

GRAND JUNCTION	CO	
Latitude = 39.12 N		WMO No. 724760
Longitude = 108.50 W		Elevation = 4839 feet
Period of Record = 1973 to 1996		Average Pressure = 25.15 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	62	38	11.0	W
0.4% Occurrence	97	62	41	10.8	W
1.0% Occurrence	94	61	41	10.0	W
2.0% Occurrence	92	60	42	10.0	W
Mean Daily Range	23	-	-	-	-
97.5% Occurrence	14	13	10	5.6	ESE
99.0% Occurrence	8	7	7	4.7	ESE
99.6% Occurrence	2	1	5	4.5	E
Median of Extreme Lows	-2	-3	4	4.9	NE
	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	68	91	84	8.6	W
0.4% Occurrence	65	84	79	8.8	W
1.0% Occurrence	64	83	75	8.9	W
2.0% Occurrence	63	83	69	9.2	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	103	69	0.58	6.5	SE
0.4% Occurrence	92	70	0.52	7.9	SE
1.0% Occurrence	85	71	0.49	8.3	SE
2.0% Occurrence	80	71	0.45	9.4	ESE
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		158	1011	0	12

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
6	1.5	90	0.0 + 1.1
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 (#)
55.2	N/A	16	95

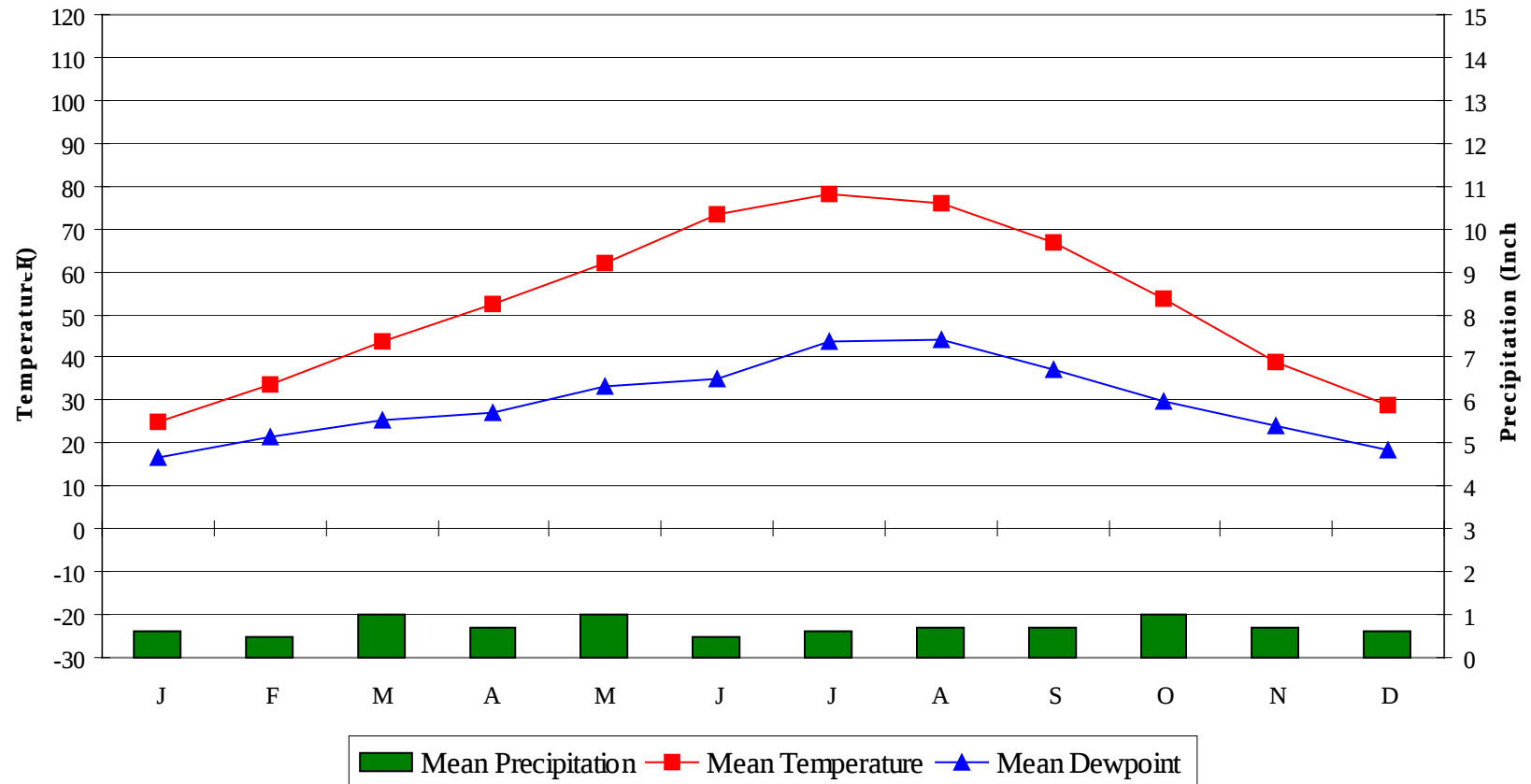
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

GRAND JUNCTION

CO

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Average Annual Climate

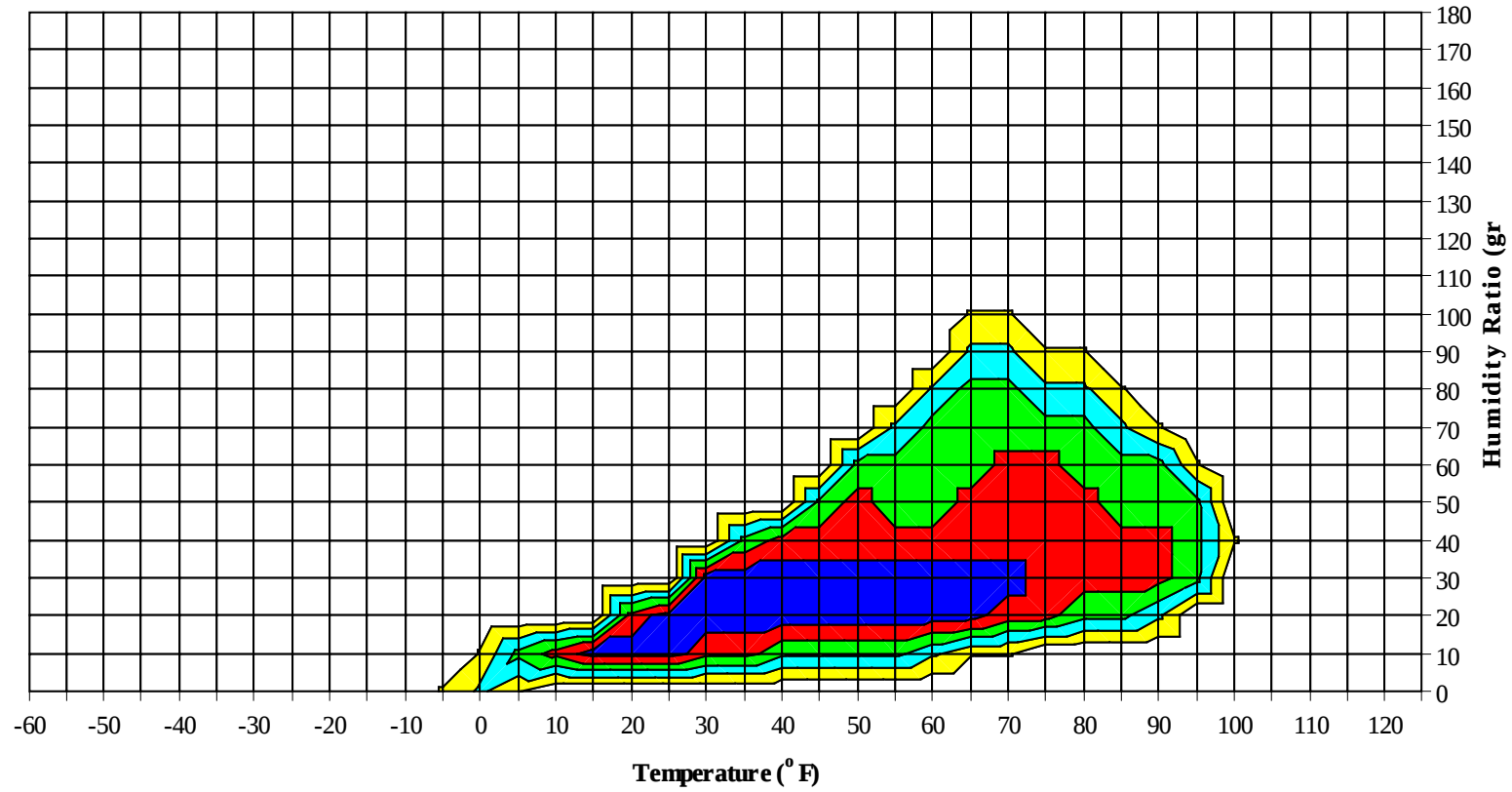


GRAND JUNCTION

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Long Term Psychrometric Summary

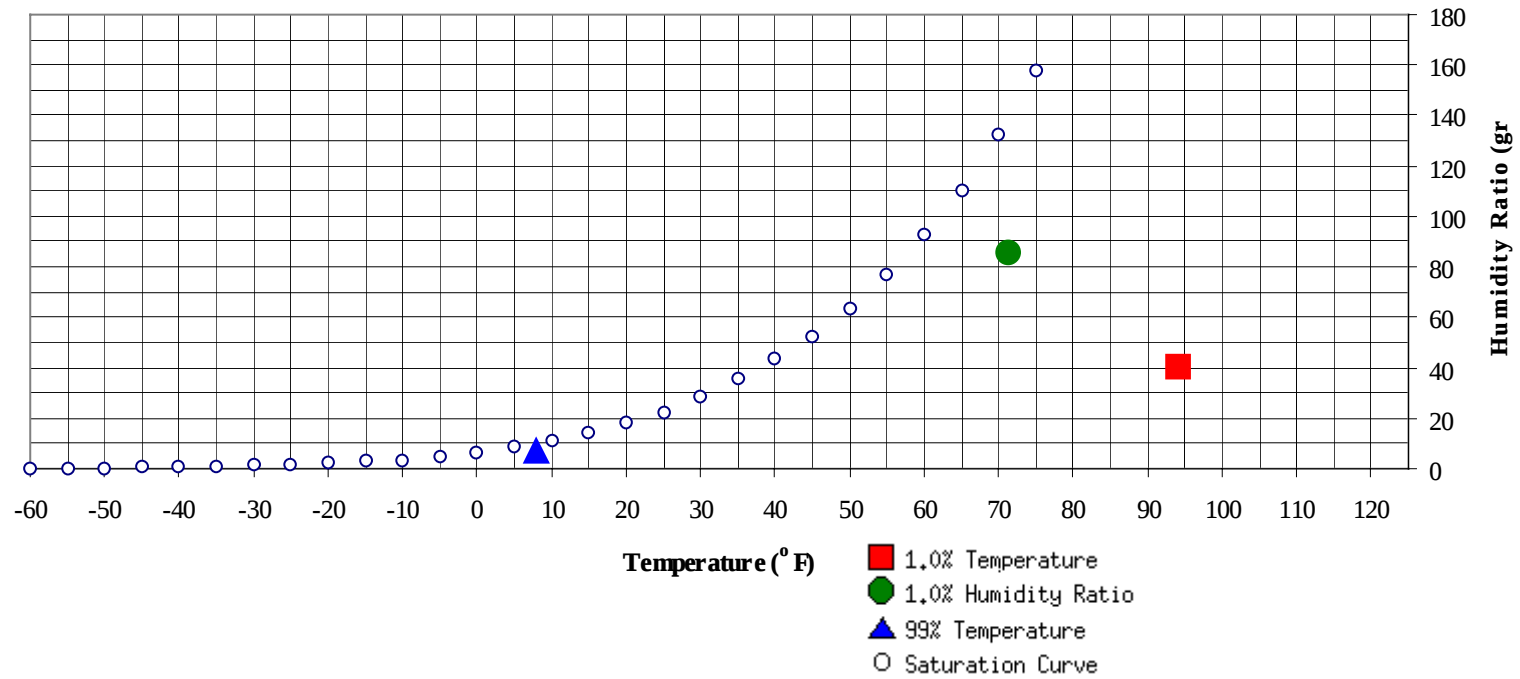


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

GRAND JUNCTION

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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	8	7.3	3.0	Ratio	85.4	71.2	62.3	57.9	30.4

1.0% Dry Bulb	(°F)	MCHR	MCWB	Enthalpy
		(gr/lb)	(°F)	(btu/lb)
	94	40.8	60.7	29.0

GRAND JUNCTION CO

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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															
90 / 94															
85 / 89															
80 / 84															
75 / 79												1	0	1	52.3
70 / 74											4	1		5	48.8
65 / 69							1	0	1	46.4	12	4		17	46.3
60 / 64							5	1	6	44.4	0	23	11	34	44.2
55 / 59						0	10	4	14	42.2	3	35	19	57	42.3
50 / 54		4	0	5	38.9	1	22	8	31	40.1	11	45	34	91	40.4
45 / 49	1	13	3	16	36.7	3	30	19	52	37.9	26	51	46	122	38.3
40 / 44	2	27	11	39	34.4	12	41	31	83	35.4	45	42	56	142	35.8
35 / 39	10	42	27	79	32.1	32	47	47	126	32.4	72	23	46	141	32.6
30 / 34	35	47	53	135	29.0	58	34	52	144	28.7	57	8	23	88	28.7
25 / 29	44	41	46	132	24.4	49	17	30	96	24.4	23	2	6	31	23.8
20 / 24	52	34	38	124	20.2	34	10	14	59	19.9	9	1	2	12	19.1
15 / 19	38	21	29	88	15.7	15	4	8	27	15.5	2	0	0	3	15.5
10 / 14	24	10	22	56	10.9	9	2	6	17	10.6	0		0	0	9.8
5 / 9	20	5	13	37	6.2	6	1	3	9	5.9					
0 / 4	15	2	6	22	1.5	3	1	1	5	1.1					
-5 / -1	5	0	2	7	-3.0	2	0	0	2	-3.3					
-10 / -6	3	0	1	3	-6.9	1		0	1	-7.2					
-15 / -11	0			0	-11.3	1		0	1	-11.6					
-20 / -16	0			0	-16.0	0			0	-18.0					

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.

GRAND JUNCTION CO WMO No. 724760
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												2	1	3	60.5
95 / 99												13	7	19	60.3
90 / 94							1	0	2	57.0		37	19	56	58.6
85 / 89		0	0	0	55.0		10	4	14	55.8		47	27	74	56.9
80 / 84		5	2	6	52.4		29	13	42	54.1	2	49	32	83	55.7
75 / 79		15	5	20	50.8	0	44	20	64	52.7	13	38	38	88	54.2
70 / 74	0	25	11	35	48.8	3	45	30	78	50.9	37	26	43	107	52.3
65 / 69	1	35	20	56	46.9	15	39	39	93	49.3	58	14	35	107	50.5
60 / 64	8	40	29	77	45.1	40	33	46	119	47.5	60	9	21	89	48.6
55 / 59	19	37	36	92	43.1	55	23	40	118	46.1	37	3	12	52	46.6
50 / 54	38	34	44	116	41.1	58	14	30	102	43.9	22	2	6	30	44.8
45 / 49	49	26	42	117	38.6	44	6	17	66	41.2	8	0	2	10	42.0
40 / 44	54	15	30	99	36.0	24	3	7	34	37.6	2		0	3	38.1
35 / 39	42	6	15	63	32.6	9	0	2	11	34.2	1		0	1	35.0
30 / 34	22	2	5	29	29.1	1		0	1	30.9	0			0	
25 / 29	7	0	1	8	24.3										
20 / 24	1		0	1	19.7										
15 / 19	0			0	16.3										
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															

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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		2	1	3	64.0		1	0	1	62.4					
95 / 99		27	13	41	61.6		13	5	19	61.9		1	0	1	61.5
90 / 94		59	31	90	60.8		46	22	68	60.9		9	3	12	59.5
85 / 89	0	58	33	91	60.3		60	31	91	60.0		25	9	34	58.0
80 / 84	5	51	43	98	59.3	2	55	40	97	59.3		43	20	63	56.3
75 / 79	33	30	55	118	57.7	20	40	53	113	57.8	2	48	30	79	55.0
70 / 74	74	15	43	132	56.5	62	21	50	133	56.4	12	42	39	94	53.5
65 / 69	83	4	20	106	55.2	85	8	32	125	54.8	36	32	51	118	51.6
60 / 64	44	1	7	51	53.2	59	2	13	74	53.2	62	21	41	125	49.8
55 / 59	9	0	1	10	50.3	17	0	2	19	49.1	56	12	27	95	47.5
50 / 54	1	0	0	1	47.3	4		0	4	46.0	40	5	15	60	44.0
45 / 49	0			0	45.0	1			1	39.9	22	2	4	27	40.0
40 / 44											8	0	1	9	35.6
35 / 39											2		0	2	32.1
30 / 34											0			0	29.0
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															

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GRAND JUNCTION CO

WMO No. 724760

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		0		0	56.0										
85 / 89		0	0	0	55.8										
80 / 84		7	2	9	52.9										
75 / 79		19	5	24	51.5										
70 / 74	0	31	10	42	50.0		1		1	49.7					
65 / 69	2	39	18	59	48.3		4	0	5	47.9					
60 / 64	8	44	32	84	46.6		13	2	15	45.1		0		0	43.7
55 / 59	22	40	46	108	44.6	2	25	7	34	43.1	0	1	0	2	41.6
50 / 54	50	30	50	130	42.4	5	37	18	60	40.8	0	7	1	9	40.3
45 / 49	62	19	42	123	39.5	13	40	32	84	38.4	1	20	3	24	37.1
40 / 44	54	10	25	89	36.5	30	44	46	120	35.6	5	40	14	58	34.4
35 / 39	31	4	12	48	32.6	48	38	54	139	32.3	13	54	36	103	31.8
30 / 34	13	2	4	20	28.2	67	24	48	138	28.6	43	56	62	160	28.5
25 / 29	4	0	1	6	23.5	43	8	23	74	24.2	58	36	59	153	24.3
20 / 24	1	0	0	1	19.5	22	3	9	34	20.0	59	19	38	116	20.0
15 / 19	0			0	16.3	7	1	3	10	15.6	38	8	20	66	15.6
10 / 14						3	0	1	5	10.0	17	4	9	29	10.9
5 / 9						1		1	2	6.0	8	1	5	14	6.5
0 / 4						0			0	0.0	3	1	2	6	1.8
-5 / -1											1	0	1	2	-3.1
-10 / -6											1	0	1	2	-7.6
-15 / -11											0			0	-12.4
-20 / -16															

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GRAND JUNCTION CO WMO No. 724760
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1973 to 1996

Temperature Range (°F)	Annual Totals				
	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
100 / 104		5	2	7	62.4
95 / 99		54	26	80	61.4
90 / 94		152	75	227	60.2
85 / 89	0	199	105	304	58.9
80 / 84	9	238	150	397	57.3
75 / 79	67	233	206	506	55.5
70 / 74	188	209	227	624	53.7
65 / 69	278	188	220	686	51.4
60 / 64	278	192	203	673	48.5
55 / 59	220	187	194	601	45.1
50 / 54	229	202	207	638	42.1
45 / 49	228	207	209	644	38.9
40 / 44	235	222	220	677	35.7
35 / 39	261	214	239	714	32.3
30 / 34	298	172	248	718	28.7
25 / 29	228	106	166	501	24.3
20 / 24	179	67	101	348	20.0
15 / 19	101	34	59	195	15.6
10 / 14	54	16	37	107	10.8
5 / 9	35	7	21	63	6.2
0 / 4	21	3	9	33	1.5
-5 / -1	8	1	3	11	-3.1
-10 / -6	4	0	2	6	-7.1
-15 / -11	1		0	1	-11.9
-20 / -16	0			0	-17.0

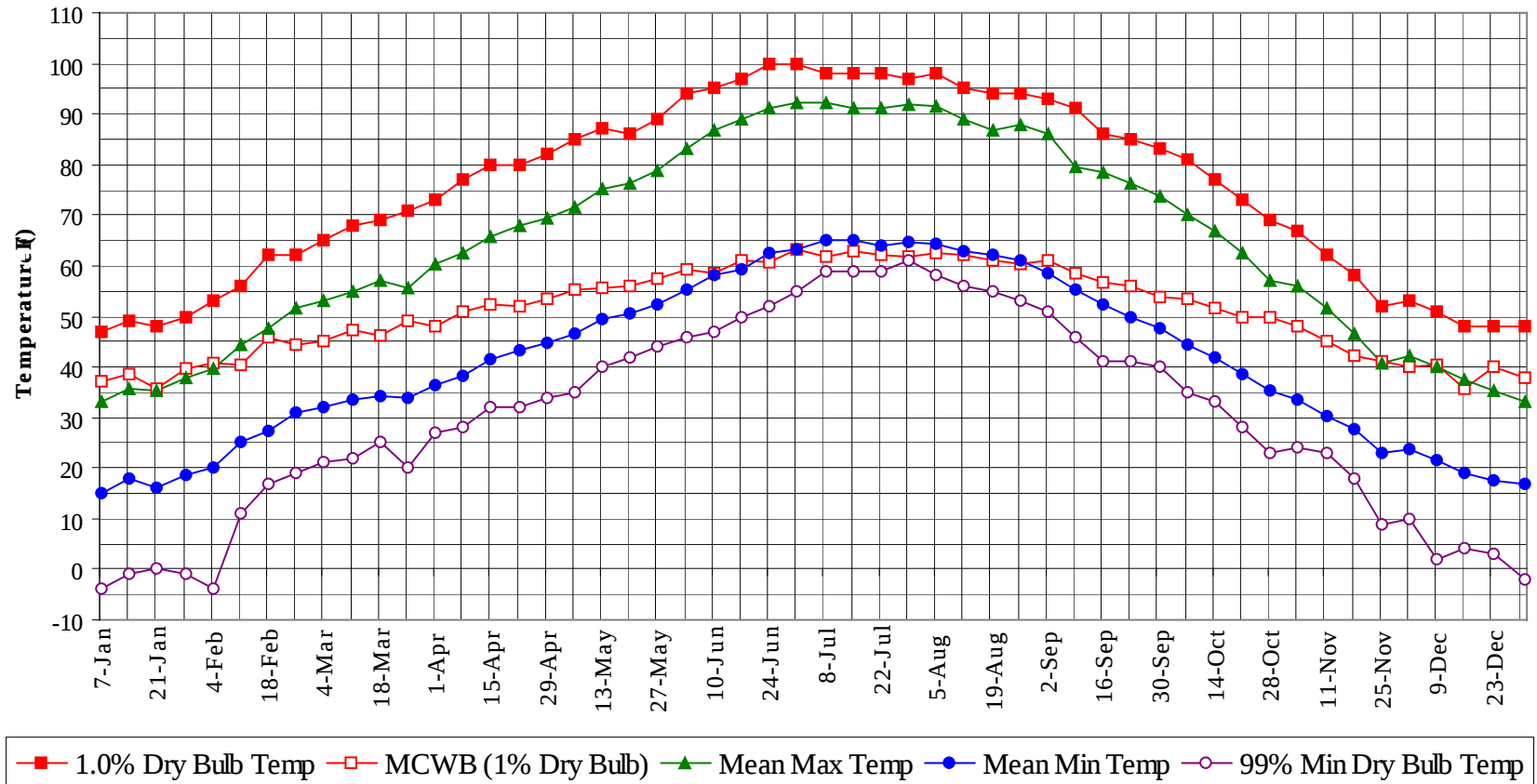
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GRAND JUNCTION

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WMO No. 724760

Annual Summary of Temperatures

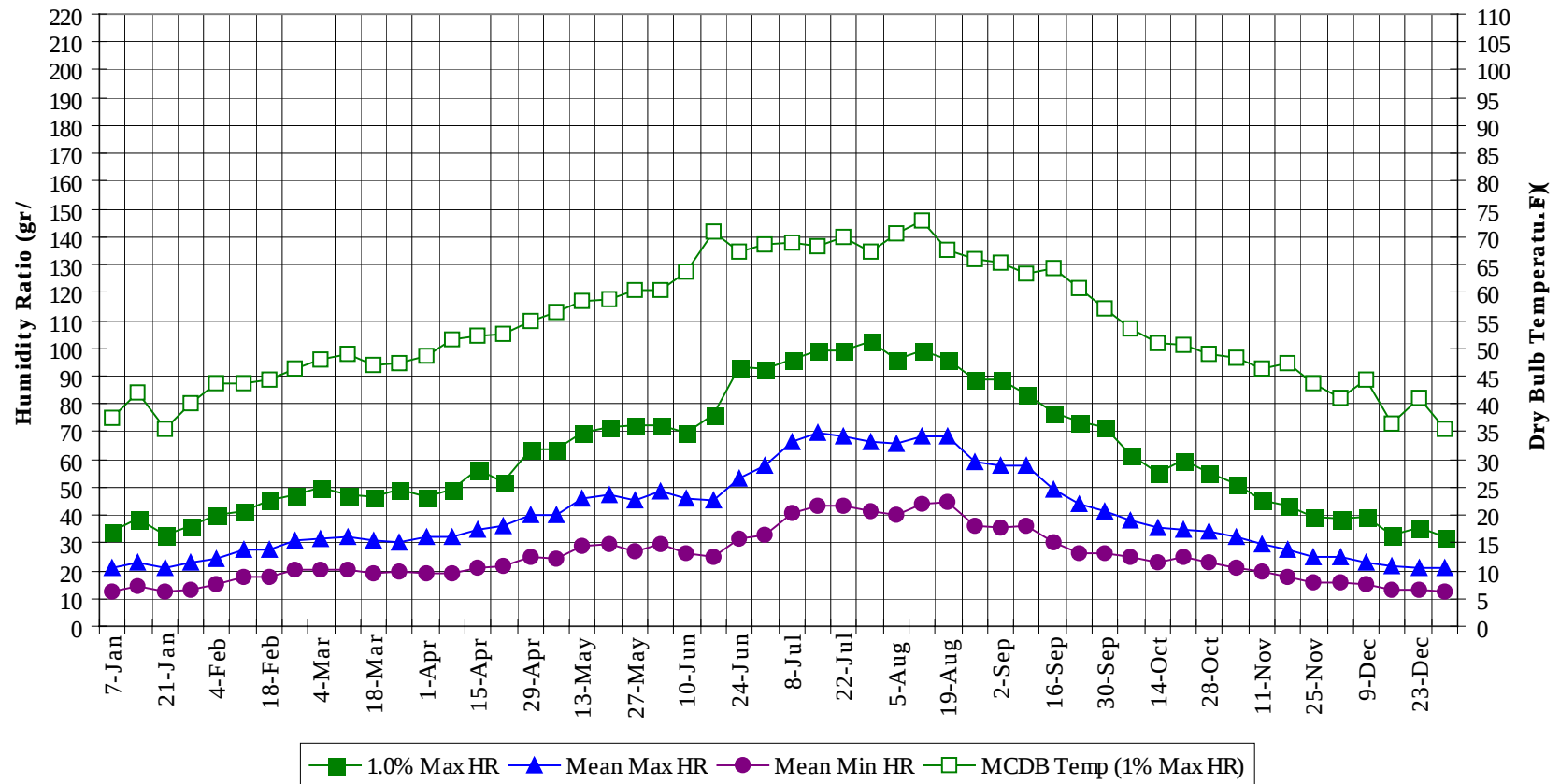


GRAND JUNCTION

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WMO No. 724760

Long Term Humidity and Dry Bulb Temperature Summary



GRAND JUNCTION CO WMO No. 724760
Long Term Dry Bulb Temperature and Humidity Summary

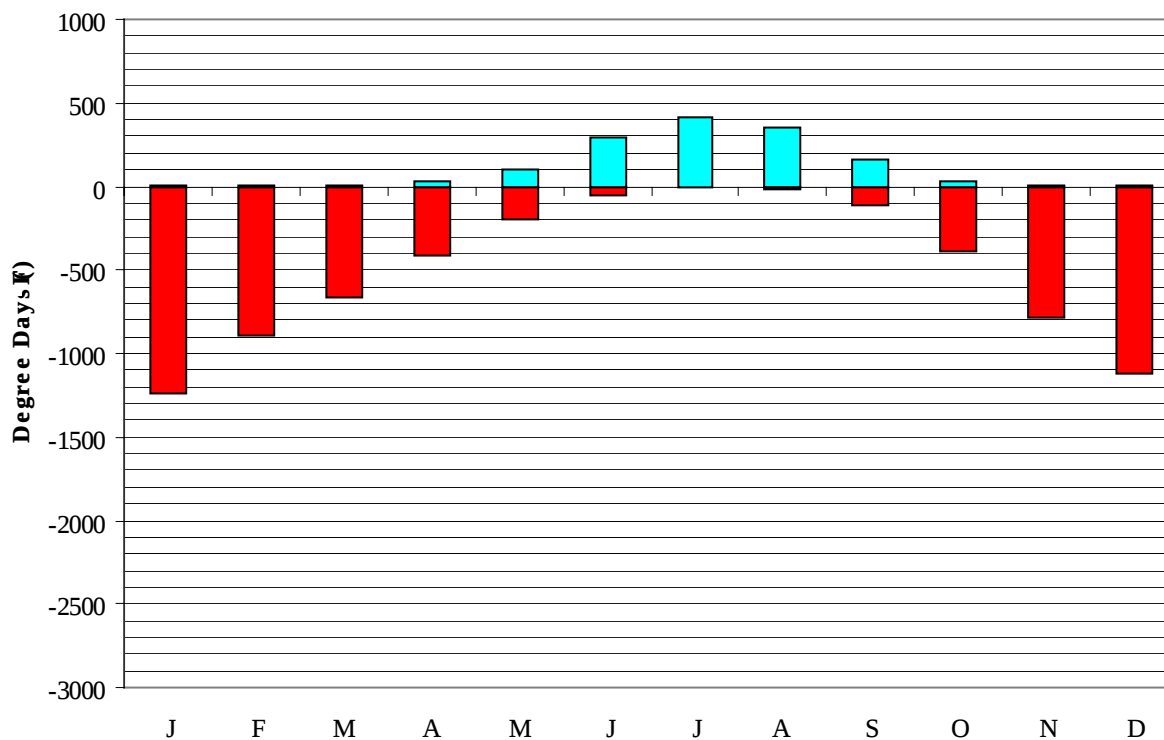
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	47.0	37.0	33.1	15.1	-4.0	34.3	37.4	20.7	12.4
14-Jan	49.0	38.5	35.8	17.8	-1.0	38.5	41.9	22.8	14.5
21-Jan	48.0	35.7	35.5	16.2	0.0	32.9	35.4	20.9	12.2
28-Jan	50.0	39.8	37.9	18.6	-1.0	36.4	40.2	22.8	13.4
4-Feb	53.0	40.6	39.6	20.1	-4.0	39.9	43.6	24.1	14.8
11-Feb	56.0	40.5	44.2	25.2	11.0	41.3	43.8	27.4	17.4
18-Feb	62.0	45.8	47.7	27.2	17.0	45.5	44.2	27.7	17.5
25-Feb	62.0	44.4	51.5	31.0	19.0	47.6	46.4	30.9	20.5
4-Mar	65.0	45.1	53.2	32.1	21.0	49.7	47.8	31.7	20.7
11-Mar	68.0	47.4	54.9	33.6	22.0	47.6	48.9	32.3	20.5
18-Mar	69.0	46.2	57.0	34.2	25.0	46.9	46.8	30.6	18.8
25-Mar	71.0	49.2	55.5	34.0	20.0	49.0	47.1	30.5	19.4
1-Apr	73.0	48.2	60.4	36.5	27.0	46.9	48.6	32.3	19.2
8-Apr	77.0	50.8	62.5	38.4	28.0	49.4	51.6	32.5	19.3
15-Apr	80.0	52.3	65.8	41.4	32.0	56.7	52.1	35.0	21.3
22-Apr	80.0	51.9	67.8	43.3	32.0	51.8	52.4	36.1	22.0
29-Apr	82.0	53.5	69.6	44.7	34.0	63.7	54.9	40.1	24.9
6-May	85.0	55.3	71.4	46.5	35.0	63.7	56.5	39.9	24.6
13-May	87.0	55.7	75.3	49.6	40.0	69.3	58.6	46.0	28.7
20-May	86.0	55.8	76.2	50.7	42.0	71.4	58.7	47.1	29.4
27-May	89.0	57.4	78.7	52.4	44.0	72.1	60.4	45.5	27.2
3-Jun	94.0	59.2	83.0	55.4	46.0	72.1	60.4	48.8	29.5
10-Jun	95.0	58.5	86.7	58.2	47.0	69.3	63.6	46.1	26.6
17-Jun	97.0	61.0	89.0	59.3	50.0	76.3	70.9	45.5	25.3
24-Jun	100.0	60.8	91.0	62.4	52.0	93.1	67.4	53.5	31.6
1-Jul	100.0	63.1	92.2	63.2	55.0	92.4	68.6	58.0	32.6
8-Jul	98.0	61.9	92.4	65.2	59.0	95.9	69.0	66.4	40.4
15-Jul	98.0	62.9	91.2	65.0	59.0	99.4	68.2	69.4	43.4
22-Jul	98.0	62.3	91.3	64.0	59.0	99.4	69.9	68.3	43.4
29-Jul	97.0	61.9	92.0	64.9	61.0	102.2	67.4	66.7	41.4
5-Aug	98.0	62.4	91.6	64.3	58.0	95.9	70.5	65.5	40.1
12-Aug	95.0	62.2	88.9	62.9	56.0	99.4	72.9	68.6	44.3
19-Aug	94.0	61.2	86.9	62.2	55.0	95.9	67.5	68.6	44.6
26-Aug	94.0	60.3	88.0	60.9	53.0	88.9	66.1	59.1	36.4
2-Sep	93.0	61.0	86.1	58.7	51.0	88.9	65.4	57.7	35.5
9-Sep	91.0	58.6	79.7	55.4	46.0	83.3	63.5	58.0	36.4
16-Sep	86.0	56.6	78.4	52.4	41.0	77.0	64.5	49.3	30.2
23-Sep	85.0	56.0	76.4	49.7	41.0	73.5	60.9	43.7	26.3
30-Sep	83.0	53.9	73.6	47.6	40.0	71.4	57.0	41.4	26.3
7-Oct	81.0	53.4	70.1	44.5	35.0	61.6	53.5	38.1	25.2
14-Oct	77.0	51.6	66.7	41.7	33.0	55.3	50.9	35.3	23.3
21-Oct	73.0	50.0	62.7	38.5	28.0	59.5	50.5	35.1	24.7
28-Oct	69.0	49.8	57.0	35.5	23.0	55.3	49.0	34.0	22.8
4-Nov	67.0	47.8	56.0	33.6	24.0	51.1	48.4	31.9	21.1
11-Nov	62.0	45.2	51.5	30.2	23.0	45.5	46.3	29.5	19.9
18-Nov	58.0	42.3	46.7	27.8	18.0	43.4	47.3	27.7	17.8
25-Nov	52.0	41.1	40.6	23.1	9.0	39.2	43.8	24.9	15.8
2-Dec	53.0	40.0	42.4	23.8	10.0	38.5	40.9	24.9	16.0
9-Dec	51.0	40.4	40.2	21.6	2.0	39.2	44.2	23.2	14.9
16-Dec	48.0	35.8	37.7	19.1	4.0	32.9	36.3	21.8	13.4
23-Dec	48.0	39.9	35.1	17.6	3.0	35.7	41.1	20.8	13.0
31-Dec	48.0	37.8	33.3	16.7	-2.0	32.2	35.5	20.7	12.3

GRAND JUNCTION

CO

WMO No. 724760

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



■ Mean Cooling Degree Days ■ Mean Heating Degree Days

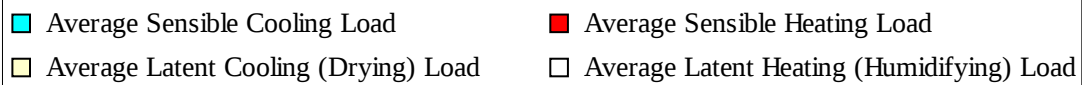
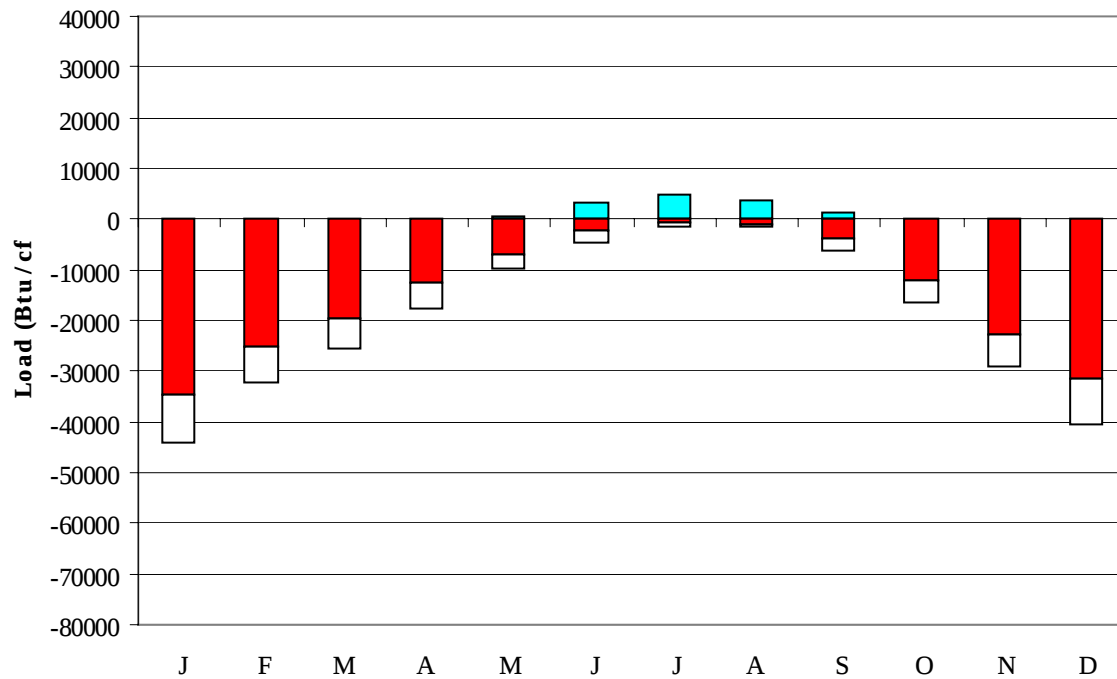
	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1240
FEB	0	888
MAR	3	662
APR	28	411
MAY	103	203
JUN	299	51
JUL	418	9
AUG	356	16
SEP	164	109
OCT	34	388
NOV	0	788
DEC	0	1125
ANN	1405	5890

GRAND JUNCTION

CO

WMO No. 724760

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	0	-34541	0	-9652
FEB	0	-25200	0	-7032
MAR	0	-19529	0	-5976
APR	82	-12693	0	-5110
MAY	610	-6857	0	-3020
JUN	3170	-2051	4	-2421
JUL	4782	-549	58	-747
AUG	3727	-878	34	-748
SEP	1272	-4006	1	-1995
OCT	103	-12120	0	-4374
NOV	0	-22755	0	-6332
DEC	0	-31557	0	-8985
ANN	13746	-172736	97	-56392

Average Annual Solar Radiation – Nearest Available Site

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

City: GRAND JUNCTION
 State: CO
 WBAN No: 23066
 Lat(N): 39.12
 Long(W): 108.53
 Elev(ft): 4839

Stn Type: Primary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 0.508
 Vert Gap: 0.316

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	780	1090	1450	1890	2200	2440	2330	2090	1750	1290	870	700	1580
	Std Dev	70	88	101	115	100	135	56	92	110	113	69	66	44
	Minimum	650	940	1190	1680	1990	2030	2240	1800	1440	980	680	480	1450
	Maximum	920	1280	1610	2070	2370	2750	2440	2230	1910	1450	1010	800	1640
	Diffuse	320	420	570	670	730	670	680	610	470	370	310	270	510
Clear Day	Global	990	1350	1860	2370	2690	2810	2710	2420	1990	1480	1050	880	1890
NORTH	Global	220	280	370	470	600	700	640	500	380	290	230	190	400
	Diffuse	220	280	370	450	510	530	510	450	370	290	230	190	370
Clear Day	Global	180	240	310	420	600	740	670	470	340	260	190	170	380
EAST	Global	530	720	920	1150	1310	1430	1370	1250	1120	860	610	490	980
	Diffuse	260	350	460	560	610	620	610	550	460	360	280	230	450
Clear Day	Global	760	970	1230	1470	1580	1610	1570	1460	1290	1040	800	690	1210
SOUTH	Global	1330	1440	1310	1170	950	860	900	1100	1390	1530	1390	1320	1220
	Diffuse	390	470	530	570	570	550	550	540	500	440	390	350	490
Clear Day	Global	2070	2100	1900	1450	1070	900	950	1240	1680	2000	2050	2010	1610
WEST	Global	540	720	880	1090	1200	1310	1250	1170	1070	850	600	500	930
	Diffuse	270	360	460	570	620	630	630	570	470	370	280	240	460
Clear Day	Global	760	970	1230	1470	1580	1610	1570	1460	1290	1040	800	690	1210

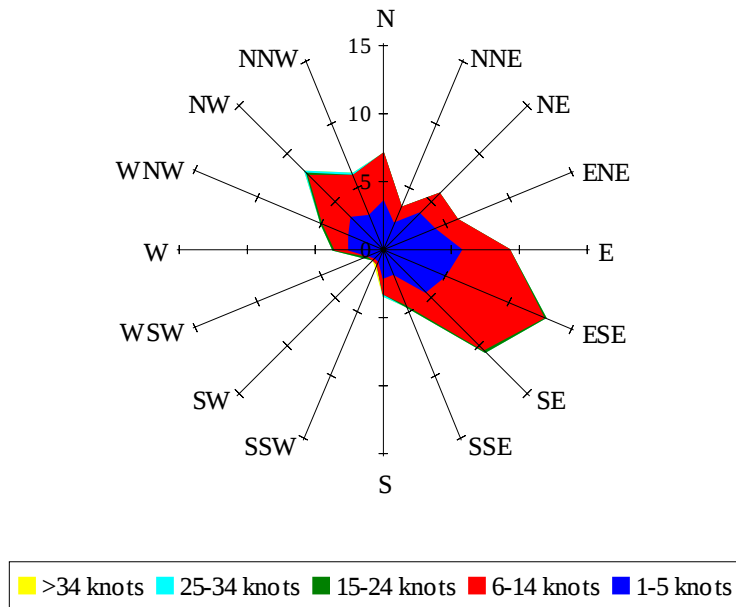
Average Annual Solar Heat and Illumination – Nearest Available Site

(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	510	740	1020	1370	1610	1790	1710	1520	1250	890	570	440	1120
NORTH	Unshaded	150	200	260	310	380	440	410	320	260	200	160	130	270
	Shaded	130	180	230	290	350	400	370	300	240	190	140	120	240
EAST	Unshaded	370	510	660	820	940	1030	980	900	800	610	420	340	700
	Shaded	330	460	580	720	810	890	850	780	710	550	380	310	620
SOUTH	Unshaded	1000	1050	910	750	570	490	520	670	920	1100	1040	1000	840
	Shaded	980	980	720	480	360	350	350	400	660	970	1010	980	690
WEST	Unshaded	380	510	620	780	850	930	890	830	770	600	420	340	660
	Shaded	340	450	550	680	740	800	770	720	680	540	380	320	580

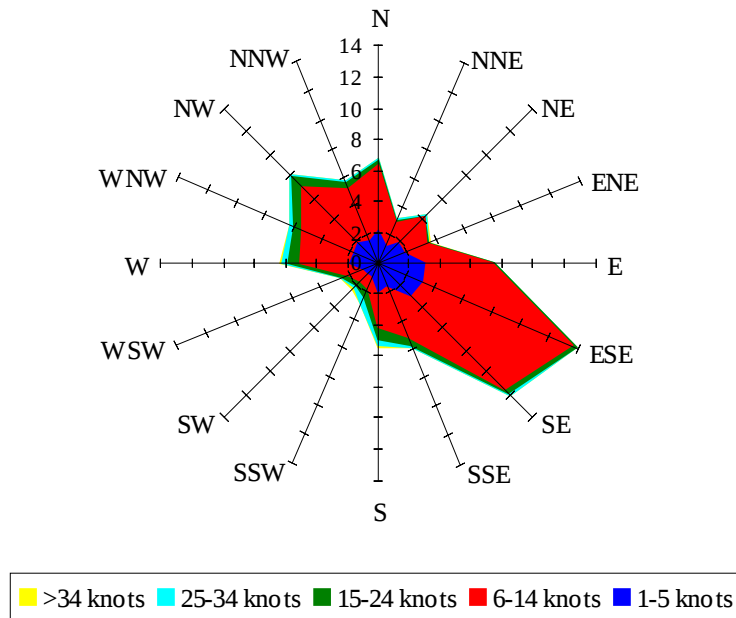
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	39	74	85	70	33	47	84	104	100	75
	M.Cloudy	25	53	62	50	22	34	67	84	80	58
NORTH	M.Clear	9	14	15	13	9	21	15	16	16	14
	M.Cloudy	9	16	18	15	9	16	17	18	18	16
EAST	M.Clear	80	63	15	13	9	86	77	35	16	14
	M.Cloudy	36	41	18	15	9	49	59	32	18	16
SOUTH	M.Clear	39	74	85	70	33	10	28	45	42	22
	M.Cloudy	20	46	56	44	18	11	26	40	37	21
WEST	M.Clear	9	14	18	67	76	10	15	16	48	81
	M.Cloudy	9	16	19	42	34	11	17	18	41	58
M.Clear	(% hrs)	37	36	33	29	31	67	65	59	52	46
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	27	67	88	83	54	13	42	51	34	4
	M.Cloudy	18	48	67	62	39	9	28	36	23	3
NORTH	M.Clear	8	13	15	15	11	5	10	11	9	2
	M.Cloudy	7	14	18	17	13	4	10	12	9	2
EAST	M.Clear	74	75	33	15	11	43	45	11	9	2
	M.Cloudy	30	48	29	17	13	15	24	12	9	2
SOUTH	M.Clear	20	56	76	72	44	37	85	96	73	14
	M.Cloudy	11	37	55	50	30	13	40	51	34	5
WEST	M.Clear	8	13	15	50	81	5	10	19	52	19
	M.Cloudy	7	14	18	38	49	4	10	15	26	7
M.Clear	(% hrs)	64	64	62	58	55	38	43	39	39	39

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



Percent Calm = 11.48

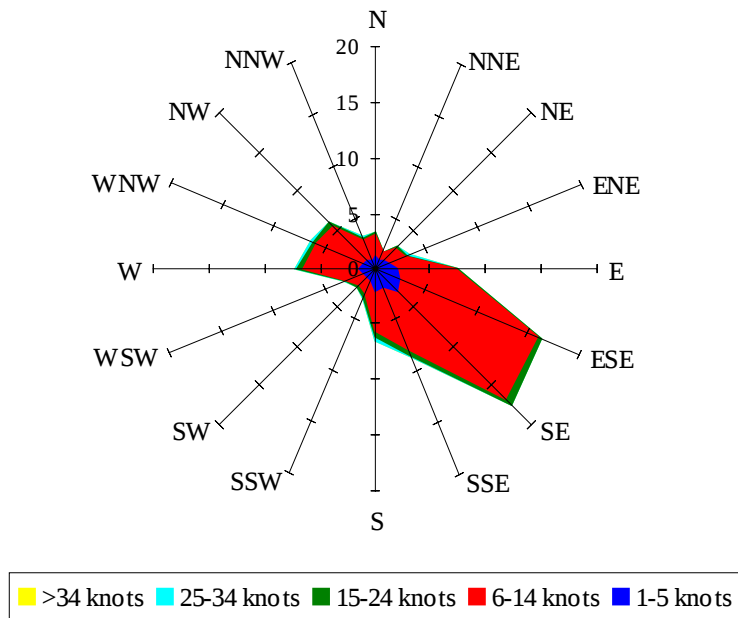
Wind Summary - March, April, and May **Labels of Percent Frequency on North Axis**



Percent Calm = 4.27

Wind Summary - June, July, and August

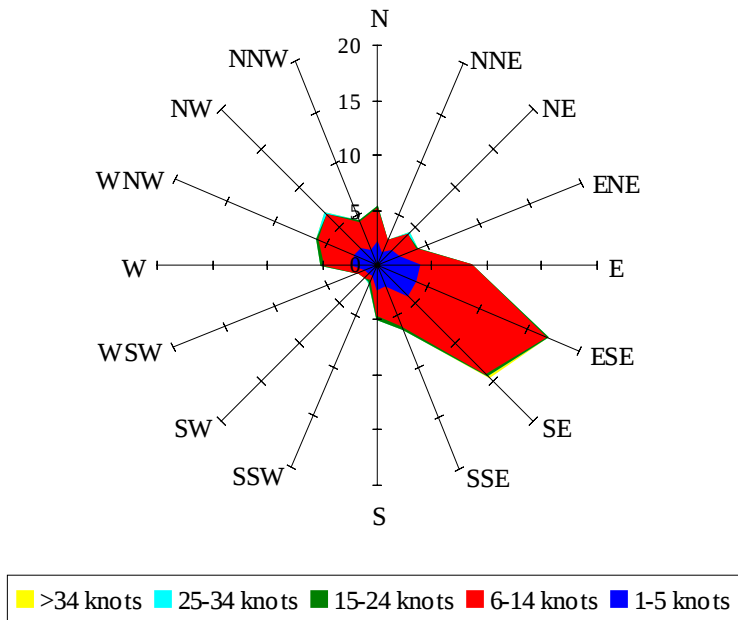
Labels of Percent Frequency on North Axis



Percent Calm = 2.56

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 6.33