

BARROW/POST-ROGERS AK

Latitude = 71.30 N

WMO No. 700260

Longitude = 156.70 W

Elevation = 13 feet

Period of Record = 1973 to 1996

Average Pressure = 29.97 inches Hg

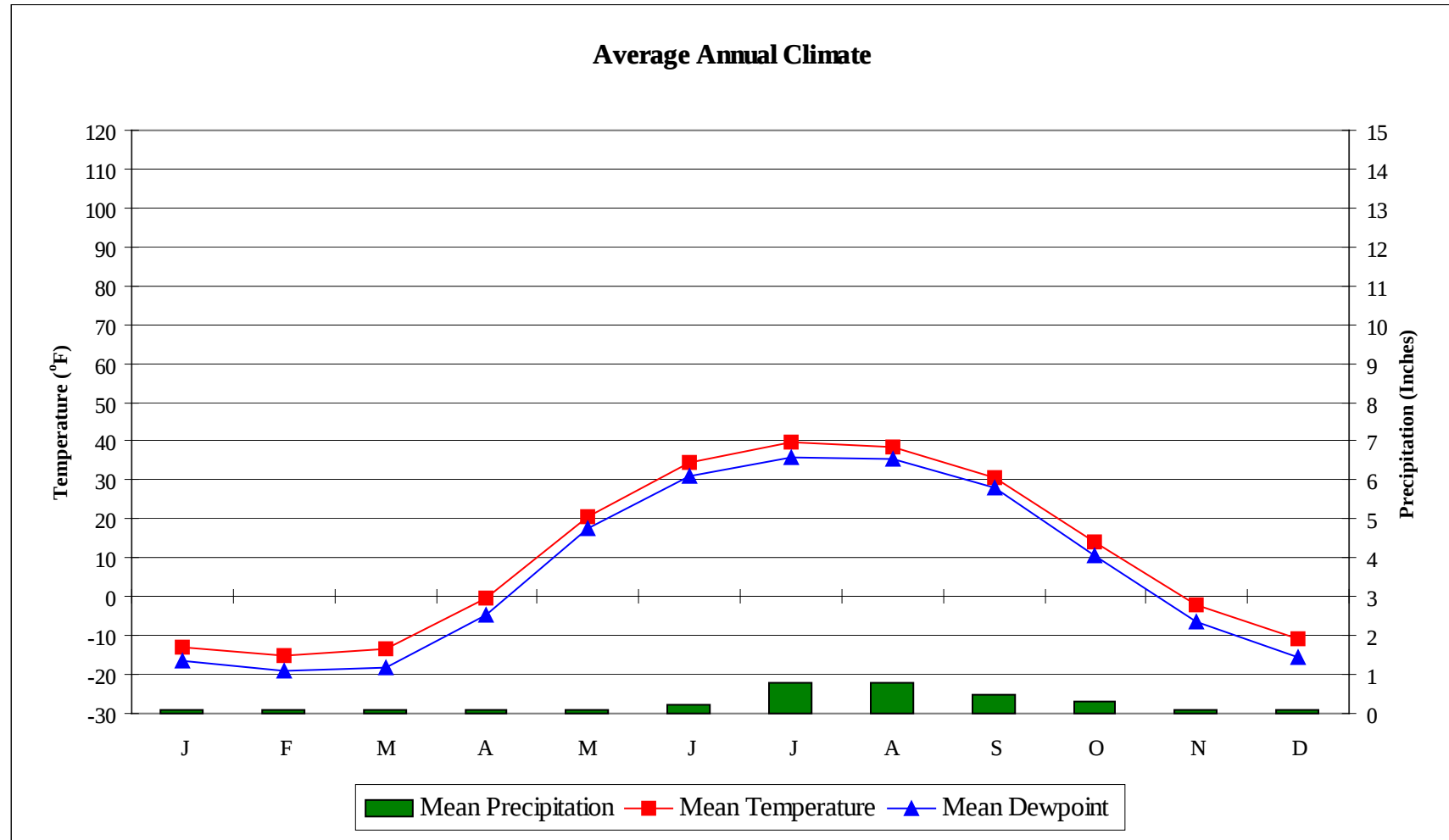
Design Criteria Data

	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	65	56	54	12.7	S
0.4% Occurrence	58	52	49	11.5	S
1.0% Occurrence	53	49	46	11.3	S
2.0% Occurrence	49	46	43	11.0	E
Mean Daily Range	10	-	-	-	-
97.5% Occurrence	-31	-31	1	7.8	NE
99.0% Occurrence	-36	-36	1	7.6	ENE
99.6% Occurrence	-41	-41	0	7.3	E
Median of Extreme Lows	-45	-45	0	6.9	S
	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	58	63	64	12.6	S
0.4% Occurrence	53	57	53	12.6	S
1.0% Occurrence	50	53	48	10.8	E
2.0% Occurrence	47	50	43	11.0	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	62	59	0.42	10.4	SSE
0.4% Occurrence	54	54	0.36	11.7	S
1.0% Occurrence	48	51	0.32	11.4	S
2.0% Occurrence	44	50	0.30	10.6	E
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		0	0	0	0

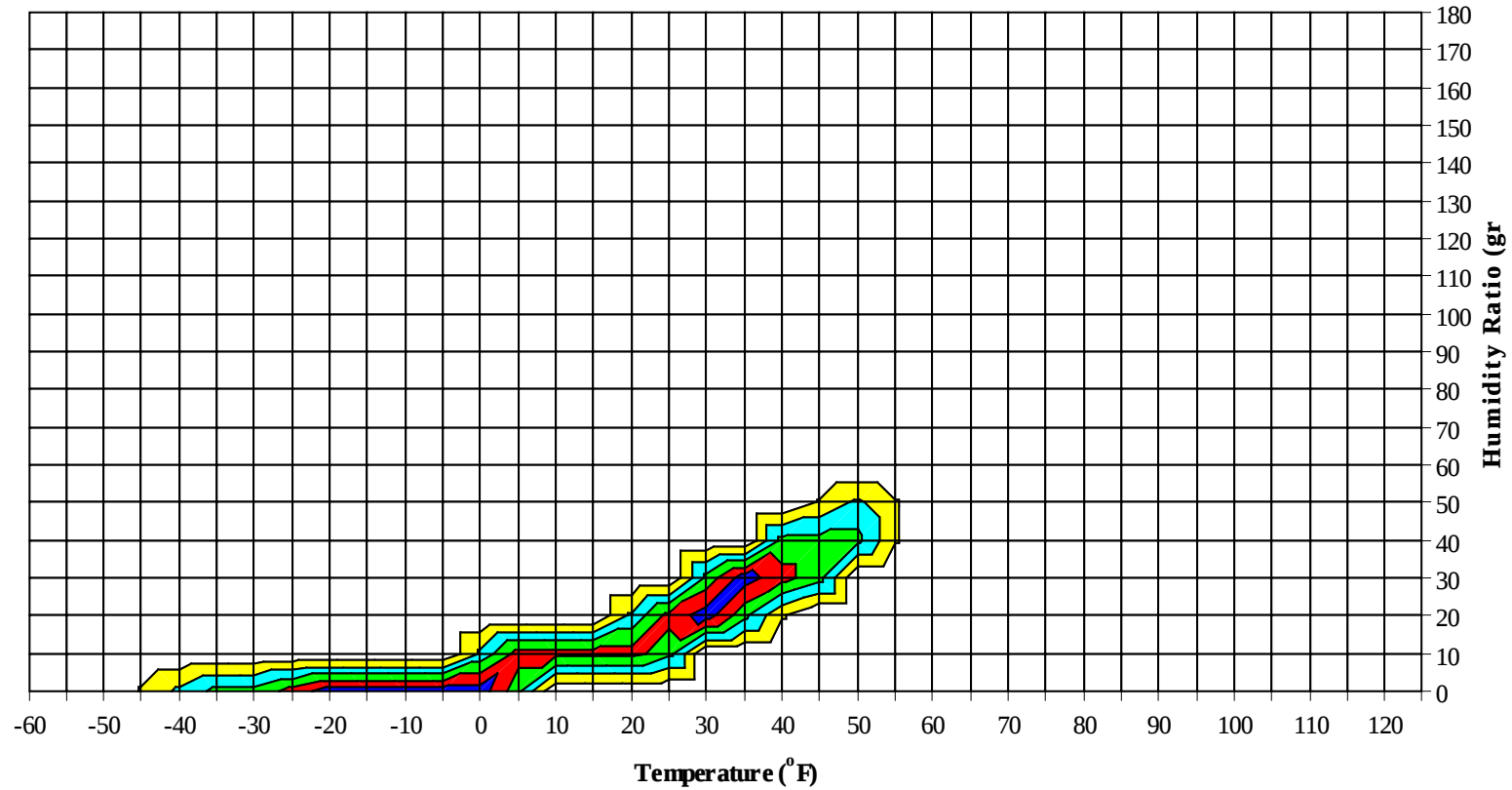
Other Site Data

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
1	0.4	120	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 (#)
Permafrost	Permafrost	40	44

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

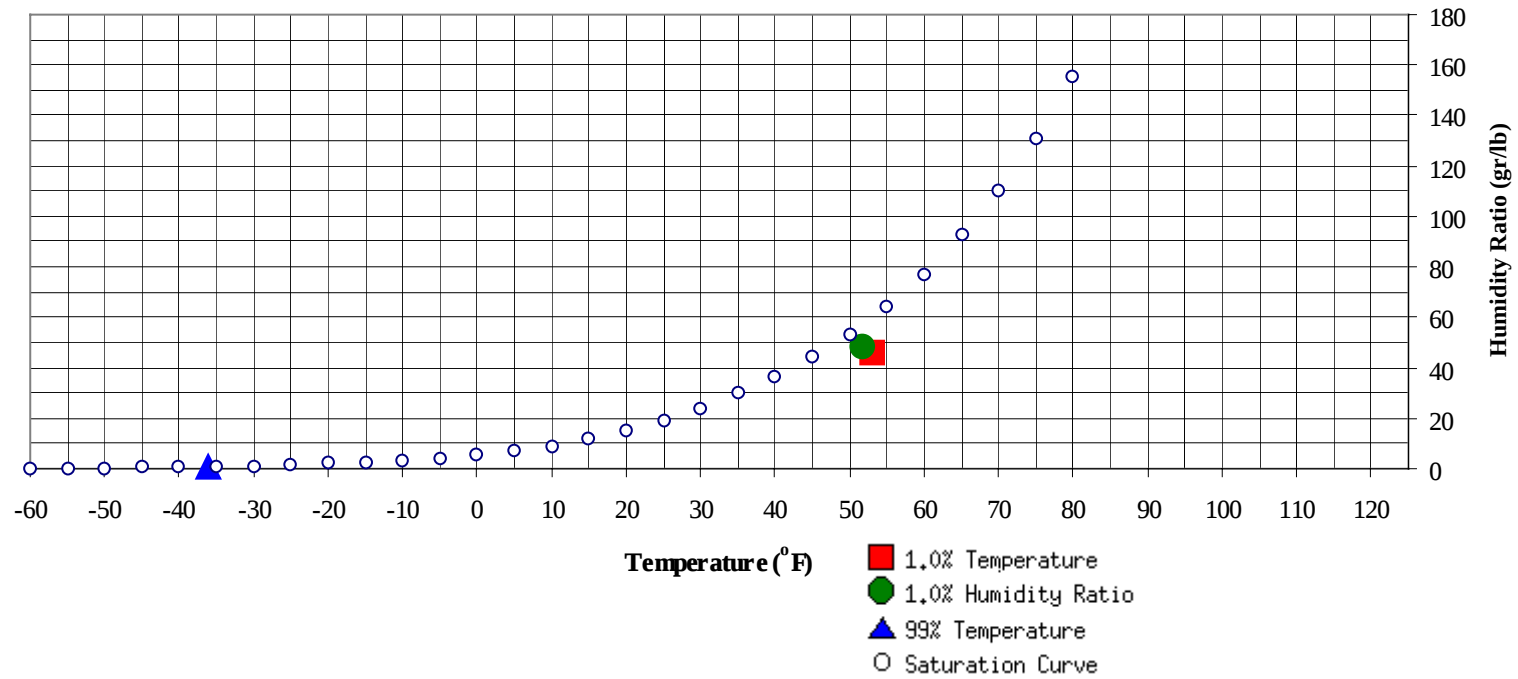


Long Term Psychrometric Summary



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

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	-36	0.7	-8.5		48.3	51.8	49.2	47.1	19.9

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	53	46.3	49.3	19.9

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		
75 / 79															
70 / 74															
65 / 69															
60 / 64															
55 / 59															
50 / 54															
45 / 49															
40 / 44															
35 / 39		0	0	0	33.5	0			0	35.5					
30 / 34	0	0	0	1	31.2	1	1	0	2	30.8	0	0	0	0	29.3
25 / 29	1	1	1	4	25.6	3	3	2	8	25.9	1	1	1	3	26.4
20 / 24	2	2	3	7	21.4	3	4	5	11	21.3	1	2	1	4	20.8
15 / 19	4	4	4	12	16.5	6	4	5	15	16.3	2	3	3	7	16.1
10 / 14	5	5	4	14	11.3	5	7	5	17	11.5	3	4	4	12	11.2
5 / 9	12	11	11	35	6.1	6	7	7	20	6.3	5	8	7	20	6.3
0 / 4	19	20	21	60	1.6	13	14	12	39	1.5	12	18	15	46	1.3
-5 / -1	22	22	21	65	-2.9	13	13	14	41	-3.0	16	24	22	61	-2.9
-10 / -6	35	32	31	98	-7.3	21	24	21	65	-7.2	27	38	39	103	-7.5
-15 / -11	35	38	37	110	-12.1	22	24	25	71	-12.1	37	47	47	131	-12.1
-20 / -16	35	34	38	106	-16.8	24	26	29	79	-17.1	47	45	43	134	-17.0
-25 / -21	26	30	28	83	-21.8	30	34	31	95	-21.9	40	32	32	104	-21.8
-30 / -26	23	24	22	69	-27.0	31	29	25	86	-26.9	29	18	20	68	-26.8
-35 / -31	12	13	14	40	-31.6	25	22	26	73	-31.7	16	9	10	35	-31.6
-40 / -36	7	6	5	18	-35.8	12	10	10	31	-35.9	7	2	3	12	-36.1
-45 / -41	5	5	5	15	-41.7	5	4	4	13	-42.1	2	0	1	3	-43.0
-50 / -46	2	2	3	8	-45.3	2	2	1	5	-45.0			0	0	
-55 / -51	0	0	0	0		0	0	0	1						

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.

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		
75 / 79															
70 / 74															
65 / 69															
60 / 64															
55 / 59															
50 / 54															
45 / 49															
40 / 44															
35 / 39		1	1	2	33.9										
30 / 34	1	3	3	8	30.6	29	37	41	107	31.0	117	90	111	318	31.4
25 / 29	3	5	5	13	25.9	34	47	50	131	26.0	53	15	18	86	27.1
20 / 24	7	10	9	26	21.1	51	56	55	163	21.2	6	2	2	10	22.1
15 / 19	11	16	17	44	16.2	47	42	42	131	16.3	1	1	1	3	16.9
10 / 14	18	25	26	70	11.2	36	32	31	99	11.4	0			0	12.7
5 / 9	20	36	33	90	6.2	25	12	11	49	6.7					
0 / 4	29	38	37	104	1.4	14	4	4	23	1.7					
-5 / -1	27	29	31	87	-2.9	4	1	1	6	-2.5					
-10 / -6	36	32	33	100	-7.3	3	0	0	3	-7.0					
-15 / -11	32	24	25	81	-12.0	1		0	1	-11.5					
-20 / -16	26	13	15	55	-16.8	0			0	-16.3					
-25 / -21	19	5	4	29	-21.7										
-30 / -26	6	1	2	9	-26.6										
-35 / -31	2	0	0	2	-31.4										
-40 / -36	0	0		0											
-45 / -41															
-50 / -46															
-55 / -51															

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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		
75 / 79		0		0	64.8										
70 / 74		0	0	0	60.8		0	0	0	60.5					
65 / 69		1	1	2	57.0		1	1	2	58.9					
60 / 64	0	6	3	9	54.4	0	4	2	6	55.5		0	0	0	53.0
55 / 59	2	13	9	24	51.4	2	9	6	17	52.4		1	0	1	51.2
50 / 54	10	20	14	44	48.4	8	18	16	43	49.1	0	2	2	4	47.7
45 / 49	23	33	30	86	44.3	20	27	23	71	45.1	3	7	5	15	44.8
40 / 44	36	60	49	146	39.8	39	46	39	124	40.4	9	17	14	40	39.8
35 / 39	78	83	87	247	35.6	63	76	75	213	35.8	36	45	41	123	35.6
30 / 34	88	34	54	176	32.1	94	60	73	227	31.6	85	81	85	251	31.1
25 / 29	8	0	1	9	28.2	21	5	12	39	27.3	64	53	53	169	26.3
20 / 24			0	0	22.0	1	1	1	3	22.3	28	23	29	79	21.6
15 / 19			0	0	13.0			0	0		8	5	6	20	17.2
10 / 14											4	4	4	13	11.8
5 / 9											2	1	1	4	7.4
0 / 4											0	0		0	2.3
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															
-35 / -31															
-40 / -36															
-45 / -41															
-50 / -46															
-55 / -51															

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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		
75 / 79															
70 / 74															
65 / 69															
60 / 64															
55 / 59															
50 / 54															
45 / 49															
40 / 44		0		0	37.7										
35 / 39	3	3	3	9	34.5	0	0		0	29.5					
30 / 34	13	15	13	41	30.9	1	2	1	4	30.1	0		0	0	29.3
25 / 29	35	38	34	107	25.8	7	7	8	22	25.5	1	1	1	4	25.9
20 / 24	39	38	38	115	21.2	9	8	9	26	21.1	2	3	3	8	21.1
15 / 19	40	38	38	116	16.5	14	14	13	41	16.4	5	5	4	15	16.4
10 / 14	33	35	36	105	11.5	18	19	16	53	11.2	7	6	8	20	11.3
5 / 9	29	28	29	86	6.7	27	27	26	80	6.3	11	12	10	33	6.4
0 / 4	23	20	22	65	1.5	29	28	28	86	1.5	21	20	21	63	1.4
-5 / -1	14	14	15	43	-2.7	20	24	22	66	-2.8	24	24	22	71	-3.0
-10 / -6	13	12	12	37	-6.8	33	30	33	96	-7.3	36	38	38	112	-7.2
-15 / -11	4	3	4	11	-11.4	35	38	34	107	-12.0	40	39	39	117	-12.1
-20 / -16	3	2	3	8	-16.8	24	25	28	77	-16.8	35	36	37	108	-16.9
-25 / -21	1	1	1	3	-20.8	15	14	15	45	-21.7	33	32	33	98	-21.9
-30 / -26	0	0		0	-25.7	4	4	4	12	-26.3	22	22	21	65	-26.8
-35 / -31						2	2	2	5	-31.8	5	7	7	20	-31.6
-40 / -36						0	0	0	0		3	2	2	7	-35.6
-45 / -41											1	0	1	2	-40.0
-50 / -46											0	0	0	1	-47.0
-55 / -51											0	0	0	0	

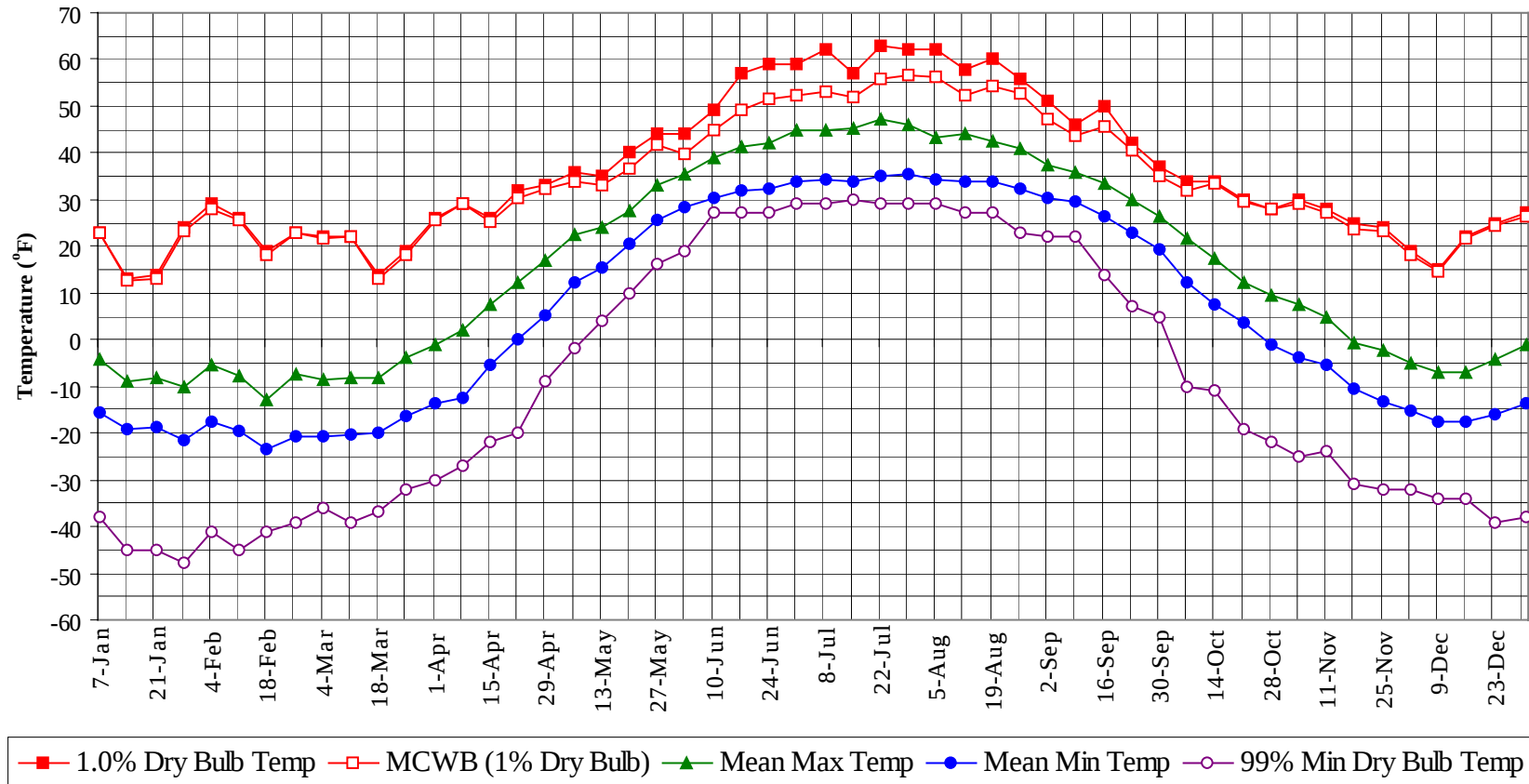
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BARROW/POST-ROGERS AK WMO No. 700260
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1973 to 1996

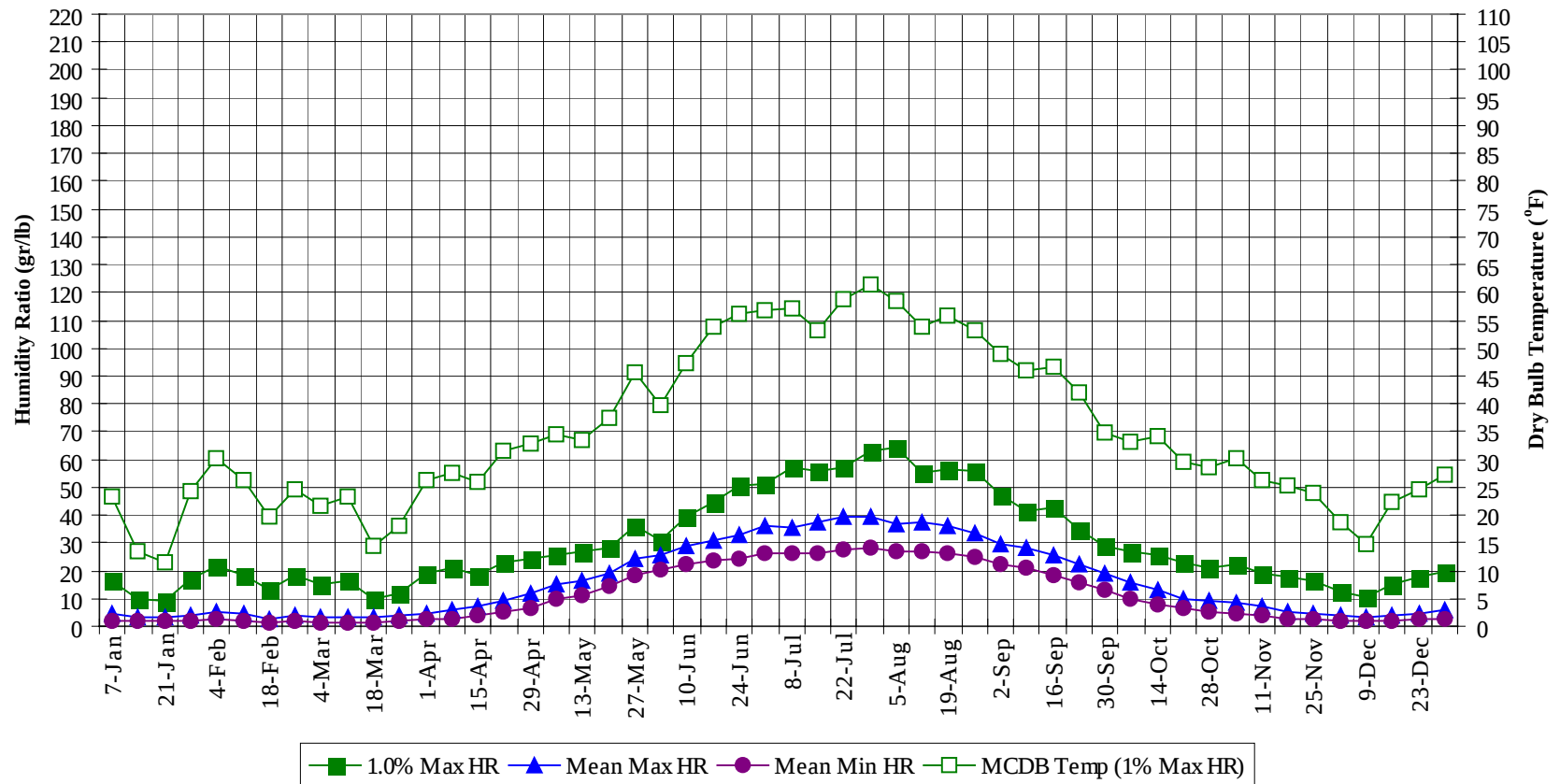
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
75 / 79	0			0	64.8
70 / 74	1			0	58.9
65 / 69	3			2	57.8
60 / 64	1	11	6	17	54.6
55 / 59	5	25	18	48	51.5
50 / 54	19	47	37	103	48.4
45 / 49	50	80	67	197	44.4
40 / 44	98	158	129	385	39.8
35 / 39	228	303	287	818	35.4
30 / 34	433	327	386	1146	31.4
25 / 29	233	178	188	599	26.3
20 / 24	151	150	155	455	21.3
15 / 19	139	132	134	404	16.4
10 / 14	129	138	136	404	11.4
5 / 9	138	141	136	415	6.4
0 / 4	161	161	160	482	1.5
-5 / -1	140	150	147	438	-2.9
-10 / -6	201	204	205	610	-7.3
-15 / -11	204	210	209	623	-12.1
-20 / -16	193	179	190	562	-16.9
-25 / -21	164	146	144	454	-21.8
-30 / -26	115	98	93	306	-26.8
-35 / -31	61	54	59	174	-31.6
-40 / -36	28	20	20	68	-35.9
-45 / -41	12	10	10	32	-41.8
-50 / -46	4	4	5	13	-45.9
-55 / -51	1	0	0	1	

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



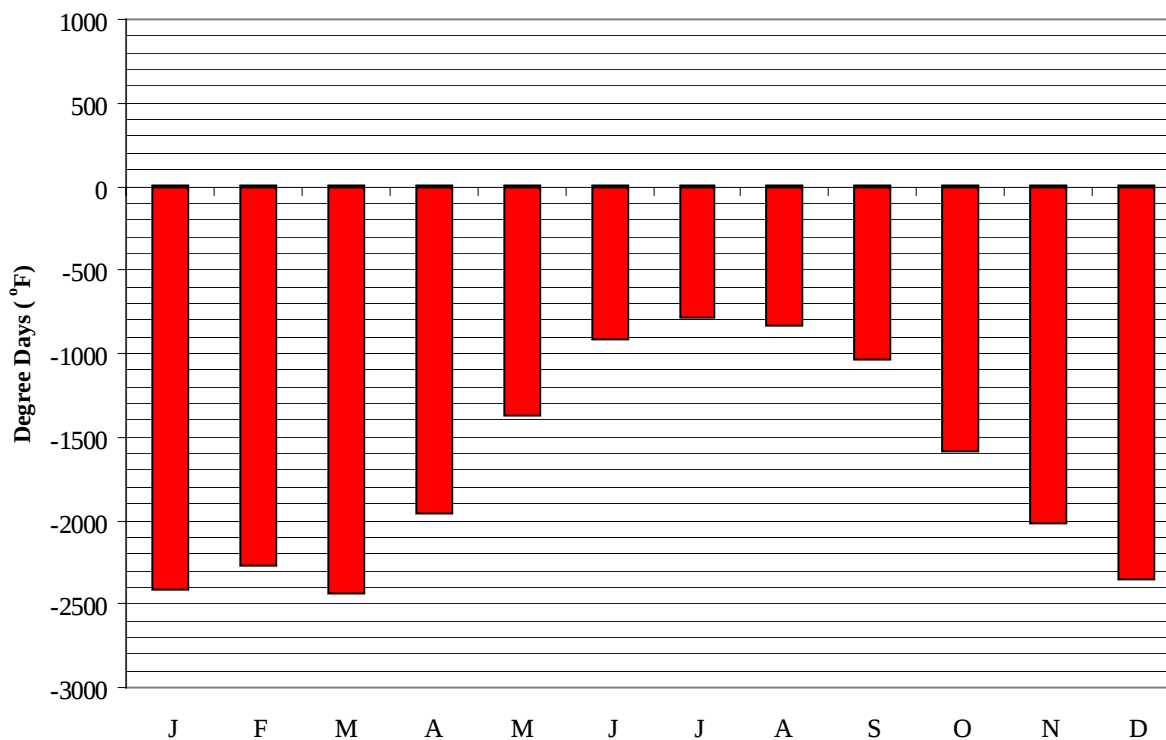
BARROW/POST-ROGERS AK

WMO No. 700260

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	23.0	22.7	-4.3	-15.7	-38.0	16.1	23.3	4.8	2.2
14-Jan	13.0	12.7	-9.1	-19.4	-45.0	9.8	13.3	3.5	1.8
21-Jan	14.0	13.0	-8.2	-18.9	-45.0	9.1	11.5	3.4	1.8
28-Jan	24.0	23.2	-10.2	-21.4	-48.0	16.8	24.3	3.9	2.0
4-Feb	29.0	28.1	-5.4	-17.8	-41.0	21.7	30.1	5.2	2.3
11-Feb	26.0	25.7	-7.7	-19.5	-45.0	18.2	26.2	4.3	1.9
18-Feb	19.0	18.0	-12.9	-23.5	-41.0	13.3	19.7	2.7	1.4
25-Feb	23.0	22.8	-7.4	-20.8	-39.0	18.2	24.8	4.2	1.7
4-Mar	22.0	21.7	-8.7	-20.6	-36.0	15.4	21.8	3.4	1.5
11-Mar	22.0	22.0	-8.1	-20.3	-39.0	16.1	23.2	3.4	1.6
18-Mar	14.0	13.1	-8.0	-20.0	-37.0	9.8	14.5	3.1	1.5
25-Mar	19.0	18.0	-3.7	-16.3	-32.0	11.9	18.2	4.0	1.9
1-Apr	26.0	25.7	-1.1	-13.5	-30.0	18.9	26.3	4.9	2.4
8-Apr	29.0	29.0	2.1	-12.5	-27.0	21.0	27.5	5.9	2.7
15-Apr	26.0	25.3	7.6	-5.4	-22.0	18.2	25.9	7.4	4.0
22-Apr	32.0	30.4	12.2	0.1	-20.0	23.1	31.4	9.5	5.2
29-Apr	33.0	32.2	17.1	5.2	-9.0	24.5	32.8	11.6	6.8
6-May	36.0	34.0	22.5	12.4	-2.0	25.9	34.3	15.1	9.9
13-May	35.0	33.3	24.1	15.2	4.0	26.6	33.5	16.3	11.2
20-May	40.0	36.5	27.7	20.4	10.0	28.0	37.5	19.3	14.2
27-May	44.0	41.5	33.2	25.5	16.0	36.4	45.7	24.1	18.3
3-Jun	44.0	39.8	35.3	28.3	19.0	30.8	39.7	25.7	20.1
10-Jun	49.0	44.7	38.8	30.5	27.0	39.2	47.3	29.2	22.6
17-Jun	57.0	49.2	41.1	31.9	27.0	44.8	53.9	30.7	23.6
24-Jun	59.0	51.4	42.3	32.2	27.0	50.4	56.1	32.9	24.0
1-Jul	59.0	52.1	44.9	33.9	29.0	51.1	56.9	36.1	26.3
8-Jul	62.0	53.2	44.8	34.2	29.0	57.4	57.3	35.5	26.4
15-Jul	57.0	52.0	45.2	34.0	30.0	56.0	53.2	37.5	26.5
22-Jul	63.0	55.8	47.1	34.9	29.0	57.4	58.7	39.7	27.9
29-Jul	62.0	56.5	46.1	35.4	29.0	63.0	61.3	39.4	28.3
5-Aug	62.0	56.2	43.3	34.3	29.0	64.4	58.6	36.6	27.3
12-Aug	58.0	52.5	44.0	34.1	27.0	55.3	54.0	37.4	27.0
19-Aug	60.0	54.3	42.6	33.7	27.0	56.7	55.9	35.9	26.5
26-Aug	56.0	52.8	40.8	32.3	23.0	56.0	53.3	33.5	24.7
2-Sep	51.0	47.1	37.4	30.4	22.0	47.6	48.8	29.8	22.5
9-Sep	46.0	43.6	35.7	29.4	22.0	41.3	45.8	28.0	21.0
16-Sep	50.0	45.6	33.7	26.4	14.0	42.7	46.7	25.4	18.5
23-Sep	42.0	40.4	29.8	22.9	7.0	35.0	42.2	22.1	16.0
30-Sep	37.0	35.0	26.4	19.4	5.0	28.7	34.9	19.0	13.3
7-Oct	34.0	32.0	21.6	12.4	-10.0	26.6	33.2	15.5	9.8
14-Oct	34.0	33.6	17.5	7.7	-11.0	25.9	34.1	13.2	7.8
21-Oct	30.0	29.7	12.3	3.6	-19.0	23.1	29.7	10.1	6.4
28-Oct	28.0	27.9	9.6	-0.9	-22.0	21.0	28.5	9.2	5.0
4-Nov	30.0	29.3	7.6	-4.0	-25.0	22.4	30.1	8.7	4.5
11-Nov	28.0	27.1	4.6	-5.3	-24.0	18.9	26.3	7.4	4.0
18-Nov	25.0	23.5	-0.9	-10.6	-31.0	17.5	25.4	5.4	2.8
25-Nov	24.0	23.4	-2.2	-13.4	-32.0	16.1	24.0	4.9	2.5
2-Dec	19.0	18.3	-4.9	-15.2	-32.0	12.6	18.9	4.1	2.1
9-Dec	15.0	14.5	-7.0	-17.7	-34.0	10.5	14.7	3.5	1.8
16-Dec	22.0	21.7	-6.8	-17.5	-34.0	15.4	22.3	4.2	1.9
23-Dec	25.0	24.3	-4.3	-16.0	-39.0	17.5	24.6	4.9	2.4
31-Dec	27.0	26.3	-1.0	-13.6	-38.0	19.6	27.2	6.0	2.6

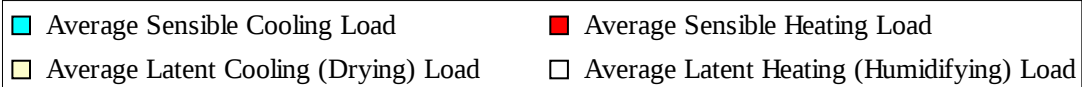
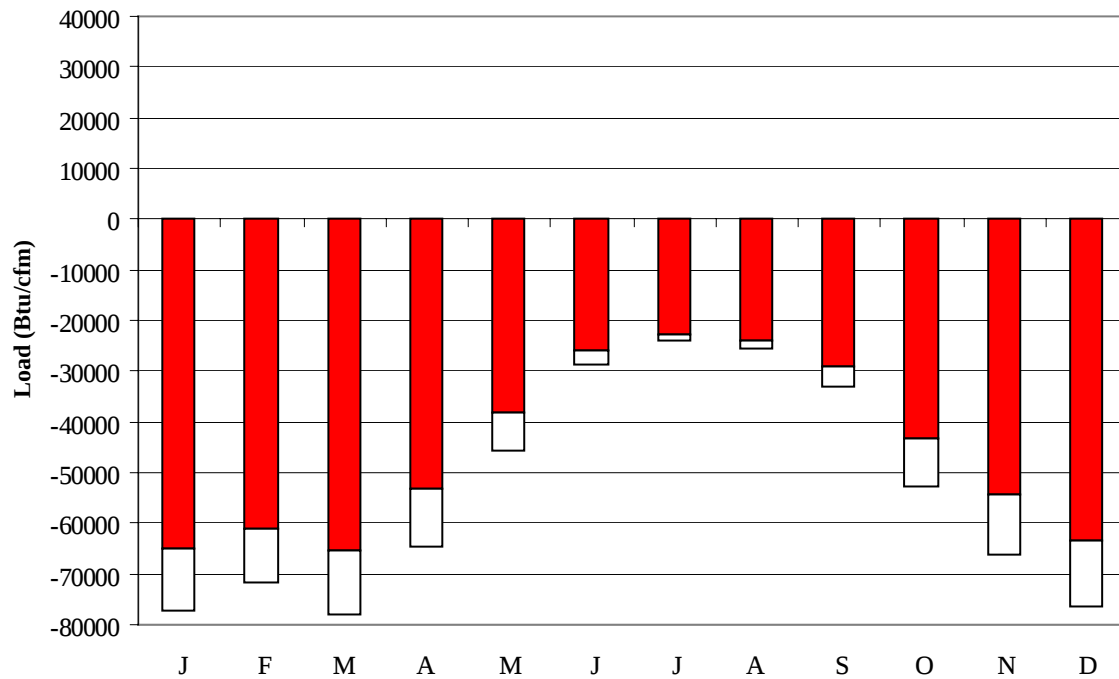
Degree Days, Heating and Cooling (Base 65°F)



■ Mean Cooling Degree Days
 ■ Mean Heating Degree Days

	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	2418
FEB	0	2273
MAR	0	2432
APR	0	1960
MAY	0	1374
JUN	0	913
JUL	0	783
AUG	0	830
SEP	0	1030
OCT	0	1581
NOV	0	2014
DEC	0	2359
ANN	1	19967

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	-65110	0	-11997
FEB	0	-61090	0	-10816
MAR	0	-65443	0	-12563
APR	0	-53138	0	-11324
MAY	0	-38040	0	-7613
JUN	0	-26004	0	-2649
JUL	1	-22689	0	-1136
AUG	0	-23918	0	-1503
SEP	0	-29027	0	-3913
OCT	0	-43376	0	-9255
NOV	0	-54535	0	-11634
DEC	0	-63571	0	-12751
ANN	1	-545941	0	-97154

Average Annual Solar Radiation – Nearest Available Site

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

City: BARROW
 State: AK
 WBAN No: 27502
 Lat(N): 71.3
 Long(W): 156.78
 Elev(ft): 13

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 0.221
 Vert Gap: 0.2

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	0	75	490	1160	1470	1550	1410	830	420	150	5	0	630
	Std Dev	0	5	23	73	82	141	152	71	33	13	1	0	21
	Minimum	0	67	430	1030	1280	1380	1170	700	380	120	3	0	590
	Maximum	0	82	530	1290	1650	1980	1860	960	490	180	6	0	680
	Diffuse	0	49	240	570	1060	990	830	620	350	130	3	0	410
Clear Day	Global	0	67	500	1310	2100	2450	2200	1480	710	160	0	0	920
NORTH	Global	0	30	160	400	690	810	690	370	190	67	3	0	280
	Diffuse	0	30	160	370	610	630	540	340	190	67	3	0	250
Clear Day	Global	0	29	140	380	930	1410	1130	480	180	60	0	0	400
EAST	Global	0	91	500	980	990	1000	950	540	280	110	6	0	460
	Diffuse	0	43	230	490	710	680	600	400	220	85	3	0	290
Clear Day	Global	0	110	590	1280	1800	1960	1820	1370	770	230	0	0	830
SOUTH	Global	0	360	1150	1500	1140	1100	1080	700	440	280	35	0	650
	Diffuse	0	100	350	580	760	700	620	450	280	150	7	0	340
Clear Day	Global	0	520	1520	1990	2060	1980	1930	1880	1640	830	0	0	1200
WEST	Global	0	90	500	990	1000	1060	990	560	290	110	6	0	470
	Diffuse	0	42	230	500	710	690	600	400	230	86	3	0	290
Clear Day	Global	0	110	590	1280	1800	1960	1820	1370	770	230	0	0	830

Average Annual Solar Heat and Illumination – Nearest Available Site

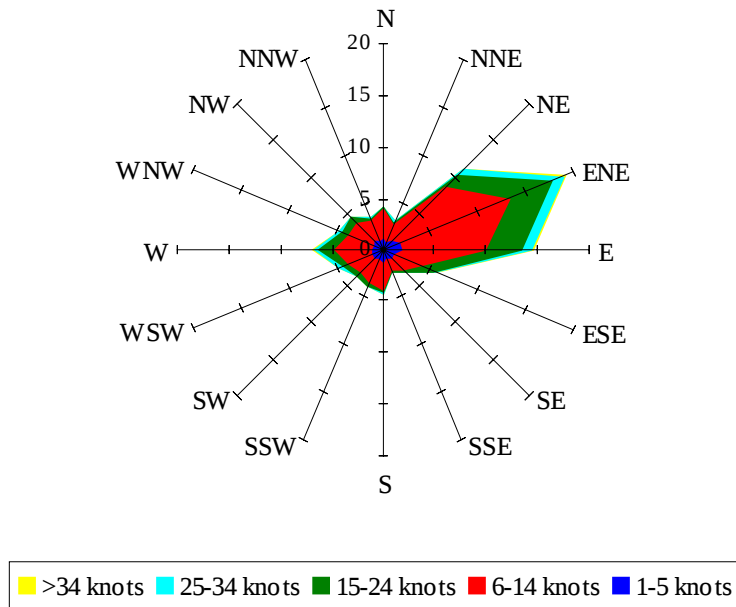
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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	0	39	270	740	1010	1070	970	570	280	94	3	0	420
NORTH	Unshaded	0	21	110	270	470	560	480	250	130	46	2	0	200
	Shaded	0	20	100	260	450	540	460	240	120	43	1	0	190
EAST	Unshaded	0	58	350	710	710	710	680	380	200	76	3	0	320
	Shaded	0	58	350	690	680	680	650	360	190	73	3	0	310
SOUTH	Unshaded	0	270	860	1090	810	770	760	490	320	210	27	0	470
	Shaded	0	270	860	1070	780	730	730	480	310	210	27	0	460
WEST	Unshaded	0	58	360	710	710	760	710	400	200	78	3	0	330
	Shaded	0	57	350	690	680	730	690	380	190	75	3	0	320

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	3	15	25	26	17	32	49	62	67	62
	M.Cloudy	2	12	20	20	13	18	29	37	41	38
NORTH	M.Clear	1	6	8	8	6	16	12	13	14	13
	M.Cloudy	1	5	8	8	6	10	12	14	15	14
EAST	M.Clear	11	38	26	8	6	68	75	53	14	13
	M.Cloudy	5	18	16	8	6	20	28	25	15	14
SOUTH	M.Clear	4	35	66	68	39	9	37	69	81	68
	M.Cloudy	2	17	33	34	19	8	18	29	37	31
WEST	M.Clear	1	6	8	23	39	9	12	13	15	54
	M.Cloudy	1	5	8	15	19	8	12	14	16	27
M.Clear	(% hrs)	53	54	54	53	52	15	16	18	18	19

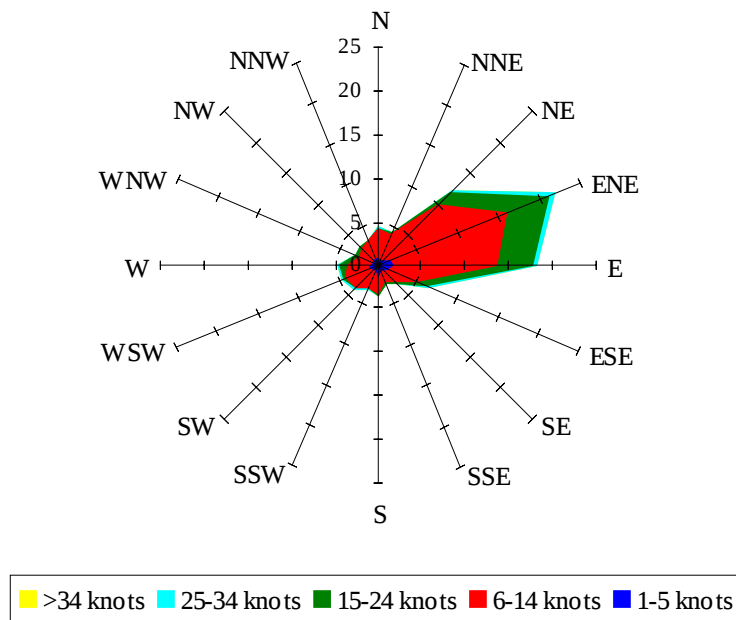
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	3	16	27	33	27	0	0	0	0	0
	M.Cloudy	2	9	16	18	15	0	0	0	0	0
NORTH	M.Clear	2	6	8	9	8	0	0	0	0	0
	M.Cloudy	1	4	7	8	7	0	0	0	0	0
EAST	M.Clear	10	40	36	9	8	0	0	0	0	0
	M.Cloudy	2	9	12	8	7	0	0	0	0	0
SOUTH	M.Clear	1	25	57	70	53	0	0	0	0	0
	M.Cloudy	1	7	15	18	15	0	0	0	0	0
WEST	M.Clear	1	6	8	11	38	0	0	0	0	0
	M.Cloudy	1	4	7	9	12	0	0	0	0	0
M.Clear	(% hrs)	5	5	6	6	6	49	46	45	46	47

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



Percent Calm = 1.97

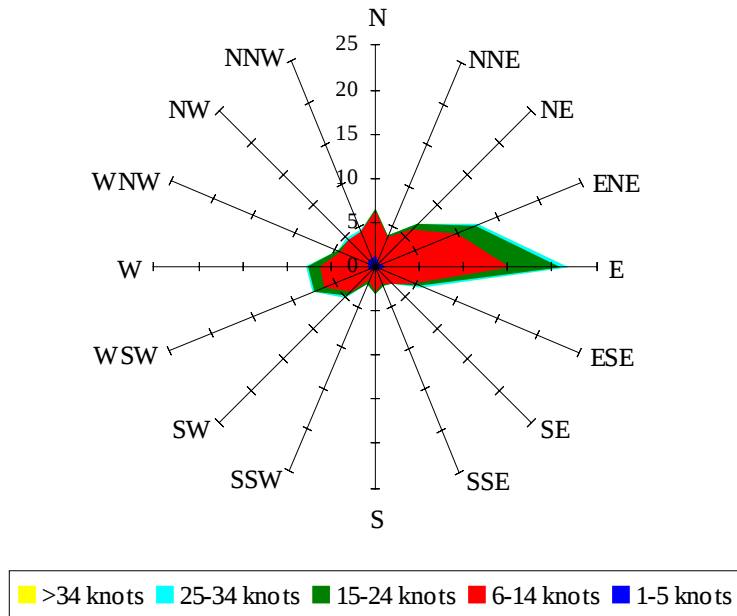
Wind Summary - March, April, and May **Labels of Percent Frequency on North Axis**



Percent Calm = 0.84

Wind Summary - June, July, and August

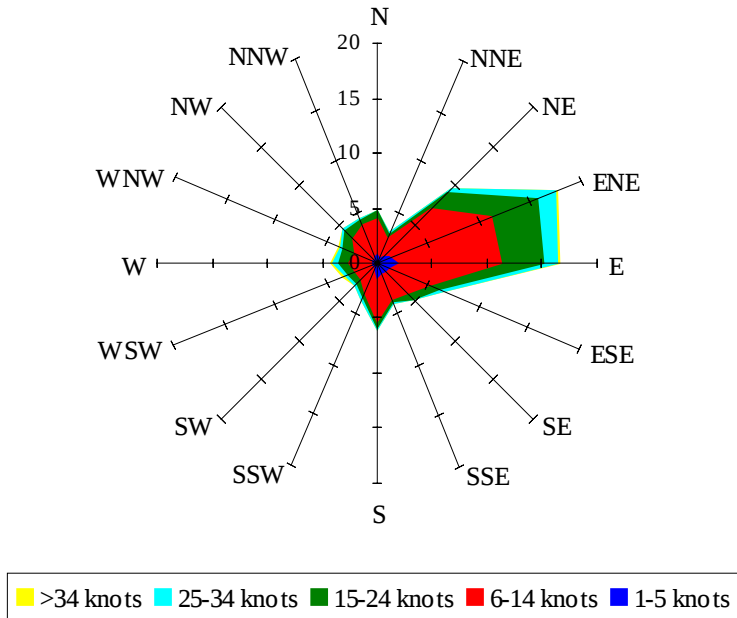
Labels of Percent Frequency on North Axis



Percent Calm = 0.61

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 1.15