NENANA AK	
Latitude = 64.55 N	WMO No. 702600
Longitude =149.00 W	Elevation = 361 feet
Period of Record = 1973 to 1996	Average Pressure = 29.46 inches Hg

Design Criteria Data

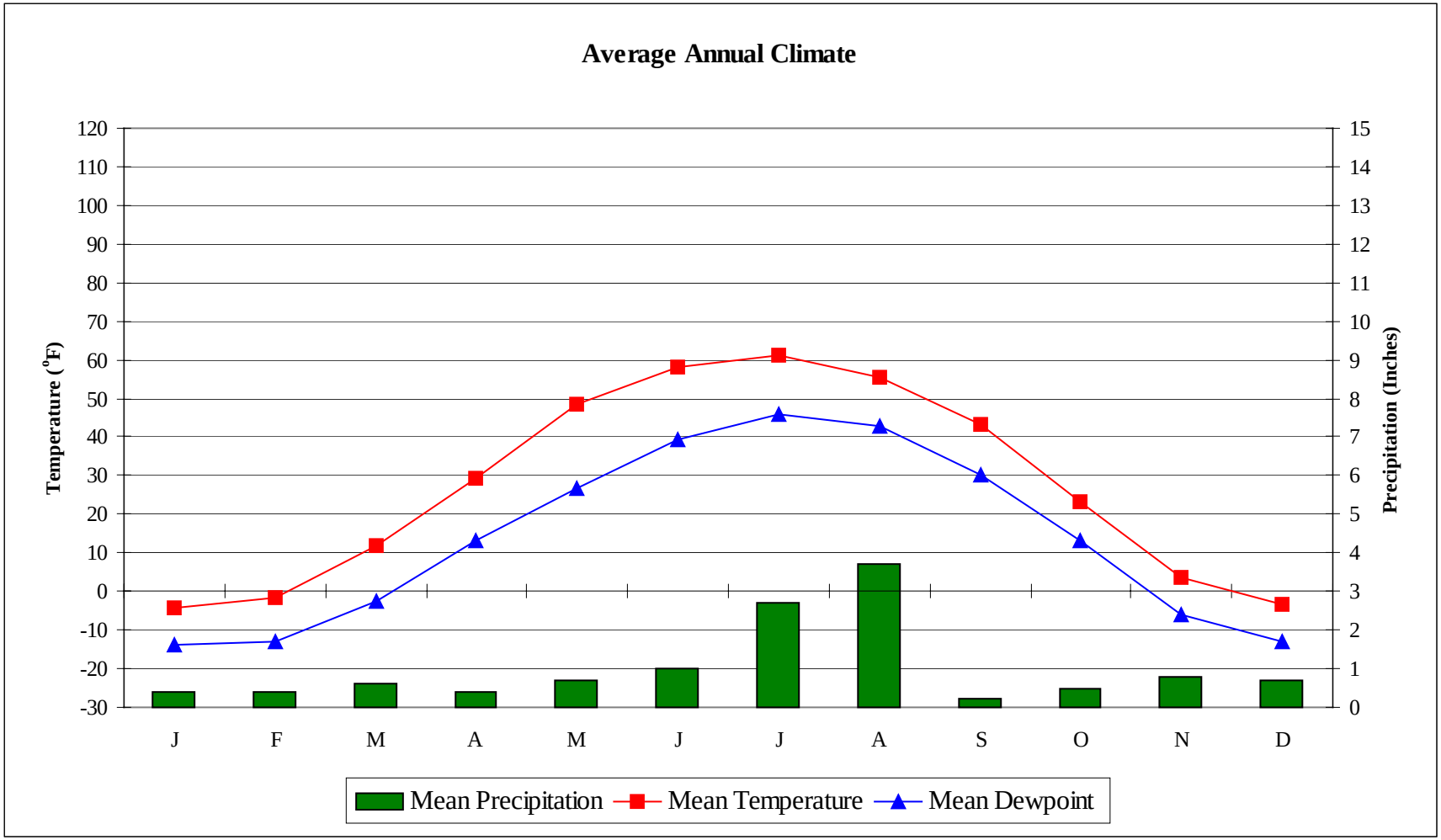
		Mean Coincident (Average) Values			
Dry Bulb Temperature (T)	**Design Value (^oF)**	Wet Bulb Temperature (^oF)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	85	63	51	5.4	ENE
0.4% Occurrence	79	60	48	5.9	NE
1.0% Occurrence	76	59	48	5.7	N
2.0% Occurrence	73	57	47	5.8	S
Mean Daily Range	18	-	-	-	-
97.5% Occurrence	-34	-34	1	1.9	E
99.0% Occurrence	-45	-45	0	1.7	MISSING
99.6% Occurrence	-50	-50	0	1.9	S
Median of Extreme Lows	-52	-52	0	1.9	E
		Mean Coincident (Average) Values			
Wet Bulb Temperature (T_{wb})	**Design Value (^oF)**	Dry Bulb Temperature (^oF)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	66	80	71	4.8	WNW
0.4% Occurrence	62	75	62	5.0	W
1.0% Occurrence	60	72	58	5.2	NE
2.0% Occurrence	59	70	56	5.2	NE
		Mean Coincident (Average) Values			
Humidity Ratio (HR)	**Design Value (gr/lb)**	Dry Bulb Temperature (^oF)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	80	66	0.54	5.2	SSW
0.4% Occurrence	70	66	0.47	4.4	WSW
1.0% Occurrence	65	65	0.44	4.9	SW
2.0% Occurrence	61	63	0.41	4.2	WSW
Air Conditioning/		$T \geq 93^oF$	$T \geq 80^oF$	$T_{wb} \geq 73^oF$	$T_{wb} \geq 67^oF$
Humid Area Criteria	# of Hours	0	33	0	3

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	0.9	90	0.0 + 0.0
Ground Water Temperature (^oF) 50 Foot Depth *	**Frost Depth 50 Year Recurrence (in.)**	**Ground Snow Load 50 Year Recurrence (lb/ft^2)**	**Average Annual Freeze-Thaw Cycles (#)**
29.9	N/A	N/A	55

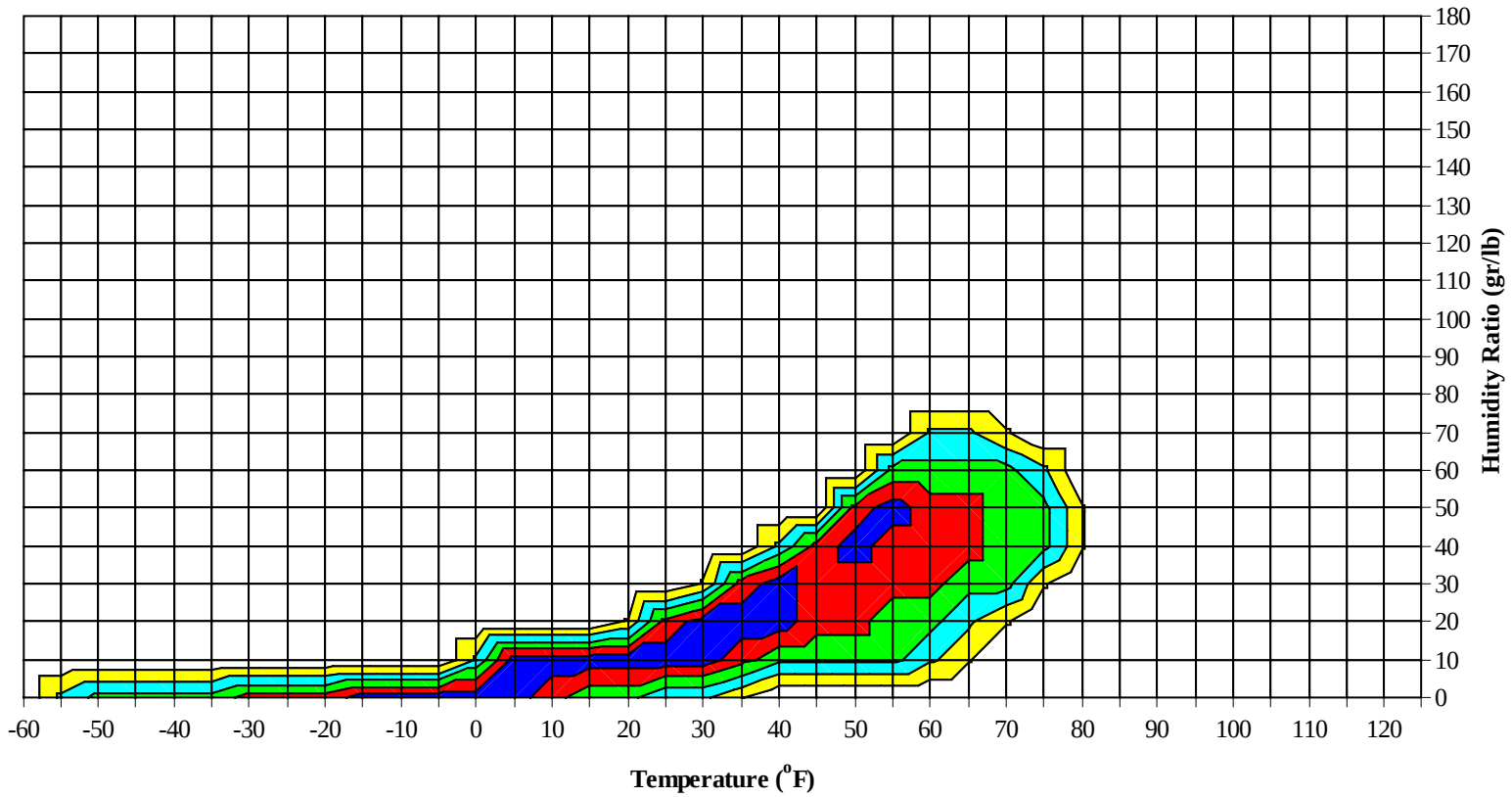
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

NENANA AK WMO No. 702600



NENANA AK WMO No. 702600

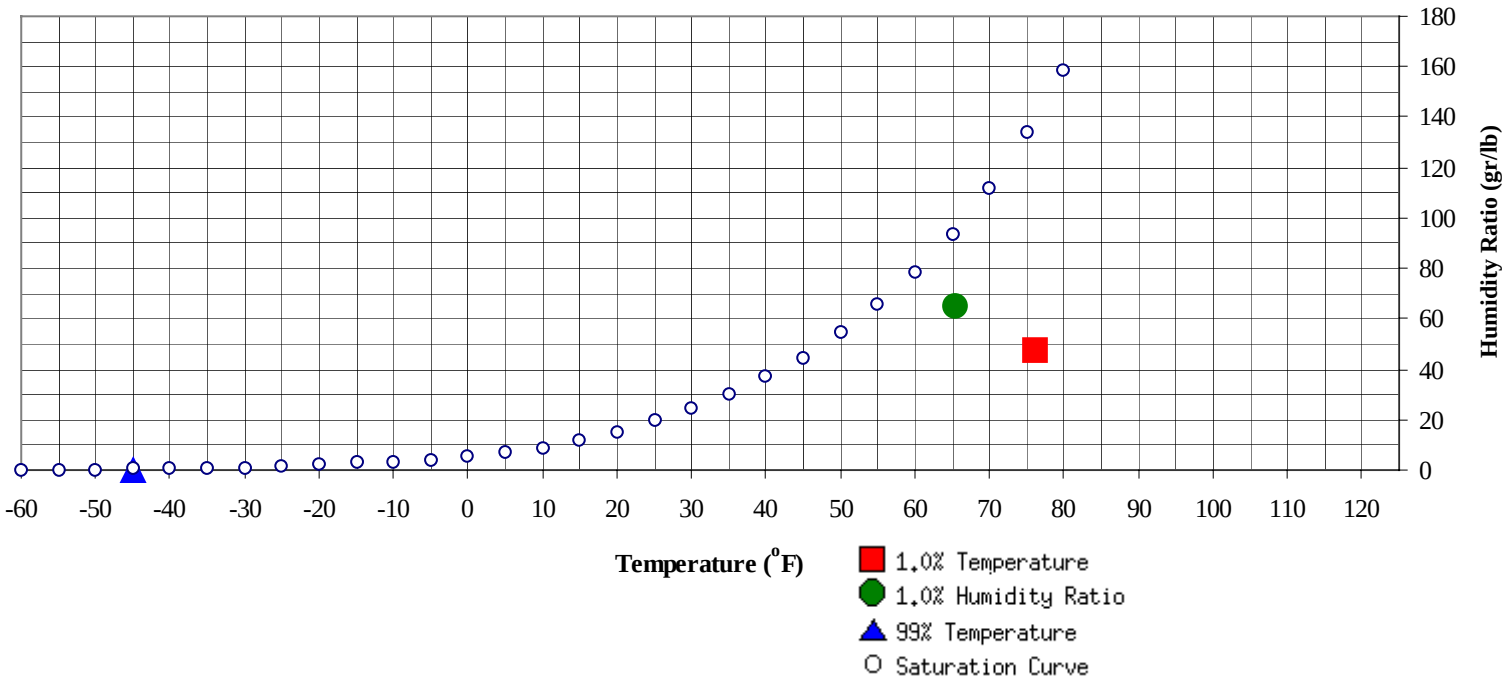
Long Term Psychrometric Summary



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

NENANA AK WMO No. 702600

Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)
99% Dry Bulb	-45	0	-10.8

	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
1.0% Humidity Ratio	65.1	65.3	59	55.1	25.8

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	76	47.6	58.8	25.7

NENANA AK WMO No. 702600

Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	January Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)	February Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)	March Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)
95 / 99															
90 / 94															
85 / 89															
80 / 84															
75 / 79															
70 / 74															
65 / 69															
60 / 64															
55 / 59															
50 / 54			0	0	34.0		0		0	36.0			0	0	43.0
45 / 49	0	0	0	0	37.2		0		0	35.0		2	1	3	36.5
40 / 44	1	1	1	3	35.4	0	1	1	2	34.4	1	10	6	17	33.1
35 / 39	2	3	4	9	30.0	2	4	4	10	30.6	2	17	12	31	30.5
30 / 34	5	6	7	18	27.7	8	10	9	27	27.6	12	22	21	55	26.9
25 / 29	8	9	9	26	23.6	8	14	13	35	23.6	16	28	27	71	22.7
20 / 24	12	12	10	35	19.1	14	14	14	41	19.5	18	30	28	76	18.7
15 / 19	16	18	16	51	14.6	13	14	13	40	14.9	23	29	32	84	14.5
10 / 14	22	20	16	59	10.4	14	18	17	49	10.0	23	31	27	81	9.9
5 / 9	18	24	21	63	5.8	16	19	19	54	5.6	30	30	31	90	5.3
0 / 4	29	28	27	84	0.4	20	23	21	64	0.4	33	22	23	78	0.5
-5 / -1	21	23	24	68	-3.4	16	19	18	53	-3.6	19	11	12	42	-3.5
-10 / -6	24	25	27	76	-7.6	24	21	22	67	-7.9	21	11	11	43	-7.8
-15 / -11	16	15	16	48	-12.3	20	20	20	60	-12.5	17	5	7	29	-12.6
-20 / -16	13	14	14	42	-17.0	16	14	14	43	-17.3	11	2	3	16	-17.0
-25 / -21	11	10	11	32	-22.0	11	10	10	31	-21.9	7	1	3	11	-22.0
-30 / -26	9	8	8	25	-27.0	8	8	9	25	-27.0	4	0	1	5	-26.8
-35 / -31	5	6	5	16	-31.9	10	6	6	22	-32.0	4	0	1	5	-31.7
-40 / -36	5	7	7	19	-36.9	8	5	4	17	-36.8	3	0	0	3	-36.6
-45 / -41	8	7	7	22	-42.0	6	3	4	13	-42.1	1	0	0	1	-41.7
-50 / -46	8	7	8	23	-46.9	6	1	3	10	-46.7	0	0	0	0	-46.8
-55 / -51	6	5	5	16	-52.1	3	1	1	5	-51.4					
-60 / -56	4	2	2	8	-56.1	1	0	0	1	-56.3					
-65 / -61	1	1	0	2											
-70 / -66	0	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.

NENANA AK WMO No. 702600

Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	April Hour Group (LST) 01 To 08	April 09 To 16	April 17 To 00	April Total Obs	April MCWB (°F)	May Hour Group (LST) 01 To 08	May 09 To 16	May 17 To 00	May Total Obs	May MCWB (°F)	June Hour Group (LST) 01 To 08	June 09 To 16	June 17 To 00	June Total Obs	June MCWB (°F)
95 / 99													0	0	65.0
90 / 94												0	0	0	61.3
85 / 89												1	1	2	61.6
80 / 84							0	0	0	59.0		4	4	8	59.3
75 / 79							1	1	2	56.1		16	11	27	58.1
70 / 74							7	6	13	52.6	0	33	22	55	55.6
65 / 69		0	0	0	49.7	0	26	15	41	49.7	4	55	36	96	53.1
60 / 64	0	2	1	3	44.9	1	42	30	73	47.1	15	59	51	125	51.1
55 / 59	0	9	5	14	42.8	8	54	40	102	44.6	43	40	49	132	49.2
50 / 54	0	17	12	30	40.0	24	49	49	121	41.9	71	24	45	140	46.3
45 / 49	2	30	23	55	37.3	44	34	44	121	39.1	67	8	17	92	42.7
40 / 44	8	39	32	78	34.4	53	20	32	105	35.9	27	0	4	31	38.1
35 / 39	25	37	36	98	31.1	54	10	17	81	32.3	10		0	10	34.0
30 / 34	42	30	41	112	27.6	40	5	9	54	28.8	2			2	30.6
25 / 29	47	24	32	102	23.6	17	1	3	21	24.6					
20 / 24	33	18	20	71	19.0	4	1	1	6	19.7					
15 / 19	21	14	14	49	14.6	1	0	0	1	14.8					
10 / 14	16	9	9	34	9.9	1			1	10.3					
5 / 9	14	7	7	28	5.4	0			0	6.8					
0 / 4	12	3	5	20	0.7										
-5 / -1	6	1	1	8	-3.2										
-10 / -6	5	1	1	7	-7.5										
-15 / -11	4	0	1	5	-12.0										
-20 / -16	3		0	3	-16.9										
-25 / -21	1		0	1	-21.7										
-30 / -26	0			0	-26.1										
-35 / -31															
-40 / -36															
-45 / -41															
-50 / -46															
-55 / -51															
-60 / -56															
-65 / -61															
-70 / -66															

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.

NENANA AK WMO No. 702600

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	July Hour Group (LST) 01 To 08	July 09 To 16	July 17 To 00	July Total Obs	July MCWB (°F)	August Hour Group (LST) 01 To 08	August 09 To 16	August 17 To 00	August Total Obs	August MCWB (°F)	September Hour Group (LST) 01 To 08	September 09 To 16	September 17 To 00	September Total Obs	September MCWB (°F)
95 / 99		0		0	68.0										
90 / 94		0	0	0	66.0										
85 / 89		2	2	4	64.1		0	0	0	62.0					
80 / 84	0	8	7	15	61.7		2	2	4	62.5			0	0	58.5
75 / 79	0	25	18	44	59.7		9	6	15	60.4		0	0	0	58.7
70 / 74	1	48	34	82	57.9	0	21	13	34	57.8	0	2	1	3	56.6
65 / 69	8	58	45	110	56.1	2	40	29	70	55.6	0	6	4	10	52.8
60 / 64	30	58	51	138	54.1	13	55	40	108	53.3	1	16	10	28	49.5
55 / 59	70	36	52	158	51.7	35	54	54	143	50.9	4	32	20	56	47.5
50 / 54	85	12	30	127	48.4	66	42	52	160	47.8	12	45	36	94	45.0
45 / 49	43	2	8	53	44.1	71	18	35	124	44.1	36	46	48	130	41.7
40 / 44	9		1	10	39.5	34	6	12	52	39.5	56	40	45	141	38.0
35 / 39	2		0	2	34.1	17	1	4	22	34.7	47	28	38	114	33.8
30 / 34	0			0	28.6	8		1	9	30.0	46	15	23	85	29.4
25 / 29						2			2	26.2	24	5	8	37	24.7
20 / 24											7	3	5	15	19.8
15 / 19											5	1	1	7	15.6
10 / 14											1	0	0	1	11.3
5 / 9											0	0	0	0	7.3
0 / 4											0		0	0	0.6
-5 / -1											0			0	-2.7
-10 / -6											0			0	-6.0
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															
-35 / -31															
-40 / -36															
-45 / -41															
-50 / -46															
-55 / -51															
-60 / -56															
-65 / -61															
-70 / -66															

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.

NENANA AK WMO No. 702600

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)				MCWB	Hour Group (LST)				MCWB	Hour Group (LST)				MCWB
	01 To 08	09 To 16	17 To 00	Total Obs	(°F)	01 To 08	09 To 16	17 To 00	Total Obs	(°F)	01 To 08	09 To 16	17 To 00	Total Obs	(°F)
95 / 99															
90 / 94															
85 / 89															
80 / 84															
75 / 79															
70 / 74															
65 / 69		0		0	50.0										
60 / 64		0	0	0	46.7										
55 / 59	0	1	1	2	43.7										
50 / 54	1	4	2	7	42.4		0		0	40.0	0		0	0	37.5
45 / 49	2	8	4	14	39.5	0	0		0	40.2	0	0	0	0	37.9
40 / 44	8	17	11	36	35.3	0	1	0	1	35.9	1	1	1	3	34.8
35 / 39	16	31	26	74	32.2	2	4	3	9	32.4	1	1	1	3	32.2
30 / 34	44	41	44	129	28.7	5	6	6	17	28.4	5	5	5	15	28.7
25 / 29	37	39	37	114	24.5	8	14	13	36	23.6	6	6	7	19	24.3
20 / 24	39	35	37	112	20.0	18	17	15	50	19.2	12	12	10	35	19.8
15 / 19	31	30	29	91	15.2	23	26	21	70	15.1	14	18	17	50	15.1
10 / 14	24	18	22	64	10.6	28	33	32	93	10.6	24	22	21	67	10.7
5 / 9	16	10	13	39	5.9	29	28	27	84	6.0	25	23	23	71	5.8
0 / 4	12	7	11	30	1.2	30	32	32	94	0.8	30	33	33	96	0.7
-5 / -1	4	3	4	11	-2.9	21	20	22	63	-3.2	24	25	23	72	-3.4
-10 / -6	5	2	2	9	-7.5	21	17	20	58	-7.6	25	25	21	71	-7.8
-15 / -11	3	2	1	6	-12.1	15	12	12	38	-12.3	17	16	18	51	-12.3
-20 / -16	2	1	1	4	-16.6	11	11	10	32	-17.2	12	18	16	47	-17.2
-25 / -21	1	0	1	2	-21.8	8	8	9	25	-22.2	11	10	12	34	-22.0
-30 / -26	1	0	0	1	-27.4	10	7	7	24	-27.0	10	10	10	31	-27.0
-35 / -31	0	0		0	-31.0	5	2	4	11	-31.7	9	8	9	26	-32.1
-40 / -36						3	2	2	7	-36.1	8	5	7	20	-37.0
-45 / -41						1	1	0	2	-42.0	5	6	4	15	-42.1
-50 / -46						1	1	1	3	-47.0	5	4	5	14	-46.8
-55 / -51						0	0	1	1	-52.2	2	1	2	5	-51.4
-60 / -56						0	0		0	-56.0	0	0		0	-55.3
-65 / -61															
-70 / -66															

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.

NENANA AK WMO No. 702600

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

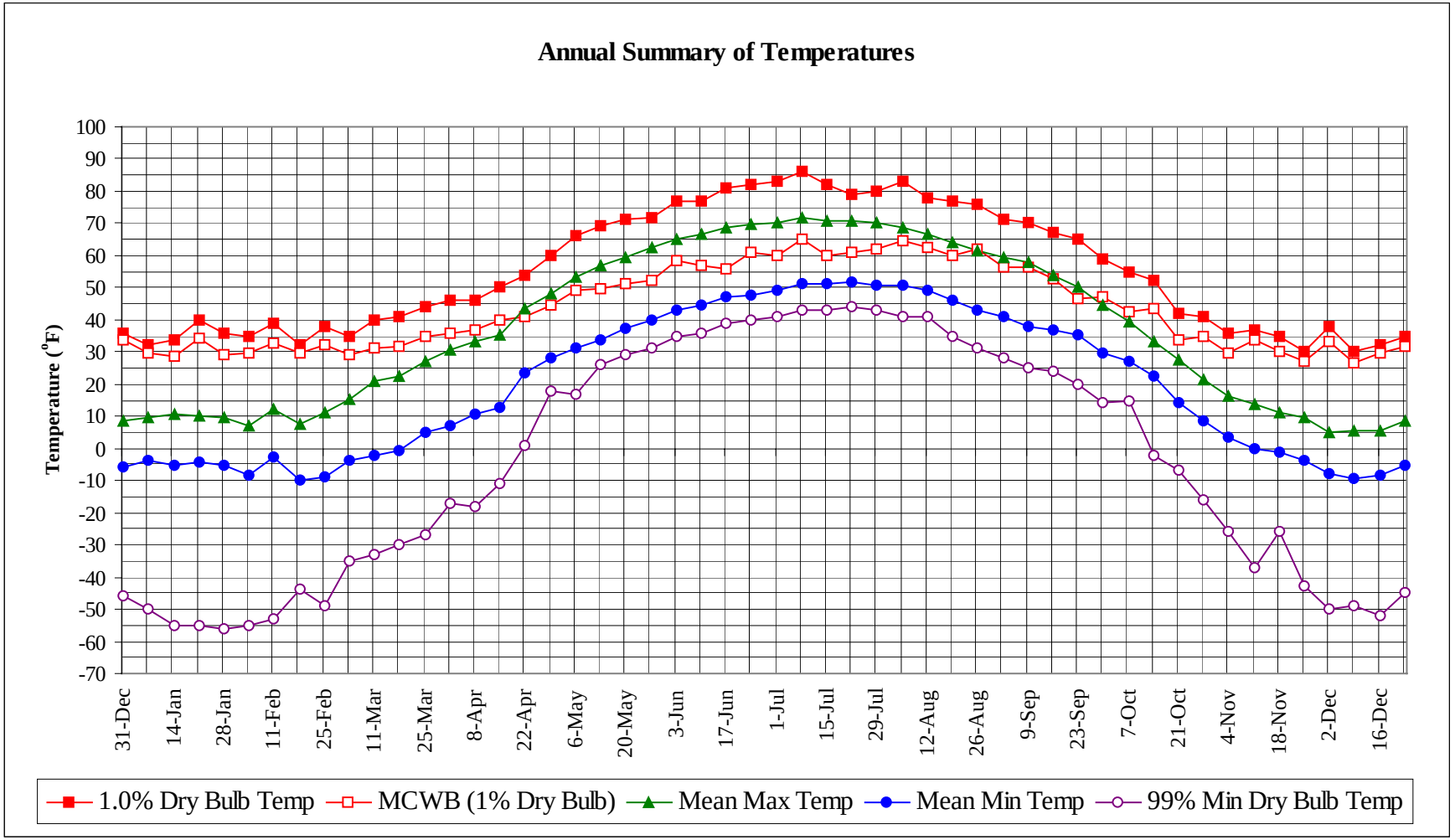
Period of Record = 1973 to 1996

Annual Totals

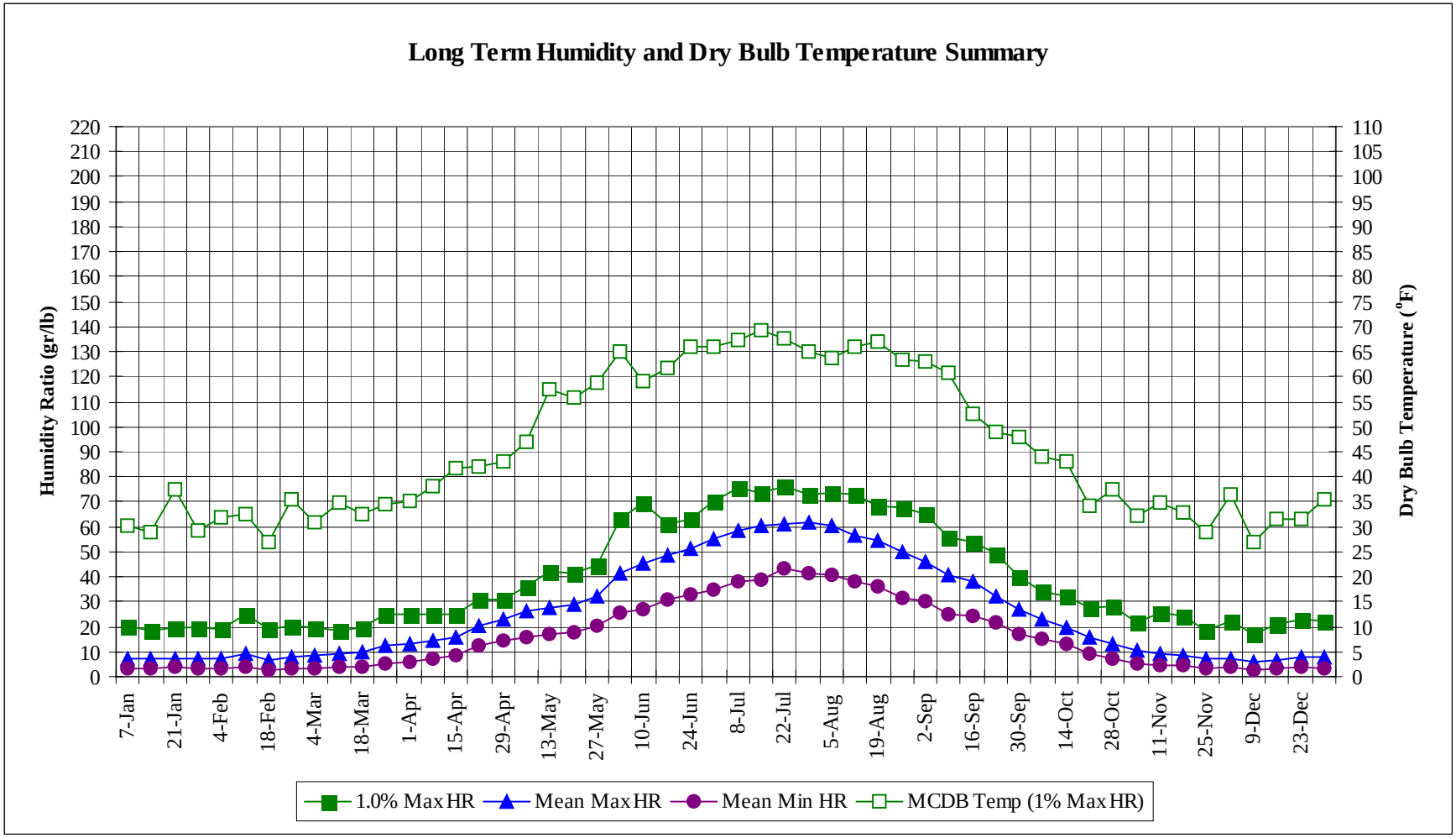
Temperature Range (°F)	Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)
95 / 99		0	0	0	66.5
90 / 94		0	0	0	64.4
85 / 89		3	3	6	63.4
80 / 84	0	15	13	28	61.0
75 / 79	0	51	38	89	59.2
70 / 74	2	111	78	191	56.8
65 / 69	15	185	132	332	54.2
60 / 64	61	232	185	478	51.7
55 / 59	164	226	222	612	49.1
50 / 54	263	194	227	684	45.7
45 / 49	268	147	179	595	41.5
40 / 44	201	134	144	478	36.7
35 / 39	184	133	146	462	32.3
30 / 34	219	137	165	521	28.3
25 / 29	172	139	150	462	23.9
20 / 24	154	141	142	437	19.4
15 / 19	147	149	145	441	14.9
10 / 14	153	150	146	449	10.4
5 / 9	145	139	140	424	5.7
0 / 4	165	148	151	464	0.6
-5 / -1	110	101	103	314	-3.4
-10 / -6	123	102	104	329	-7.7
-15 / -11	90	71	75	235	-12.4
-20 / -16	67	59	60	186	-17.1
-25 / -21	52	40	46	137	-22.0
-30 / -26	44	34	37	114	-27.0
-35 / -31	34	22	25	81	-31.9
-40 / -36	28	17	20	65	-36.8
-45 / -41	20	16	16	53	-42.1
-50 / -46	20	13	17	50	-46.8
-55 / -51	12	8	8	28	-51.8
-60 / -56	5	3	2	10	-56.0
-65 / -61	1	1	0	2	
-70 / -66	0	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.

NENANA AK WMO No. 702600



NENANA AK WMO No. 702600

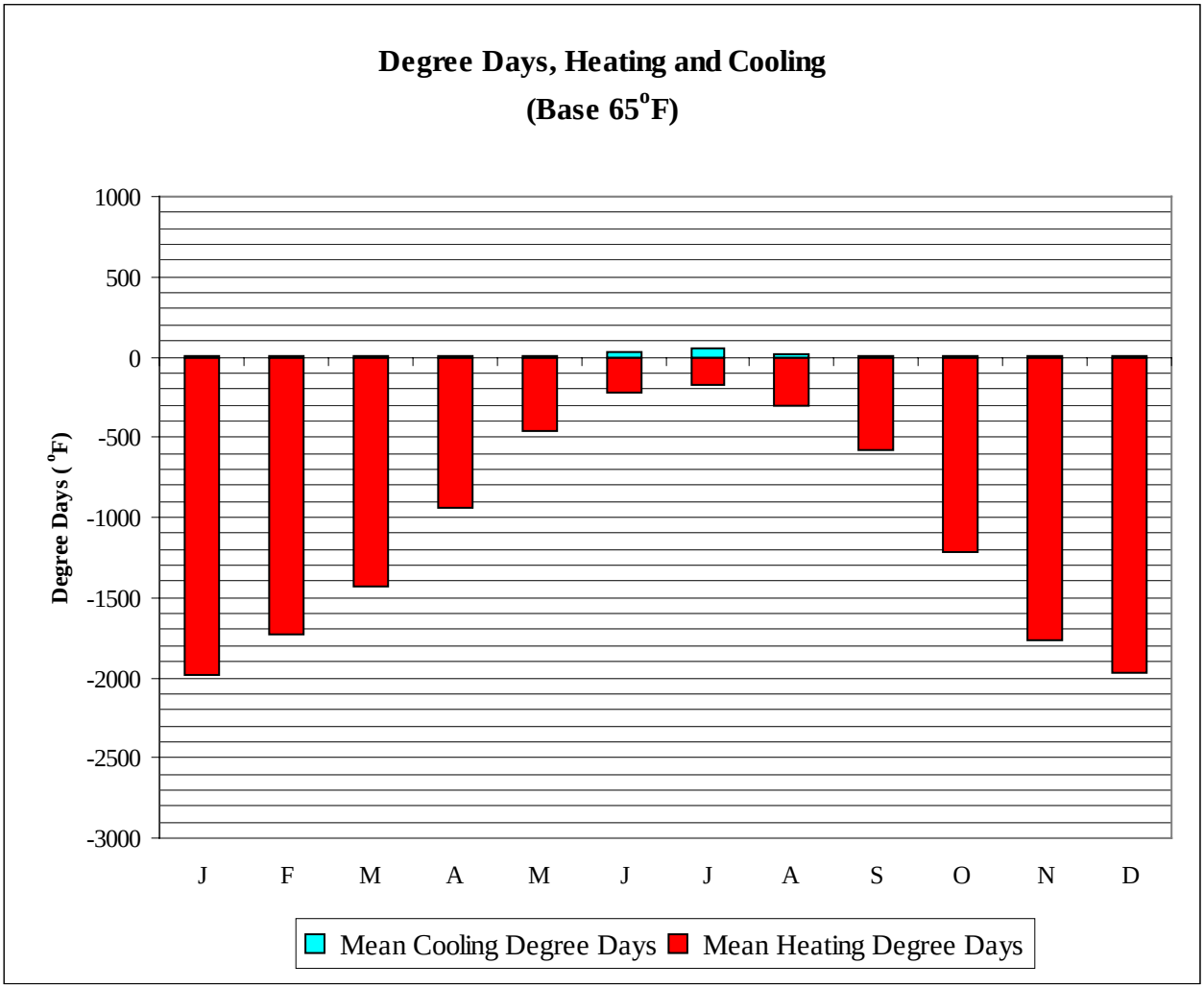


NENANA AK WMO No. 702600

Long Term Dry Bulb Temperature and Humidity Summary

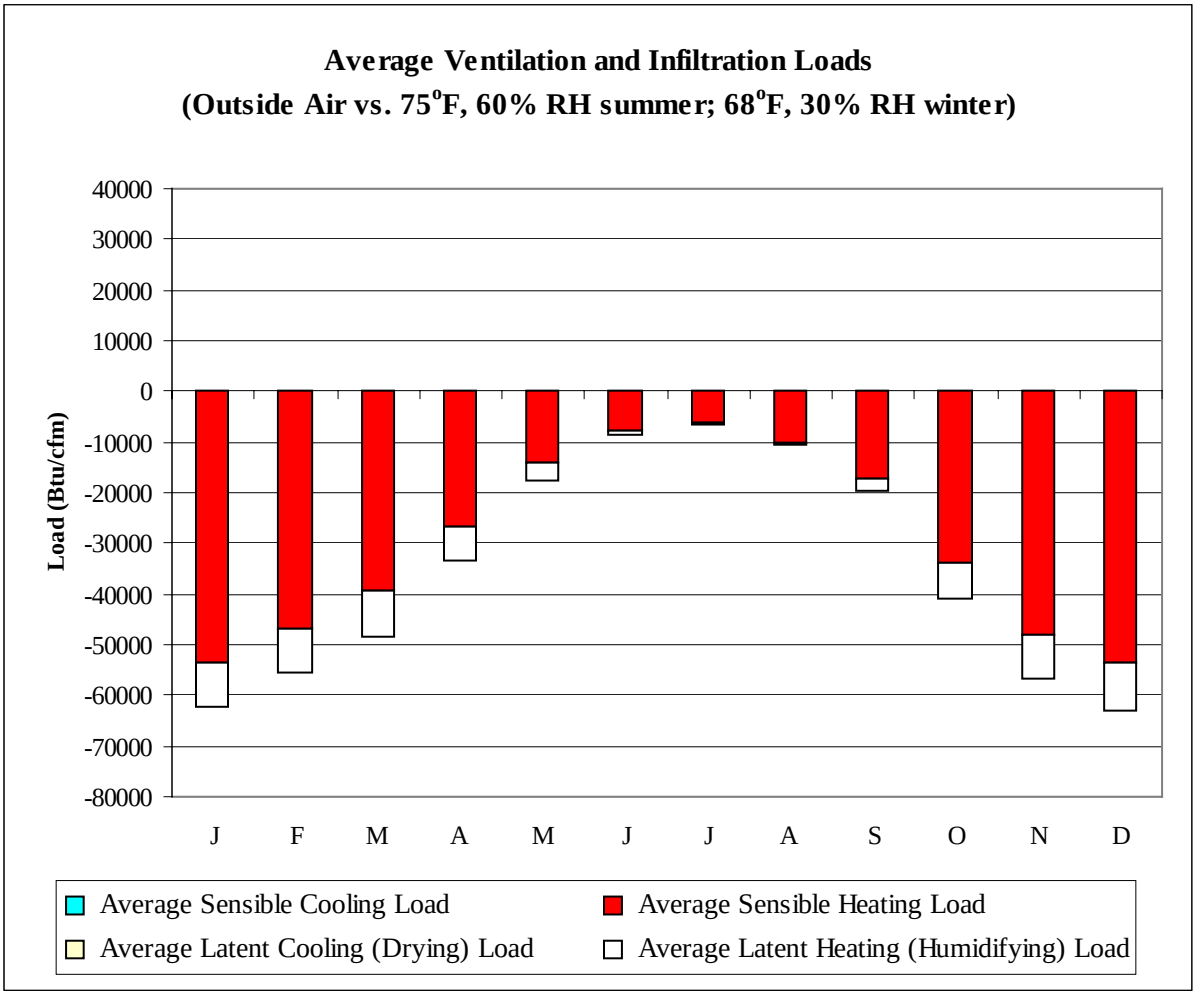
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	32.0	29.5	9.6	-3.7	-50.0	20.3	30.2	7.4	3.3
14-Jan	34.0	28.6	10.7	-5.1	-55.0	18.2	28.9	7.3	3.5
21-Jan	40.0	34.3	10.0	-4.3	-55.0	19.6	37.4	7.4	3.8
28-Jan	36.0	29.2	9.5	-5.5	-56.0	19.6	29.1	7.3	3.4
4-Feb	35.0	29.7	7.1	-8.4	-55.0	18.9	31.8	7.0	3.2
11-Feb	39.0	32.9	12.4	-2.6	-53.0	25.2	32.4	8.9	4.1
18-Feb	32.0	29.5	7.5	-10.1	-44.0	18.9	27.0	6.6	2.8
25-Feb	38.0	32.0	11.4	-8.8	-49.0	20.3	35.6	7.6	3.3
4-Mar	35.0	29.3	15.2	-3.7	-35.0	19.6	30.9	8.8	3.6
11-Mar	40.0	31.3	20.8	-2.3	-33.0	18.2	34.7	9.2	3.7
18-Mar	41.0	31.9	22.2	-0.9	-30.0	19.6	32.5	9.9	3.9
25-Mar	44.0	34.8	27.3	5.1	-27.0	25.2	34.6	12.2	5.4
1-Apr	46.0	36.0	30.7	6.8	-17.0	25.2	35.1	13.1	5.8
8-Apr	46.0	36.6	33.1	10.7	-18.0	25.2	38.2	14.7	7.1
15-Apr	50.0	39.7	35.2	12.8	-11.0	25.2	41.8	15.9	8.3
22-Apr	54.0	40.9	43.4	23.3	1.0	30.8	42.0	20.1	12.4
29-Apr	60.0	44.3	48.4	28.1	18.0	30.8	42.9	22.9	14.4
6-May	66.0	49.1	53.3	31.2	17.0	36.4	47.1	26.6	15.9
13-May	69.0	49.9	56.6	34.0	26.0	42.0	57.5	27.8	17.2
20-May	71.0	51.2	59.7	37.2	29.0	41.3	55.9	28.8	17.7
27-May	72.0	52.4	62.7	39.7	31.0	44.8	58.9	32.1	20.3
3-Jun	77.0	58.2	65.2	43.2	35.0	63.0	65.1	41.3	25.5
10-Jun	77.0	56.9	66.7	44.4	36.0	69.3	59.0	45.1	27.0
17-Jun	81.0	55.9	68.7	47.3	39.0	60.9	61.6	48.3	30.9
24-Jun	82.0	60.8	69.7	47.8	40.0	63.0	65.9	51.3	33.0
1-Jul	83.0	59.8	70.1	49.3	41.0	70.0	65.9	54.9	34.6
8-Jul	86.0	65.0	71.7	51.3	43.0	75.6	67.5	58.4	37.9
15-Jul	82.0	60.1	70.7	51.2	43.0	73.5	69.4	60.7	38.7
22-Jul	79.0	60.8	70.8	51.7	44.0	76.3	67.6	61.3	43.5
29-Jul	80.0	61.8	70.3	50.6	43.0	72.8	65.0	61.8	41.3
5-Aug	83.0	64.5	68.8	50.5	41.0	73.5	63.9	60.4	40.5
12-Aug	78.0	62.5	66.8	49.0	41.0	72.8	66.0	56.8	38.2
19-Aug	77.0	59.9	64.3	46.2	35.0	68.6	67.0	54.3	36.1
26-Aug	76.0	62.0	61.3	42.8	31.0	67.9	63.5	50.2	31.6
2-Sep	71.0	56.4	59.5	41.1	28.0	65.1	62.9	46.1	30.0
9-Sep	70.0	56.4	57.7	37.9	25.0	56.0	60.6	40.7	24.9
16-Sep	67.0	52.6	53.8	36.9	24.0	53.9	52.7	38.3	24.4
23-Sep	65.0	46.6	50.0	35.0	20.0	49.0	48.9	32.5	21.7
30-Sep	59.0	47.0	44.7	29.7	14.0	39.9	47.9	26.9	17.0
7-Oct	55.0	42.7	39.6	26.8	15.0	34.3	44.1	23.3	15.0
14-Oct	52.0	43.7	33.3	22.5	-2.0	32.2	43.1	19.7	13.0
21-Oct	42.0	33.7	27.4	14.3	-7.0	27.3	34.2	15.5	9.1
28-Oct	41.0	34.7	21.4	8.5	-16.0	28.0	37.5	12.8	7.4
4-Nov	36.0	29.6	16.2	3.2	-26.0	21.7	32.3	10.6	5.2
11-Nov	37.0	33.9	13.9	-0.2	-37.0	25.9	34.9	9.4	4.8
18-Nov	35.0	30.0	11.0	-1.4	-26.0	24.5	33.0	8.8	4.3
25-Nov	30.0	27.3	9.5	-3.8	-43.0	18.2	28.8	7.3	3.4
2-Dec	38.0	33.0	5.1	-7.7	-50.0	22.4	36.3	6.9	3.8
9-Dec	30.0	26.6	5.5	-9.5	-49.0	16.8	26.8	6.2	2.7
16-Dec	32.0	29.7	5.5	-8.4	-52.0	21.0	31.4	6.9	3.0
23-Dec	35.0	31.5	8.8	-5.2	-45.0	23.1	31.4	8.0	3.8
31-Dec	36.0	33.8	8.8	-5.7	-46.0	22.4	35.4	7.8	3.5

NENANA AK WMO No. 702600



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1979
FEB	0	1729
MAR	0	1434
APR	0	945
MAY	6	461
JUN	35	227
JUL	58	174
AUG	20	309
SEP	2	585
OCT	0	1217
NOV	0	1761
DEC	0	1976
ANN	121	12797

NENANA AK WMO No. 702600



	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	-53518	0	-8685
FEB	0	-46857	0	-8538
MAR	0	-39321	0	-9154
APR	0	-26684	0	-6548
MAY	6	-14122	0	-3686
JUN	111	-7721	1	-821
JUL	199	-6219	10	-340
AUG	41	-10086	4	-520
SEP	1	-17270	0	-2241
OCT	0	-33852	0	-7027
NOV	0	-47867	0	-8991
DEC	0	-53428	0	-9652
ANN	358	-356945	15	-66203

Average Annual Solar Radiation – Nearest Available Site

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

City: FAIRBANKS
State: AK
WBAN No: 26411
Lat(N): 64.82
Long(W): 147.87
Elev(ft): 453

Stn Type: Primary
SHADING GEOMETRY IN DIMENSIONLESS UNITS
Window: 1
Overhang: 0.176
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	38	240	720	1270	1610	1780	1630	1190	720	300	83	5	800
	Std Dev	4	18	49	94	99	134	122	81	76	23	7	2	26
	Minimum	32	220	570	1030	1430	1490	1300	1020	570	250	73	3	750
	Maximum	44	290	810	1470	1820	2010	1840	1350	920	340	98	6	860
	Diffuse	26	140	360	640	770	900	840	660	400	210	58	3	420
Clear Day	Global	44	260	810	1580	2190	2500	2320	1730	1000	390	79	6	1080
NORTH	Global	16	87	230	410	610	750	650	430	240	120	34	1	300
	Diffuse	16	87	230	390	500	590	540	400	240	120	34	1	260
Clear Day	Global	19	73	180	370	710	1000	840	460	220	100	29	0	340
EAST	Global	46	230	620	970	1190	1210	1090	810	550	240	84	11	590
	Diffuse	20	120	310	520	620	690	630	480	310	150	45	2	330
Clear Day	Global	86	340	830	1380	1720	1870	1770	1440	960	460	130	25	920
SOUTH	Global	240	740	1280	1380	1290	1230	1180	1060	940	590	350	94	860
	Diffuse	60	240	440	600	650	700	660	540	390	240	110	5	390
Clear Day	Global	500	1250	1890	2030	1870	1780	1790	1870	1860	1430	680	240	1430
WEST	Global	47	240	620	950	1080	1180	1090	850	560	250	85	11	580
	Diffuse	21	120	310	520	620	700	650	500	310	150	45	2	330
Clear Day	Global	86	340	830	1380	1720	1870	1770	1440	960	460	130	25	920

Average Annual Solar Heat and Illumination – Nearest Available Site

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

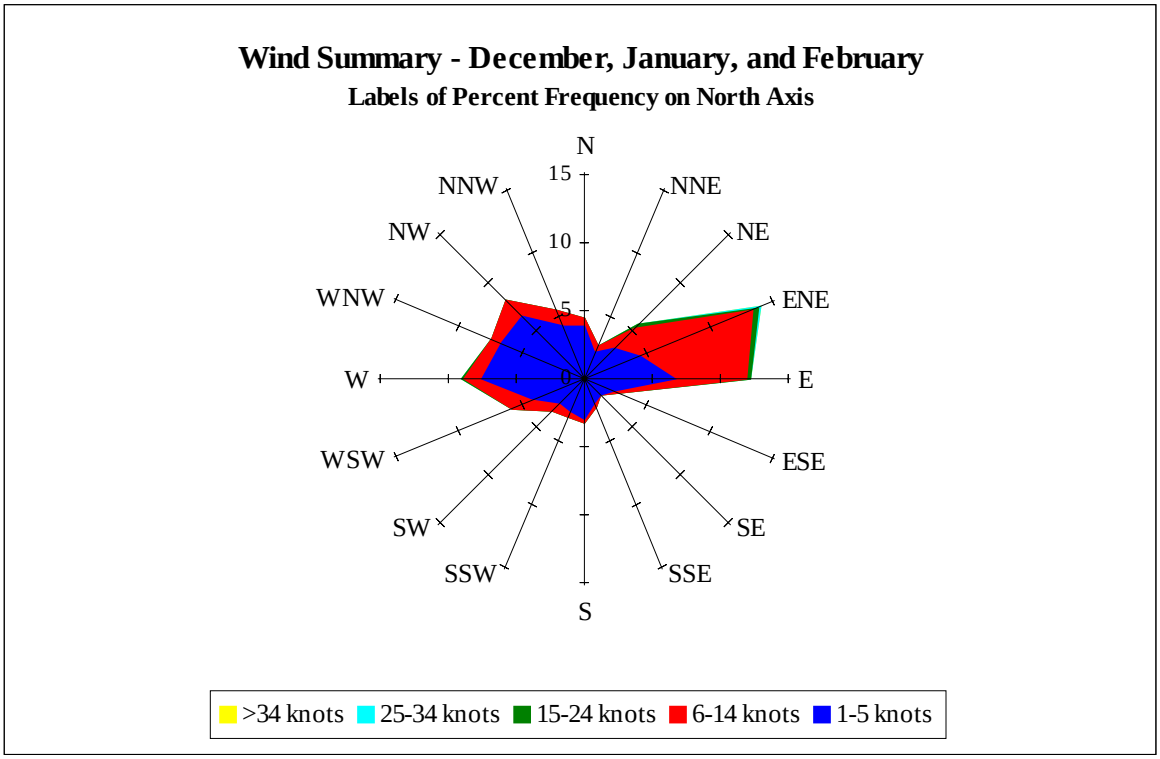
AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 9

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	19	130	440	860	1120	1250	1140	820	470	180	45	3	540
NORTH	Unshaded	10	60	160	280	410	510	440	290	170	82	24	0	200
	Shaded	10	58	150	270	400	500	430	280	160	79	23	0	200
EAST	Unshaded	27	160	440	700	860	870	780	580	390	170	54	5	420
	Shaded	27	150	430	680	840	850	760	560	380	170	53	5	410
SOUTH	Unshaded	190	570	950	990	900	850	810	750	690	440	270	74	620
	Shaded	190	560	940	970	880	820	790	740	680	440	270	73	610
WEST	Unshaded	28	160	440	680	780	840	780	610	400	170	54	5	410
	Shaded	27	160	430	660	760	820	760	590	390	170	54	5	400

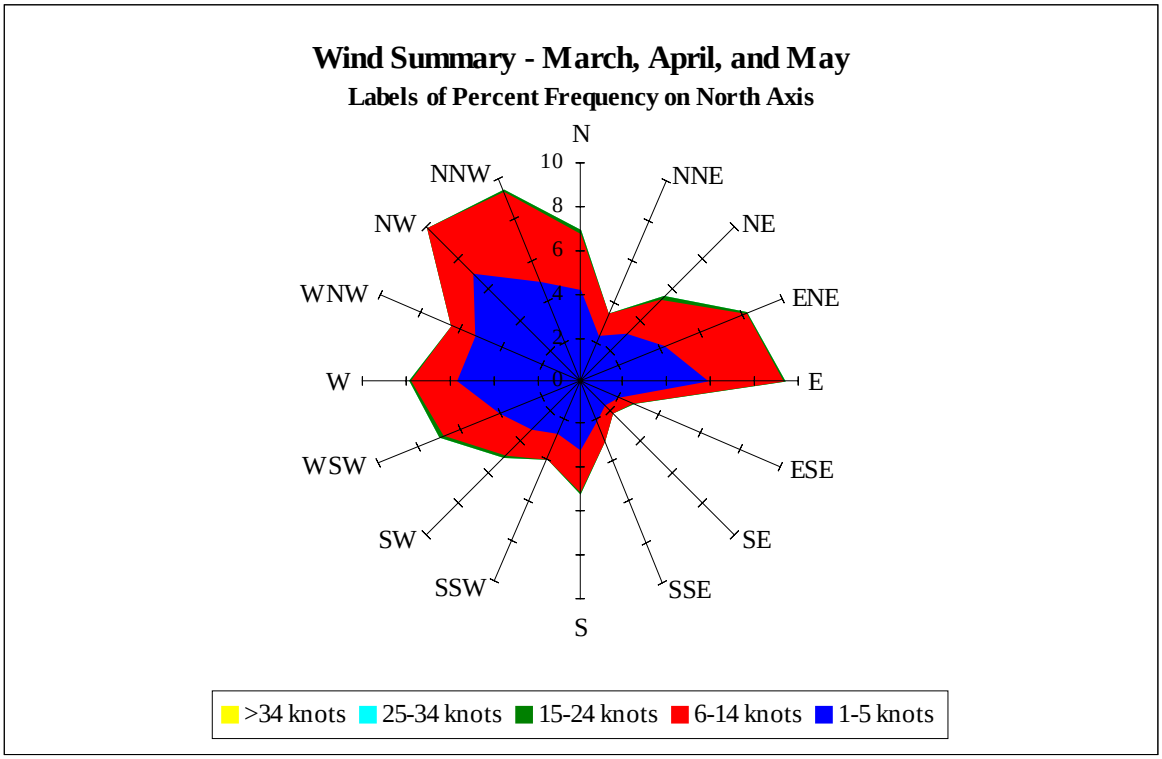
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9

		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	9	29	40	36	20	37	60	73	75	64
	M.Cloudy	8	23	32	29	16	25	41	52	55	46
NORTH	M.Clear	4	8	10	9	7	12	13	15	15	14
	M.Cloudy	4	9	12	11	7	10	14	16	16	15
EAST	M.Clear	34	51	21	9	7	75	75	44	15	14
	M.Cloudy	14	26	17	11	7	34	42	32	16	15
SOUTH	M.Clear	16	60	86	77	38	10	45	72	76	55
	M.Cloudy	8	30	45	40	19	10	28	46	50	36
WEST	M.Clear	4	8	10	40	51	10	13	15	29	65
	M.Cloudy	4	9	12	24	24	10	14	16	24	41
M.Clear	(% hrs)	39	42	41	39	39	25	24	22	19	16

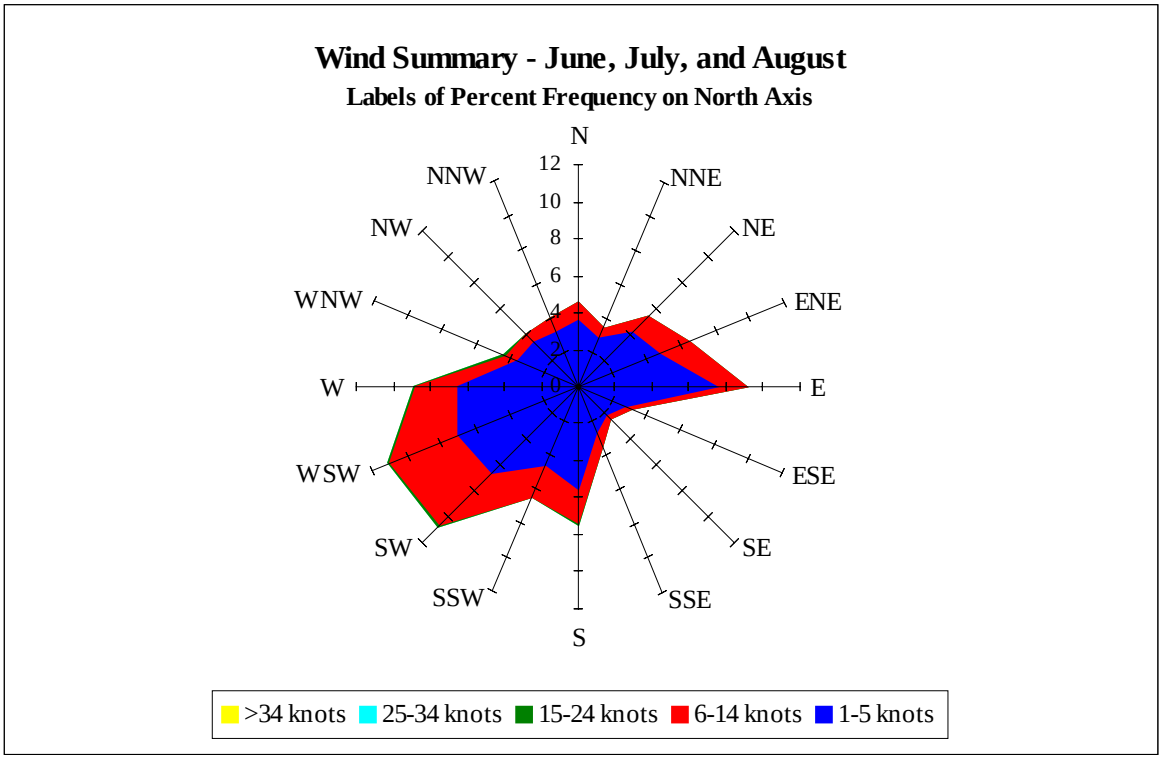
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	8	28	43	46	34	0	0	1	0	0
	M.Cloudy	5	18	27	29	21	0	0	1	0	0
NORTH	M.Clear	4	8	10	11	9	0	0	0	0	0
	M.Cloudy	3	7	10	11	8	0	0	0	0	0
EAST	M.Clear	31	58	37	11	9	0	0	1	0	0
	M.Cloudy	9	21	19	11	8	0	0	0	0	0
SOUTH	M.Clear	7	45	77	81	55	0	0	4	0	0
	M.Cloudy	3	18	32	36	24	0	0	1	0	0
WEST	M.Clear	4	8	10	26	55	0	0	0	0	0
	M.Cloudy	3	7	10	16	24	0	0	0	0	0
M.Clear	(% hrs)	22	23	23	21	22	35	29	27	30	30



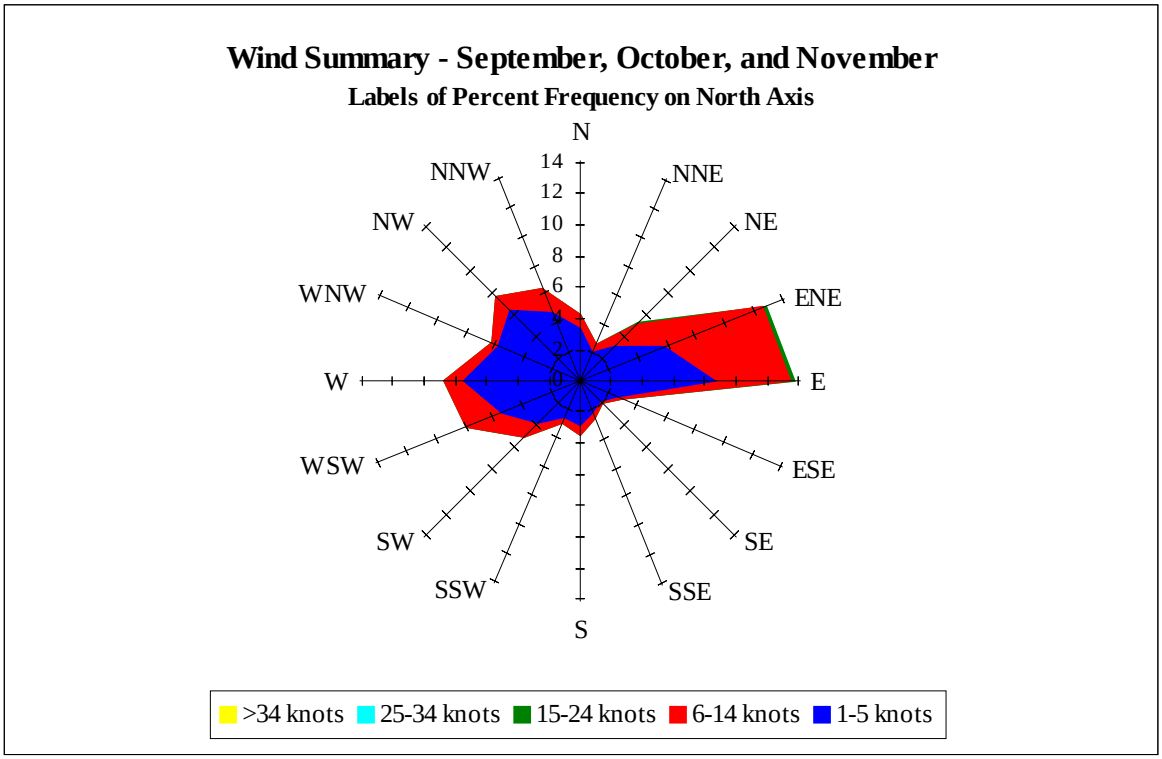
Percent Calm = 10.10



Percent Calm = 4.90



Percent Calm = 5.08



Percent Calm = 6.04