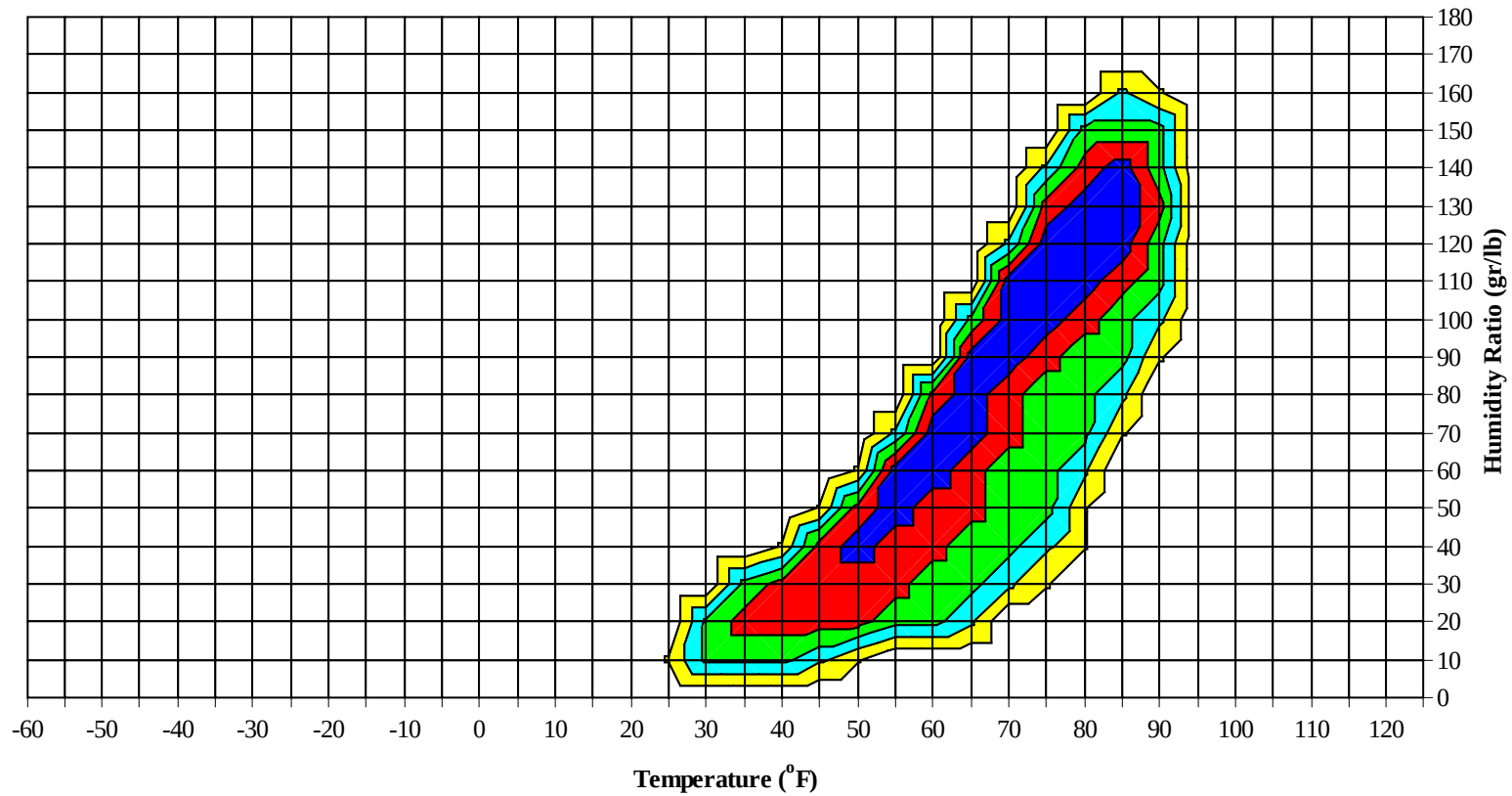
Average Annual Climate



HURLBURT FIELD (AF) FL

WMO No. 747770

Long Term Psychrometric Summary

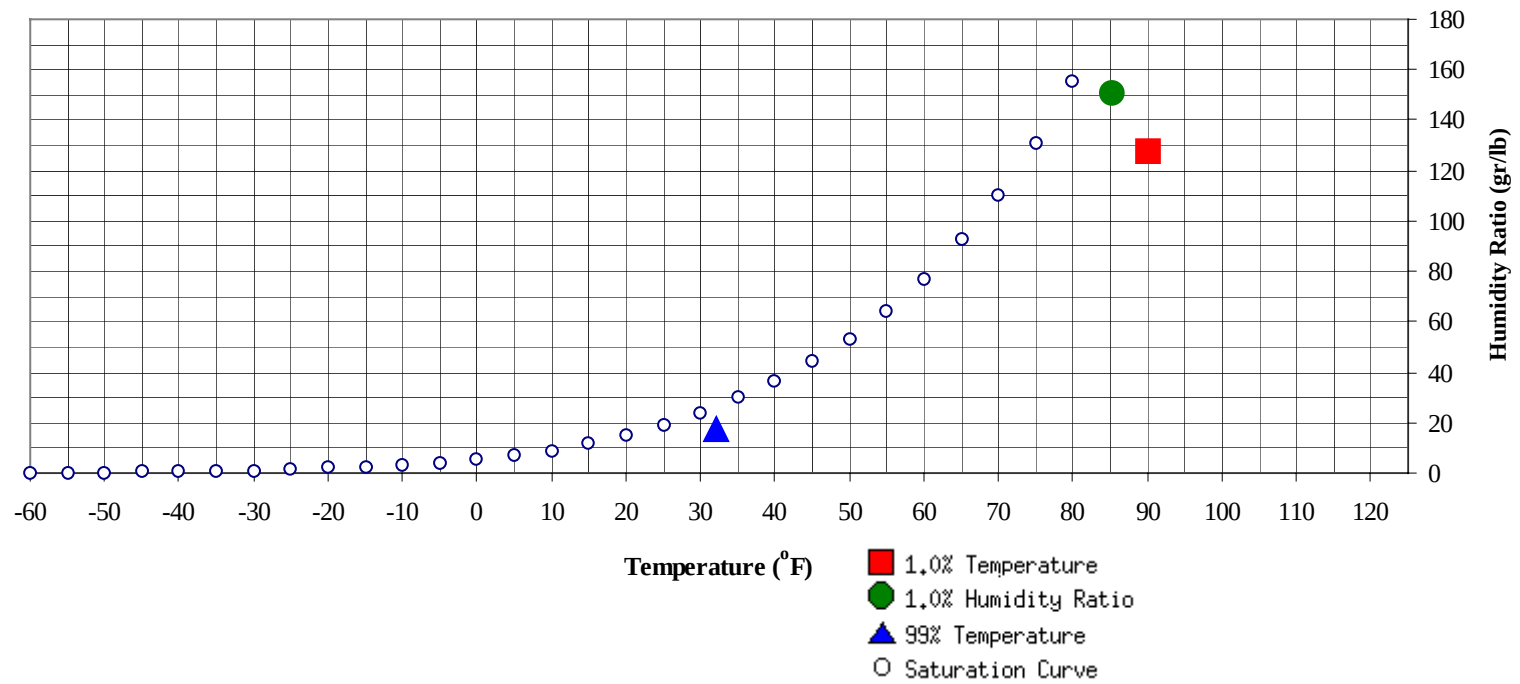


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

HURLBURT FIELD (AF) FL

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Psychrometric Summary of Peak Design Values



	(°F)	MCHR	Enthalpy	1.0% Humidity Ratio	(gr/lb)	MCDB	MCWB	MC Dewpt	Enthalpy
		(gr/lb)	(btu/lb)			(°F)	(°F)	(°F)	(btu/lb)
99% Dry Bulb	32	17.4	10.4	Ratio	150.5	85.3	80.7	79	44.1

		MCHR	MCWB	Enthalpy
	(°F)	(gr/lb)	(°F)	(btu/lb)
1.0% Dry Bulb	90	127.4	78.4	41.6

HURLBURT FIELD (AF) FL

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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	09	17			01	09	17			01	09	17		
	To 08	To 16	To 00			To 08	To 16	To 00			To 08	To 16	To 00		
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84						0		0	65.5		1		1	65.5	
75 / 79		2	0	2	69.3	1	0	1	66.5		11	1	12	67.1	
70 / 74	3	14	4	21	67.1	2	18	3	23	65.0	8	52	15	76	65.6
65 / 69	17	34	22	73	63.1	19	46	26	90	62.4	38	73	62	173	62.3
60 / 64	27	52	43	122	58.1	30	52	45	128	57.4	50	55	66	171	57.4
55 / 59	27	44	38	109	52.2	28	38	42	108	51.8	38	31	46	115	51.8
50 / 54	28	36	34	99	46.8	27	31	32	90	46.6	36	14	26	77	47.3
45 / 49	38	33	38	108	42.3	32	18	30	80	42.0	33	7	17	57	42.8
40 / 44	33	18	31	82	37.6	31	14	23	68	37.7	25	3	10	38	38.5
35 / 39	32	10	23	66	33.3	29	6	15	50	33.5	13	1	3	17	33.9
30 / 34	26	4	11	41	28.9	18	2	6	26	28.9	4	0	1	5	28.7
25 / 29	12	1	3	16	24.3	7	0	1	8	24.2	1	0		1	23.8
20 / 24	3	0	1	4	19.4	1	0	0	1	19.4	0			0	19.3
15 / 19	1	0		1	15.6	0		0	0	15.8					
10 / 14	0	0		0	9.1										
5 / 9	0			0	6.0										

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.

HURLBURT FIELD (AF) FL

WMO No. 747770

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															
95 / 99							0		0	72.0		1	0	1	77.8
90 / 94		0		0	70.3		1	0	1	71.8	0	18	1	19	77.5
85 / 89		0	0	0	68.6	0	21	1	22	73.9	6	110	23	139	76.6
80 / 84	0	12	0	12	68.9	8	95	22	125	72.4	54	83	101	238	74.9
75 / 79	6	68	14	89	68.5	44	91	86	221	70.3	75	22	75	172	72.5
70 / 74	43	91	73	207	65.9	75	35	86	196	67.3	72	7	31	110	69.2
65 / 69	54	44	74	173	61.7	59	6	32	96	63.7	26	0	7	33	64.1
60 / 64	44	17	41	102	57.0	32	1	13	46	58.7	6	0	1	7	59.4
55 / 59	39	6	21	66	52.7	21	0	6	27	54.1	1		0	1	54.3
50 / 54	30	2	11	43	48.4	8		1	9	49.8	0		0	0	46.3
45 / 49	17	0	4	21	43.9	1		0	1	45.1	0			0	43.3
40 / 44	6	0	1	7	39.9	0			0	41.3					
35 / 39	1		0	1	35.1										
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															

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HURLBURT FIELD (AF) FL

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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		
100 / 104		0		0	80.0		0		0	74.0					
95 / 99		3	0	3	78.6		3	0	3	79.4		0		0	80.0
90 / 94	0	43	2	45	79.0	0	36	2	38	78.6		13	0	13	77.4
85 / 89	16	127	49	193	77.8	9	136	46	191	77.5	1	101	16	118	76.1
80 / 84	68	52	107	228	76.1	48	53	96	196	75.9	25	78	75	179	74.2
75 / 79	99	19	71	189	73.7	112	18	81	212	73.6	67	32	81	180	72.1
70 / 74	60	4	18	82	70.7	71	3	22	96	70.6	94	11	46	150	68.8
65 / 69	4		0	4	65.2	7	0	1	8	65.2	33	4	14	50	63.0
60 / 64	0			0	62.0	1	0	0	1	61.6	12	1	5	18	58.0
55 / 59						0			0	59.0	5	0	2	7	53.3
50 / 54											3		1	4	49.1
45 / 49											0		0	0	45.8
40 / 44															
35 / 39															
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															

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HURLBURT FIELD (AF) FL

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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		
100 / 104															
95 / 99															
90 / 94		0		0	75.5										
85 / 89	0	13	0	13	72.9										
80 / 84	3	66	10	79	71.4		4		4	69.7					
75 / 79	17	74	47	138	68.8	5	39	7	52	69.6	0	6	0	6	70.5
70 / 74	42	55	57	154	65.2	26	59	41	125	66.4	9	32	13	54	67.7
65 / 69	53	27	50	130	61.4	30	50	41	121	61.2	30	50	41	121	63.2
60 / 64	49	10	39	97	57.1	31	38	35	104	55.9	30	48	38	116	57.2
55 / 59	36	2	25	63	52.7	33	26	37	96	51.2	27	43	37	108	51.3
50 / 54	27	1	14	41	48.0	35	15	32	82	47.0	30	32	36	98	46.6
45 / 49	14	1	5	20	43.8	33	7	25	65	42.8	33	20	34	87	42.2
40 / 44	6	0	1	7	39.6	24	2	16	41	38.5	32	11	27	71	37.9
35 / 39	1		0	1	36.5	18	0	5	24	34.7	29	4	15	48	33.6
30 / 34						5	0	1	6	30.3	20	1	6	27	29.2
25 / 29						1	0	0	1	26.1	6	0	1	7	25.0
20 / 24											0	0	0	0	19.3
15 / 19											0	0	0	0	14.1
10 / 14											0	0		0	10.8
5 / 9															

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HURLBURT FIELD (AF) FL

WMO No. 747770

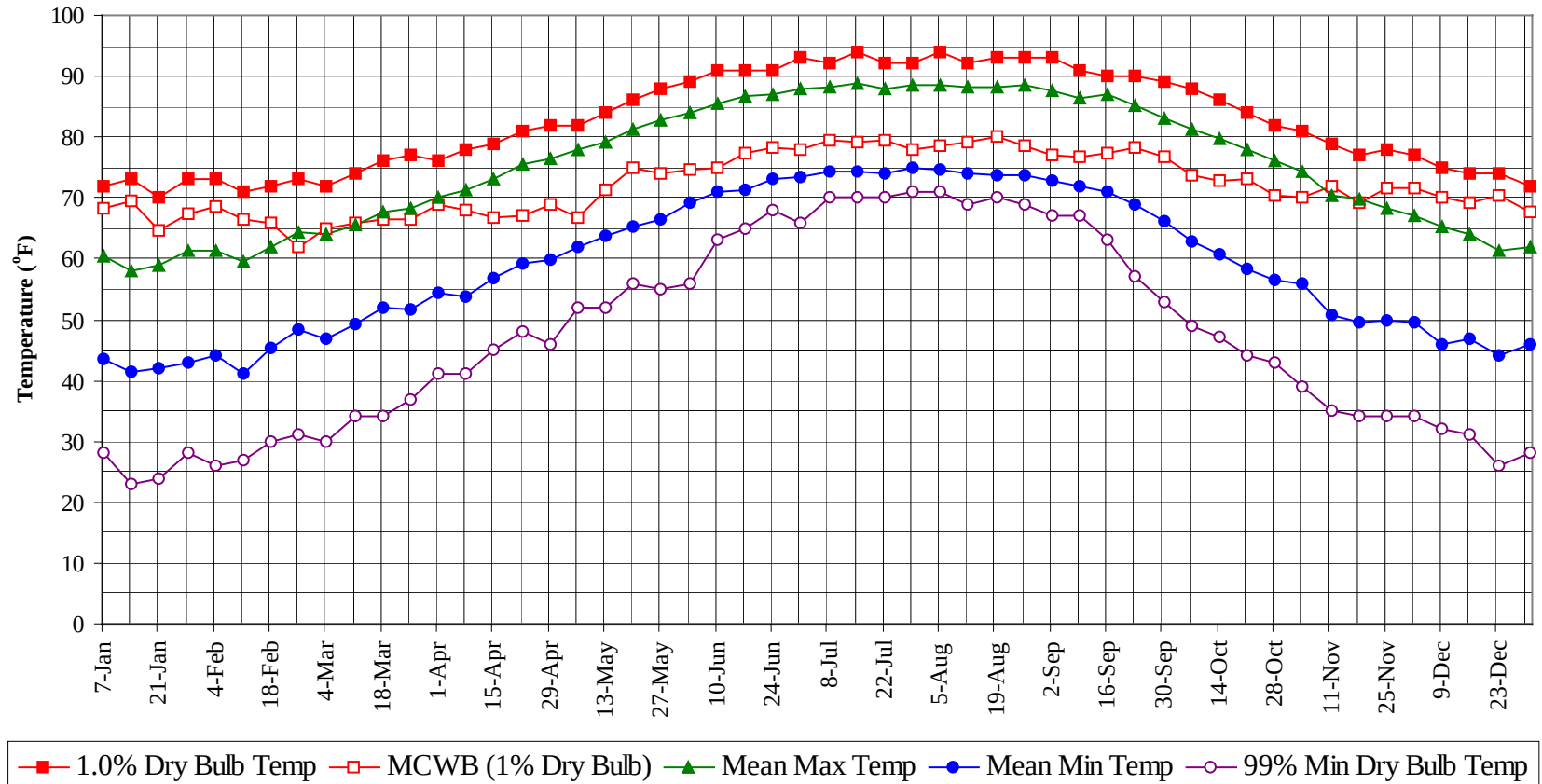
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1967 to 1996

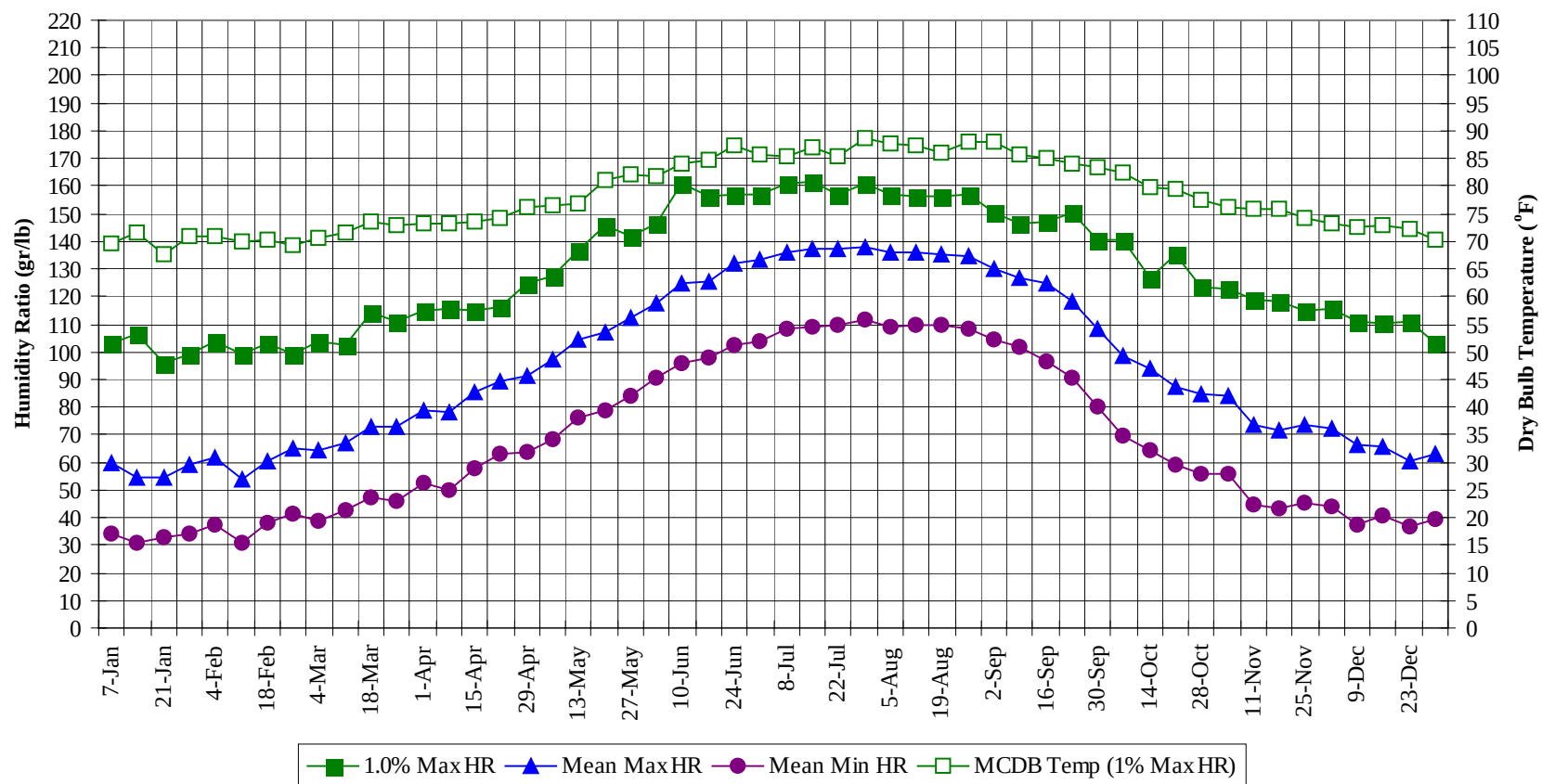
Annual Totals						
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	
	01 To 08	09 To 16	17 To 00			
100 / 104	0			0	77.0	
95 / 99	7			0	7	78.9
90 / 94	0	112	5	117	78.4	
85 / 89	35	513	136	685	76.9	
80 / 84	212	448	414	1073	74.6	
75 / 79	436	382	465	1283	71.5	
70 / 74	511	377	412	1300	67.4	
65 / 69	367	331	370	1069	62.4	
60 / 64	308	271	327	906	57.3	
55 / 59	251	189	253	692	52.0	
50 / 54	222	130	186	539	47.1	
45 / 49	198	84	151	433	42.5	
40 / 44	155	47	107	309	38.0	
35 / 39	121	20	60	201	33.7	
30 / 34	71	7	26	103	29.1	
25 / 29	26	2	6	34	24.5	
20 / 24	4	1	1	6	19.4	
15 / 19	2	0	0	2	15.2	
10 / 14	1	0		1	10.0	
5 / 9	0			0	6.0	
	</					

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary

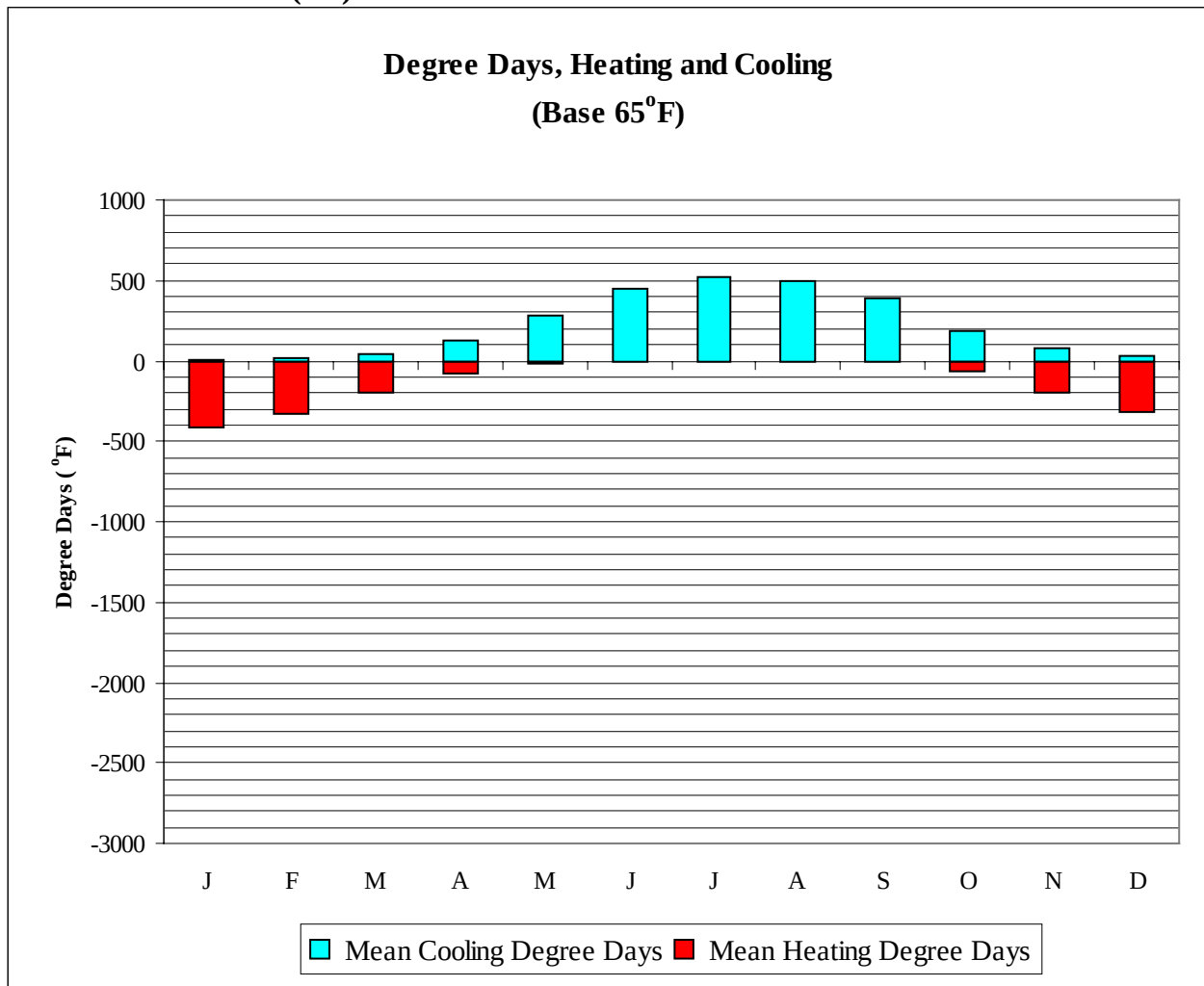


HURLBURT FIELD (AF) FL

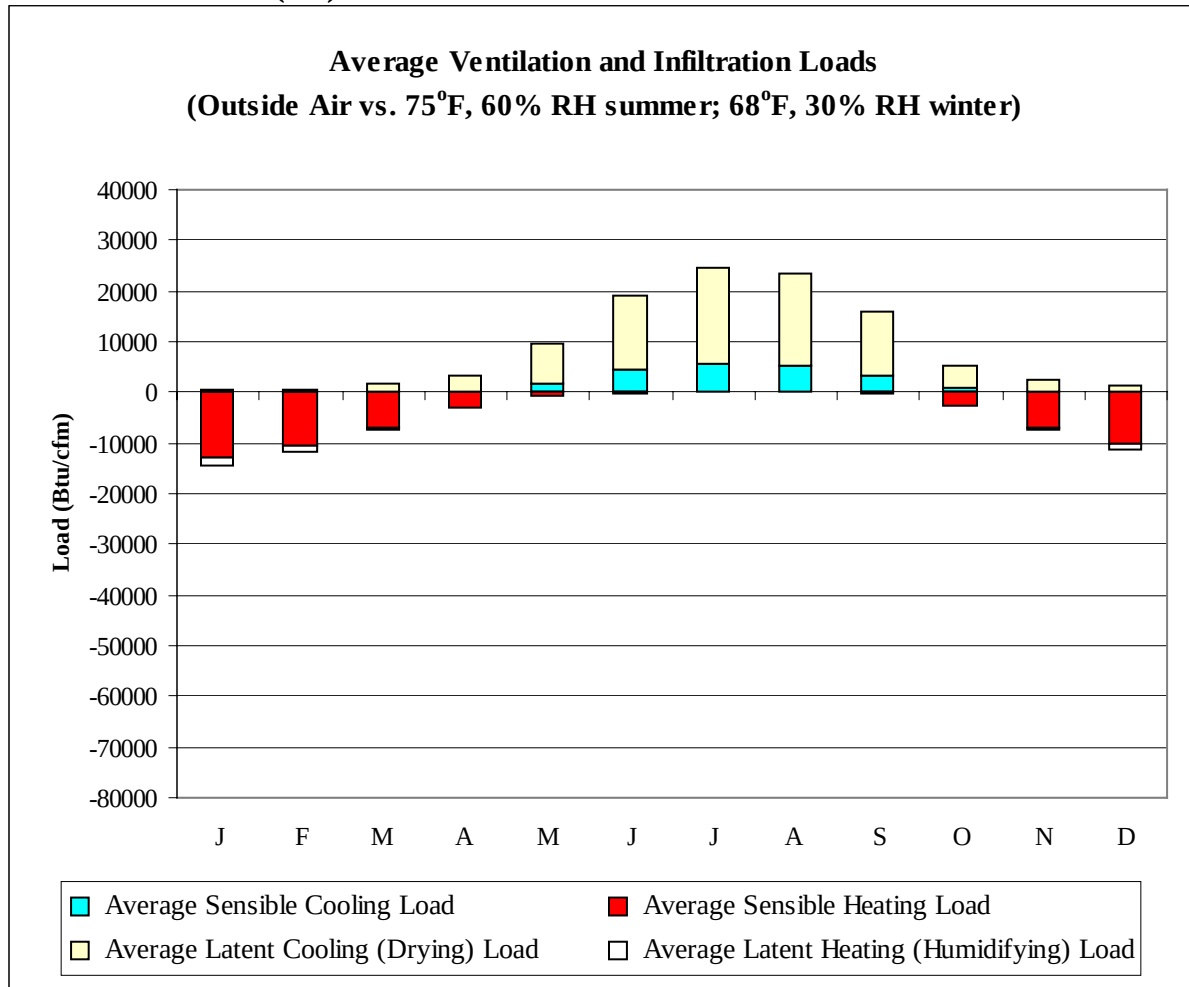
WMO No. 747770

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	72.0	68.4	60.4	43.6	28.0	102.9	69.5	59.6	34.4
14-Jan	73.0	69.6	57.9	41.3	23.0	106.4	71.5	54.2	31.2
21-Jan	70.0	64.5	58.9	41.9	24.0	95.9	67.5	54.2	32.5
28-Jan	73.0	67.5	61.3	42.9	28.0	99.4	71.0	59.3	34.2
4-Feb	73.0	68.5	61.3	44.2	26.0	103.6	71.1	61.9	37.2
11-Feb	71.0	66.5	59.6	40.9	27.0	99.4	70.0	54.2	30.7
18-Feb	72.0	66.0	62.0	45.3	30.0	102.9	70.2	60.4	38.1
25-Feb	73.0	62.0	64.4	48.4	31.0	99.4	69.4	65.0	41.2
4-Mar	72.0	65.1	64.0	46.7	30.0	103.6	70.5	64.3	38.8
11-Mar	74.0	66.0	65.7	49.2	34.0	102.2	71.6	67.0	42.9
18-Mar	76.0	66.4	67.6	51.8	34.0	114.1	73.4	72.9	47.6
25-Mar	77.0	66.4	68.3	51.6	37.0	111.3	73.0	73.1	46.1
1-Apr	76.0	68.9	70.0	54.5	41.0	114.8	73.3	78.6	52.5
8-Apr	78.0	68.1	71.3	53.8	41.0	115.5	73.2	78.3	49.7
15-Apr	79.0	66.8	73.2	56.9	45.0	114.8	73.7	85.3	57.5
22-Apr	81.0	67.2	75.4	59.3	48.0	116.2	74.2	89.2	63.0
29-Apr	82.0	68.8	76.6	59.7	46.0	124.6	76.2	91.6	63.6
6-May	82.0	66.8	77.8	62.0	52.0	127.4	76.6	97.3	68.3
13-May	84.0	71.2	79.2	63.9	52.0	136.5	76.9	104.2	76.0
20-May	86.0	75.0	81.2	65.2	56.0	145.6	81.1	107.0	79.0
27-May	88.0	74.1	82.7	66.5	55.0	142.1	82.0	112.1	84.1
3-Jun	89.0	74.7	83.9	69.1	56.0	146.3	81.8	117.8	90.8
10-Jun	91.0	75.0	85.6	71.0	63.0	161.0	84.2	125.0	96.0
17-Jun	91.0	77.4	86.6	71.4	65.0	156.1	84.6	125.5	97.6
24-Jun	91.0	78.3	87.1	73.0	68.0	156.8	87.3	132.3	102.5
1-Jul	93.0	77.9	87.9	73.3	66.0	156.8	85.7	133.6	103.9
8-Jul	92.0	79.6	88.1	74.4	70.0	161.0	85.3	135.7	108.2
15-Jul	94.0	79.1	88.8	74.3	70.0	161.7	87.1	137.5	109.0
22-Jul	92.0	79.4	88.1	73.9	70.0	156.8	85.4	137.0	109.9
29-Jul	92.0	78.0	88.4	74.9	71.0	161.0	88.7	138.2	111.9
5-Aug	94.0	78.4	88.4	74.5	71.0	156.8	87.6	135.9	109.3
12-Aug	92.0	79.2	88.3	74.1	69.0	156.1	87.3	136.2	109.8
19-Aug	93.0	80.1	88.3	73.9	70.0	156.1	86.1	135.0	110.0
26-Aug	93.0	78.5	88.6	73.8	69.0	156.8	87.9	134.4	108.6
2-Sep	93.0	76.9	87.7	72.8	67.0	150.5	88.0	130.3	104.3
9-Sep	91.0	76.8	86.5	72.0	67.0	146.3	85.7	126.7	101.6
16-Sep	90.0	77.3	86.9	71.1	63.0	147.0	85.0	124.5	96.4
23-Sep	90.0	78.4	85.3	69.0	57.0	150.5	84.2	118.1	90.6
30-Sep	89.0	76.8	83.2	66.1	53.0	140.7	83.3	108.0	80.3
7-Oct	88.0	73.6	81.2	62.9	49.0	140.7	82.3	98.4	69.6
14-Oct	86.0	72.9	79.8	60.7	47.0	126.7	79.8	93.7	64.6
21-Oct	84.0	73.0	78.0	58.2	44.0	135.1	79.5	87.3	58.8
28-Oct	82.0	70.3	76.3	56.5	43.0	123.2	77.6	84.9	55.7
4-Nov	81.0	70.2	74.3	55.9	39.0	122.5	76.2	84.1	55.8
11-Nov	79.0	71.9	70.4	50.9	35.0	119.0	75.9	73.3	44.8
18-Nov	77.0	69.2	69.7	49.7	34.0	118.3	75.8	71.6	43.5
25-Nov	78.0	71.8	68.2	49.9	34.0	114.8	74.1	73.6	45.1
2-Dec	77.0	71.6	67.1	49.4	34.0	115.5	73.4	72.3	44.1
9-Dec	75.0	70.0	65.4	46.0	32.0	111.3	72.4	66.1	37.5
16-Dec	74.0	69.3	64.0	46.8	31.0	110.6	72.8	65.8	40.5
23-Dec	74.0	70.5	61.3	44.1	26.0	111.3	72.4	60.7	36.7
31-Dec	72.0	67.7	61.9	45.8	28.0	102.9	70.4	63.0	39.2



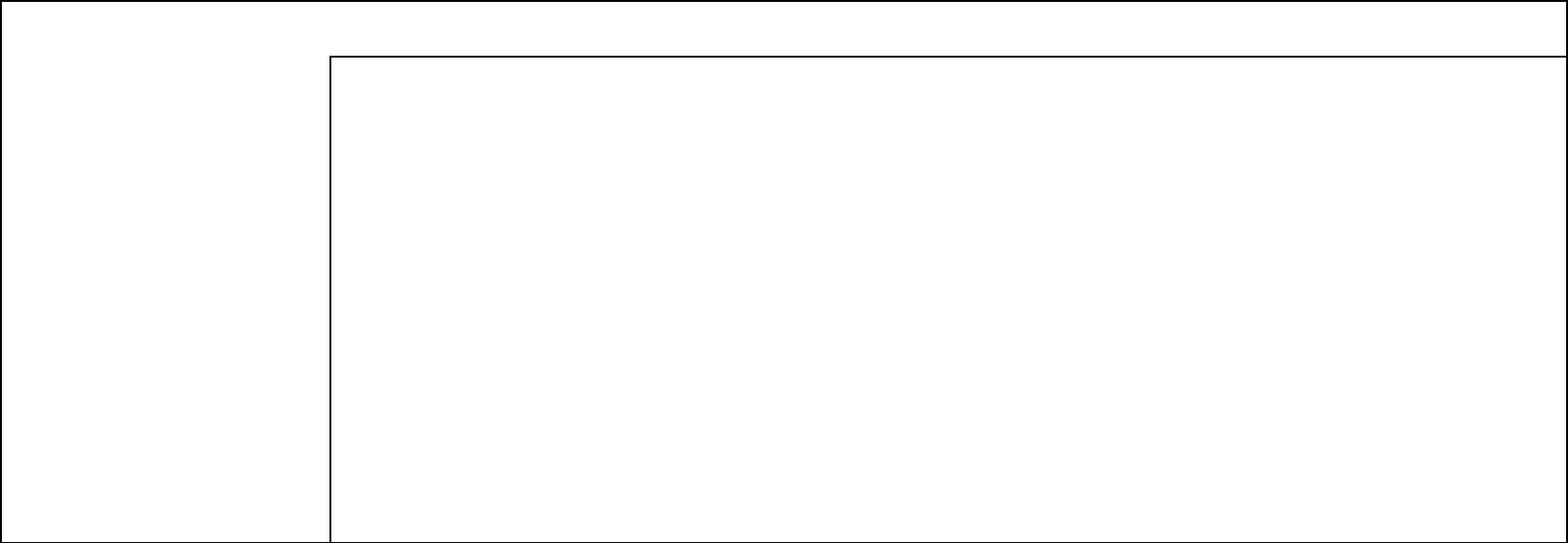
	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	11	418
FEB	12	328
MAR	39	197
APR	125	75
MAY	287	18
JUN	445	1
JUL	516	0
AUG	500	0
SEP	394	6
OCT	191	69
NOV	73	202
DEC	25	322
ANN	2618	1636



	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	2	-13057	620	-1512
FEB	2	-10537	642	-1134
MAR	17	-6930	1547	-503
APR	225	-2919	3086	-114
MAY	1632	-804	8154	-2
JUN	4352	-83	14743	0
JUL	5512	-2	19050	0
AUG	5161	-9	18330	0
SEP	3458	-300	12630	0
OCT	978	-2656	4114	-57
NOV	92	-6789	2263	-456
DEC	5	-10325	1209	-1024
ANN	21436	-54411	86388	-4802

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

No Solar Radiation
Data Available

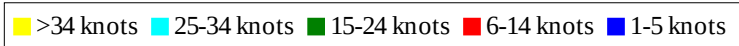
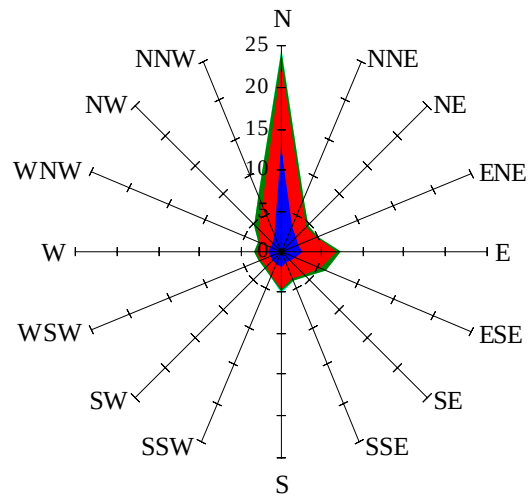


Average Annual Solar Heat and Illumination – Nearest Available Site

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

Wind Summary - December, January, and February

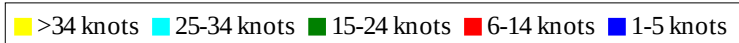
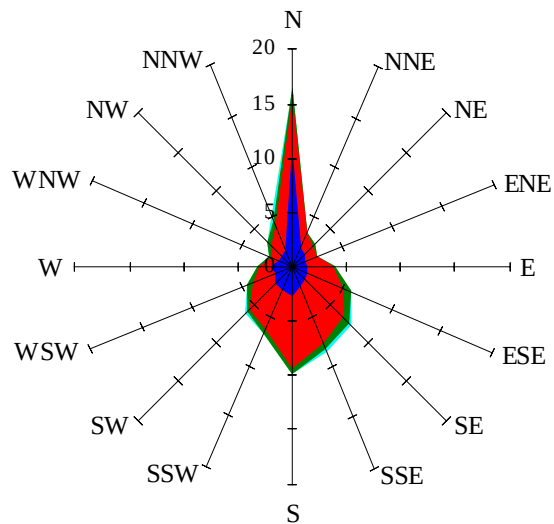
Labels of Percent Frequency on North Axis



Percent Calm = 8.93

Wind Summary - March, April, and May

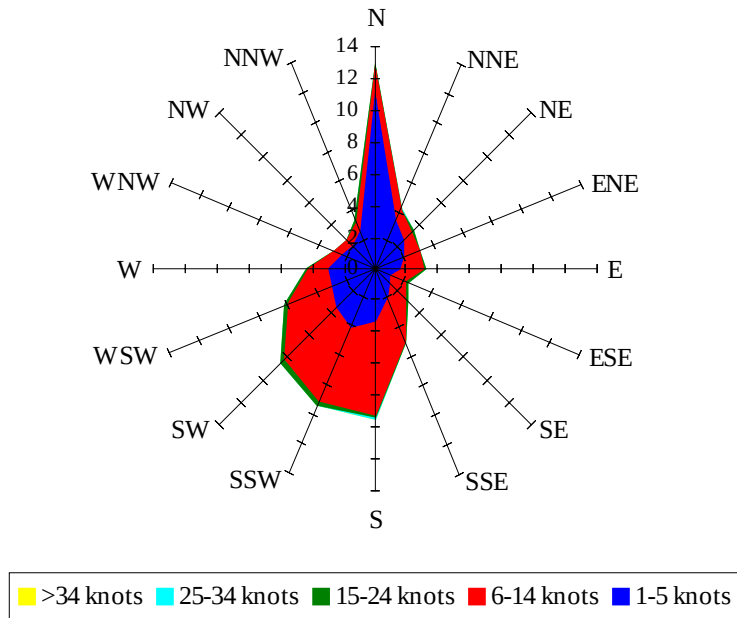
Labels of Percent Frequency on North Axis



Percent Calm = 10.55

Wind Summary - June, July, and August

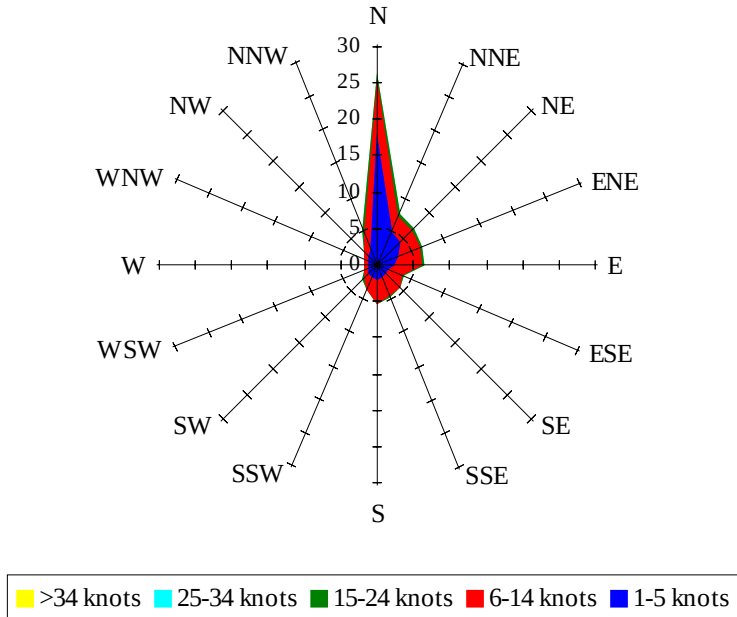
Labels of Percent Frequency on North Axis



Percent Calm = 17.64

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 10.90