

DYESS AFB/ABILENE TX

Latitude = 32.43 N

WMO No. 690190

Longitude = 99.85 W

Elevation = 1788 feet

Period of Record = 1967 to 1996

Average Pressure = 28.11 inches Hg

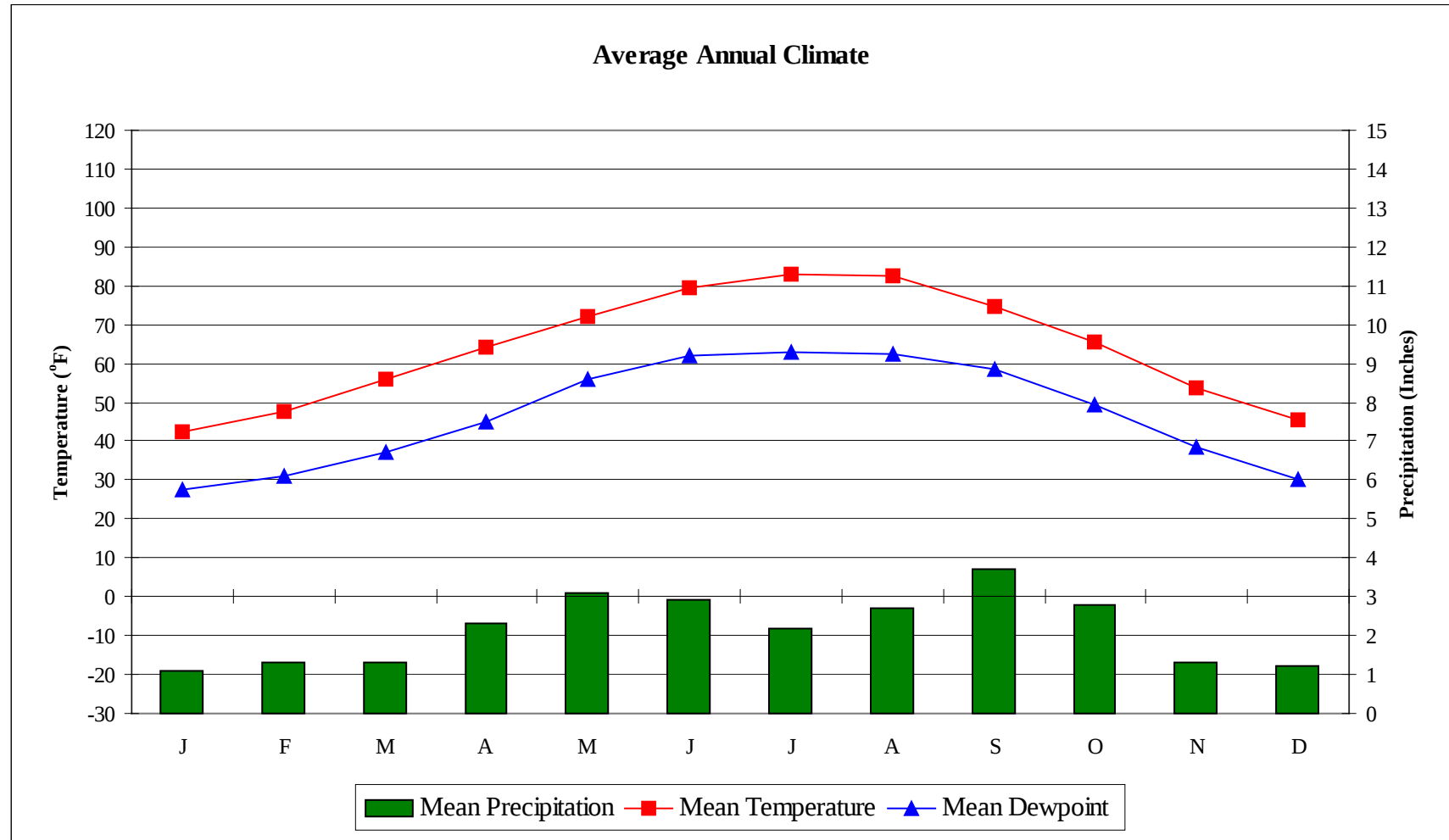
Design Criteria Data

	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	105	72	75	10.7	S
0.4% Occurrence	100	72	78	9.2	S
1.0% Occurrence	98	72	82	9.2	S
2.0% Occurrence	96	72	85	9.7	S
Mean Daily Range	22	-	-	-	-
97.5% Occurrence	28	25	16	6.5	N
99.0% Occurrence	22	19	11	7.2	N
99.6% Occurrence	18	16	9	8.3	N
Median of Extreme Lows	12	10	7	9.9	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	78	91	133	11.2	S
0.4% Occurrence	76	90	121	10.4	S
1.0% Occurrence	75	90	114	10.1	S
2.0% Occurrence	74	89	110	9.9	S
	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	137	82	0.85	13.9	S
0.4% Occurrence	131	80	0.82	7.8	S
1.0% Occurrence	123	82	0.77	11.2	S
2.0% Occurrence	118	81	0.74	10.0	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		378	1868	450	2359

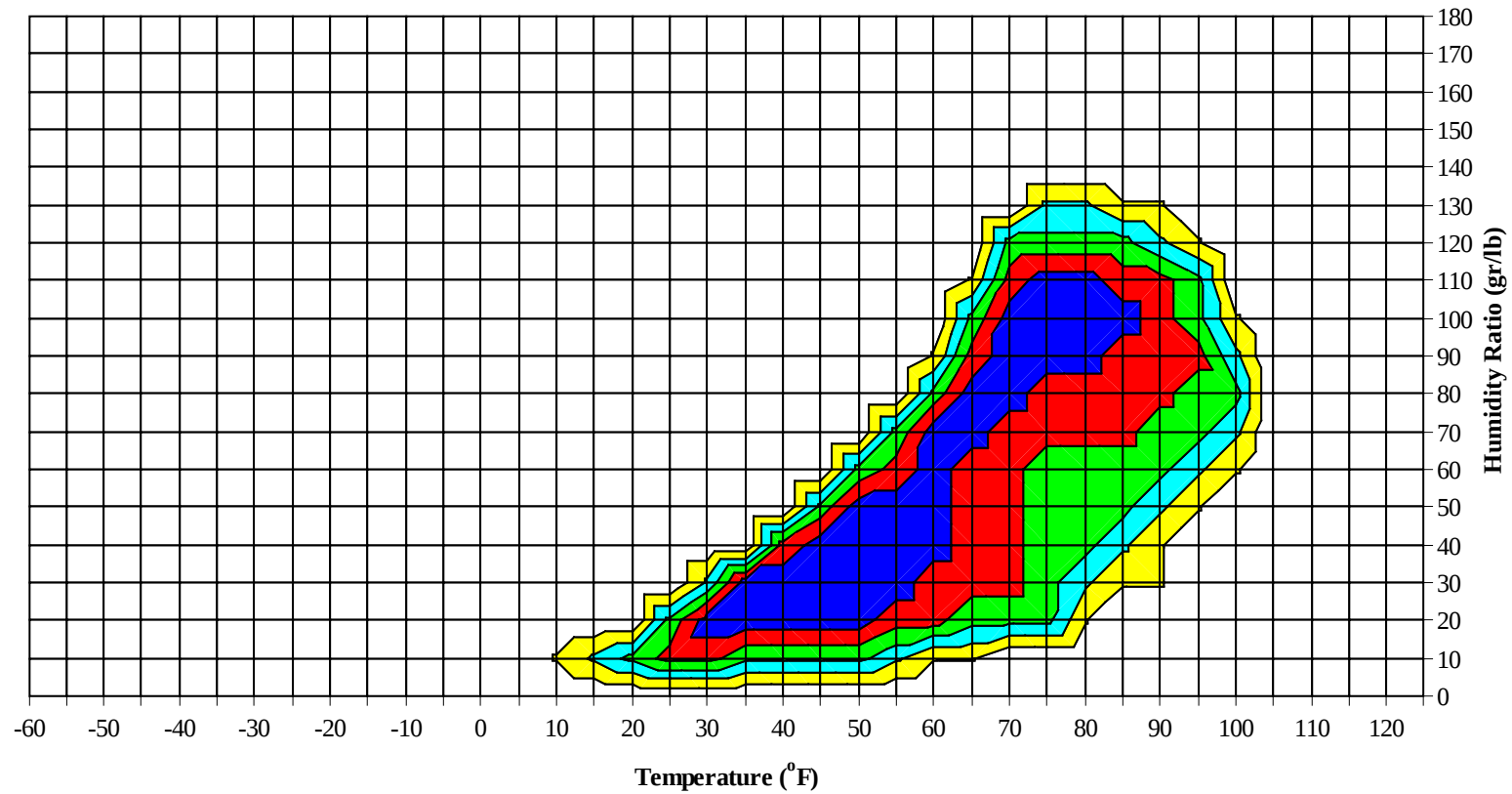
Other Site Data

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
11	3.8	90	2.0 + 2.2
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 (#)
66.4	7	6	33

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

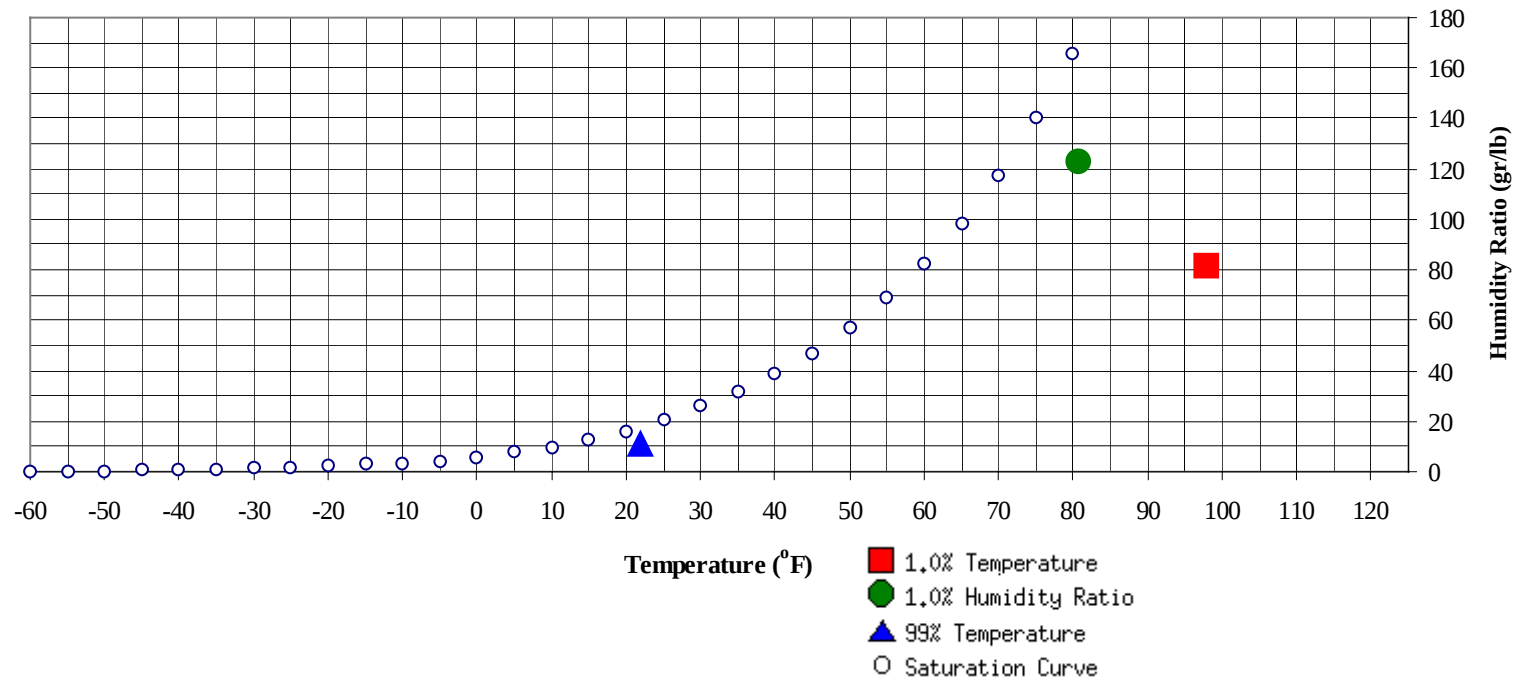


Long Term Psychrometric Summary



- 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	22	11.3	7.0		123.2	80.6	73.7	71.1	38.6

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	98	81.8	71.7	36.4

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		
110 / 114															
105 / 109															
100 / 104															
95 / 99							0		0	60.0		0		0	62.6
90 / 94							0	0	0	59.4		2	1	2	61.6
85 / 89		0		0	55.5		1	0	1	58.6		6	2	8	59.9
80 / 84		1	0	1	55.4		3	1	5	56.9		13	5	18	59.7
75 / 79		4	1	5	54.3		9	4	13	55.2	0	21	13	34	57.9
70 / 74		9	3	11	53.1		13	7	21	53.8	3	32	23	58	56.4
65 / 69	0	14	7	21	51.2	2	21	14	37	52.2	13	34	31	78	54.6
60 / 64	3	26	16	46	49.7	9	26	20	56	50.2	29	34	37	100	51.9
55 / 59	12	28	23	62	47.0	18	28	29	75	47.7	36	32	37	105	48.5
50 / 54	21	29	28	79	43.7	23	28	31	83	44.4	38	27	34	98	44.8
45 / 49	26	33	36	95	40.4	31	26	34	92	40.9	42	19	27	88	41.2
40 / 44	37	29	36	102	36.6	39	25	30	95	37.4	36	12	17	65	37.2
35 / 39	42	27	37	105	32.9	38	18	23	80	33.3	23	8	11	42	33.0
30 / 34	44	22	29	94	28.8	31	9	15	56	29.1	17	6	7	30	29.0
25 / 29	31	15	19	66	24.4	18	8	8	34	24.6	7	2	2	11	24.1
20 / 24	17	8	9	34	19.8	8	4	4	16	20.0	4	1	1	5	19.6
15 / 19	10	3	3	16	15.2	3	1	1	5	14.6	0	0	0	1	15.7
10 / 14	3	1	1	5	10.6	1	1	0	3	10.6	0			0	10.0
5 / 9	1	0		1	6.6	0	0	0	0	6.9	0			0	7.5
0 / 4	0			0	1.3	0		0	0	1.9					
-5 / -1	0			0	-4.0	0			0	-3.0					

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.

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		
110 / 114												0	0	0	72.4
105 / 109							0	0	0	66.4		1	0	1	72.2
100 / 104							1	1	2	68.4		6	2	8	72.0
95 / 99		0	0	1	62.2		7	4	11	68.6		20	11	30	72.2
90 / 94		6	2	8	64.1		20	10	30	69.2	0	52	30	82	71.9
85 / 89		17	7	24	63.4	0	36	20	55	68.2	2	59	42	102	70.8
80 / 84	0	29	16	46	62.5	3	50	37	89	66.9	19	50	55	124	69.2
75 / 79	1	39	29	70	61.1	21	49	45	116	65.4	69	30	48	147	67.9
70 / 74	17	42	41	100	59.9	51	38	47	135	63.4	76	15	30	122	65.7
65 / 69	39	39	41	120	57.1	62	24	40	127	60.6	47	6	15	68	62.6
60 / 64	43	27	37	108	53.5	54	13	28	94	57.1	20	2	4	26	59.0
55 / 59	46	18	28	93	50.0	32	6	11	49	52.8	6	0	1	7	54.3
50 / 54	38	12	19	69	45.8	17	4	5	25	48.5	2	0	0	2	49.4
45 / 49	28	6	10	44	42.0	7	0	1	8	44.6			0	0	47.0
40 / 44	17	3	6	26	37.8	2		0	2	39.6					
35 / 39	7	0	1	9	33.1	0			0	34.0					
30 / 34	3	0	1	3	29.7										
25 / 29	1			1	25.9										
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -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 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		
110 / 114															
105 / 109		2	1	2	72.3		0	0	0	72.3					
100 / 104		13	6	19	71.7		12	5	17	72.0		3	1	3	71.8
95 / 99		44	25	69	71.6		43	21	65	71.9		12	5	17	70.9
90 / 94	0	67	40	107	71.6		64	36	100	71.5		30	13	43	70.5
85 / 89	5	58	51	114	70.6	3	56	49	108	70.3	0	47	26	73	69.4
80 / 84	47	39	61	146	69.3	41	39	60	139	69.2	9	48	40	97	67.9
75 / 79	101	17	39	157	68.5	90	20	45	156	68.2	41	41	49	130	66.9
70 / 74	68	8	22	97	67.3	78	10	26	114	66.8	67	25	48	140	65.3
65 / 69	24	2	3	30	64.6	28	2	5	36	63.6	54	17	30	101	61.7
60 / 64	2	0	0	3	59.8	6	0	1	7	59.8	31	8	14	53	56.6
55 / 59	0			0	55.0	1		0	1	56.1	20	5	8	33	52.3
50 / 54											12	3	6	21	48.6
45 / 49											5	1	2	8	44.8
40 / 44											1		0	1	39.6
35 / 39											0			0	33.0
30 / 34															
25 / 29															
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -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 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		
110 / 114															
105 / 109															
100 / 104		0	0	0	65.0										
95 / 99		1	0	1	63.9		0		0	60.0					
90 / 94		6	1	7	66.4		0	0	0	59.3					
85 / 89		21	7	27	66.8		1	0	1	60.6		0		0	55.0
80 / 84	0	36	14	51	64.8		7	1	9	61.0		1	0	1	55.2
75 / 79	5	44	29	77	63.1		20	4	24	60.6		5	1	6	56.0
70 / 74	24	43	42	110	61.2	1	31	13	46	59.0		14	3	17	55.0
65 / 69	44	36	46	126	58.7	14	32	29	75	56.8	1	21	9	32	53.8
60 / 64	51	27	41	119	55.3	27	33	33	92	53.3	8	29	19	56	51.4
55 / 59	42	17	31	91	51.0	30	30	34	94	49.3	15	31	29	74	47.8
50 / 54	37	9	20	65	46.8	33	29	36	98	45.4	27	35	34	95	44.3
45 / 49	25	4	10	39	42.9	39	23	34	95	41.5	31	32	39	101	40.8
40 / 44	13	3	5	20	38.6	36	16	25	78	37.4	38	27	39	103	37.1
35 / 39	5	1	1	7	34.5	32	11	18	61	33.5	47	23	33	103	33.2
30 / 34	1	0	1	2	30.2	18	4	8	30	29.0	41	15	23	79	28.8
25 / 29	0		0	0	25.7	8	2	3	13	24.6	22	8	12	43	24.4
20 / 24	0			0	22.7	2	0	1	3	19.5	10	3	4	17	19.8
15 / 19						1	0	0	1	15.6	5	2	2	8	15.0
10 / 14											2	2	2	7	10.6
5 / 9											1	0	0	2	5.8
0 / 4											0	0		1	1.4
-5 / -1											0			0	-3.0

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.

DYESS AFB/ABILENE TX

WMO No. 690190

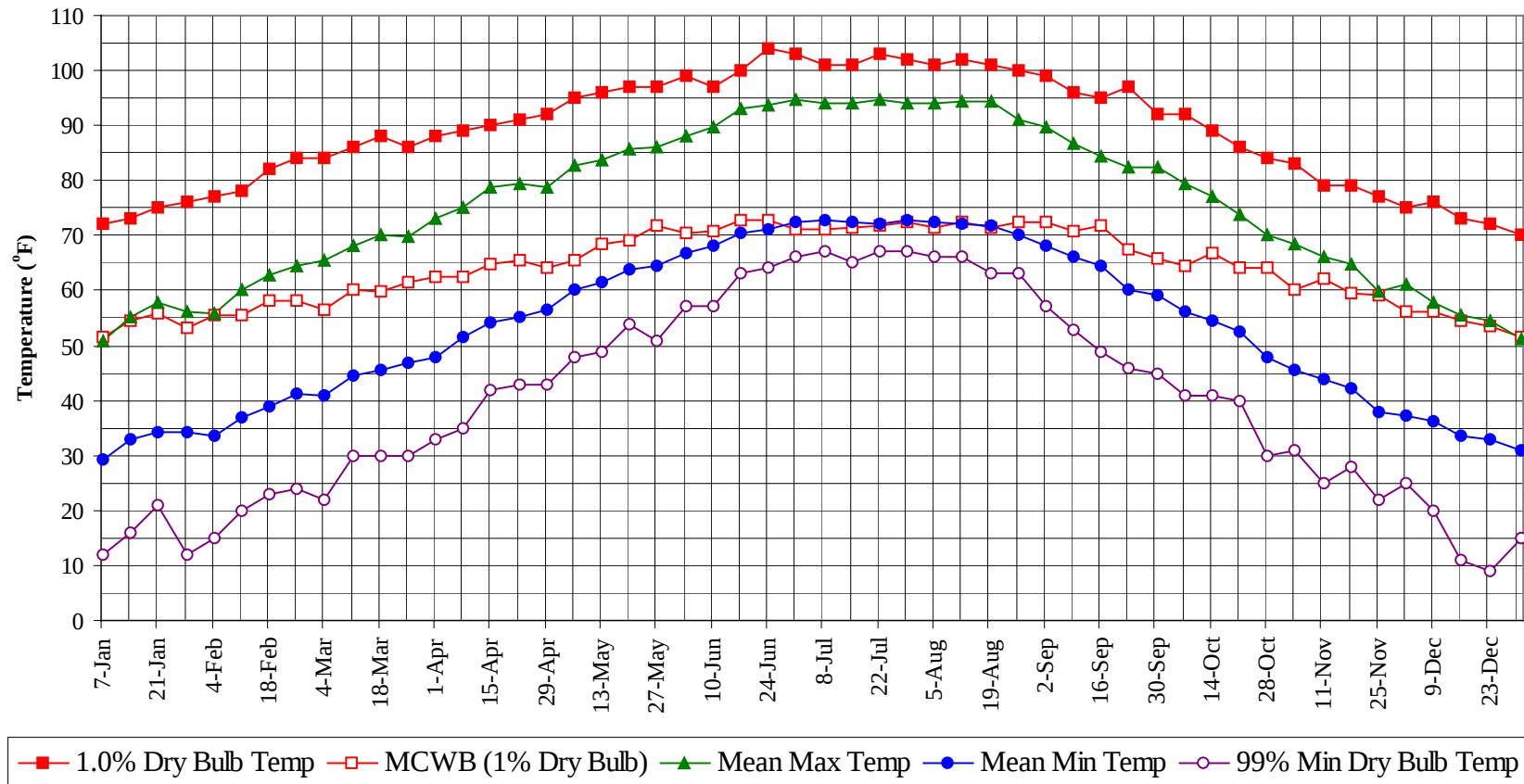
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1967 to 1996

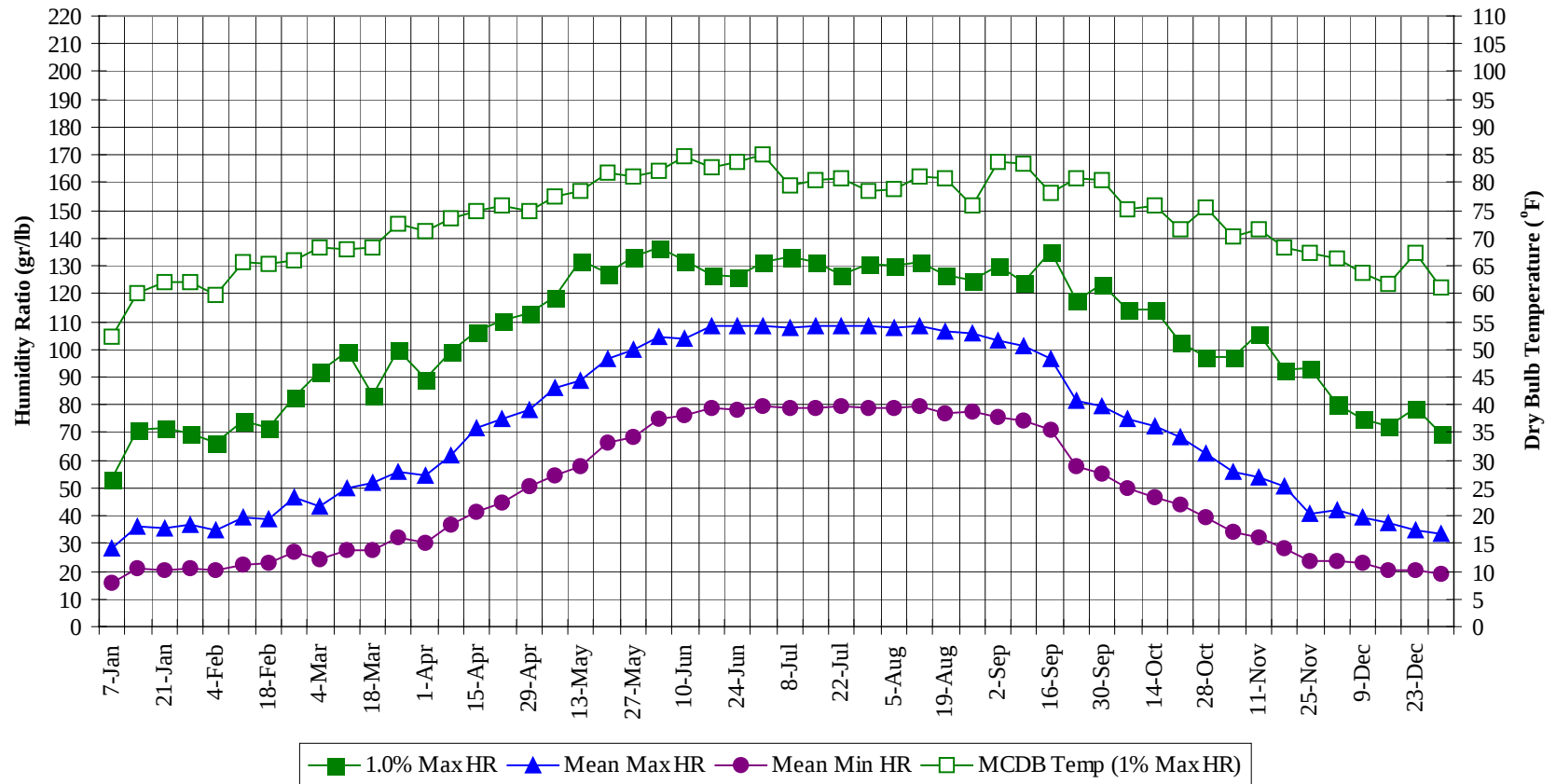
Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
110 / 114		0	0	0	72.4
105 / 109		3	1	4	71.9
100 / 104		35	15	50	71.7
95 / 99		128	66	193	71.5
90 / 94	0	246	134	380	71.0
85 / 89	10	301	204	515	69.4
80 / 84	119	317	291	727	67.6
75 / 79	329	299	307	934	65.8
70 / 74	385	281	305	971	63.1
65 / 69	329	251	272	852	58.6
60 / 64	283	225	250	759	53.9
55 / 59	259	195	230	684	49.4
50 / 54	247	176	213	636	45.2
45 / 49	234	144	193	571	41.3
40 / 44	219	115	158	492	37.2
35 / 39	193	88	125	406	33.2
30 / 34	154	57	83	295	28.9
25 / 29	87	35	45	167	24.4
20 / 24	41	16	18	75	19.8
15 / 19	19	6	7	32	15.1
10 / 14	7	4	4	15	10.6
5 / 9	2	1	1	3	6.2
0 / 4	1	0	0	1	1.6
-5 / -1	0			0	-3.1

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.

Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



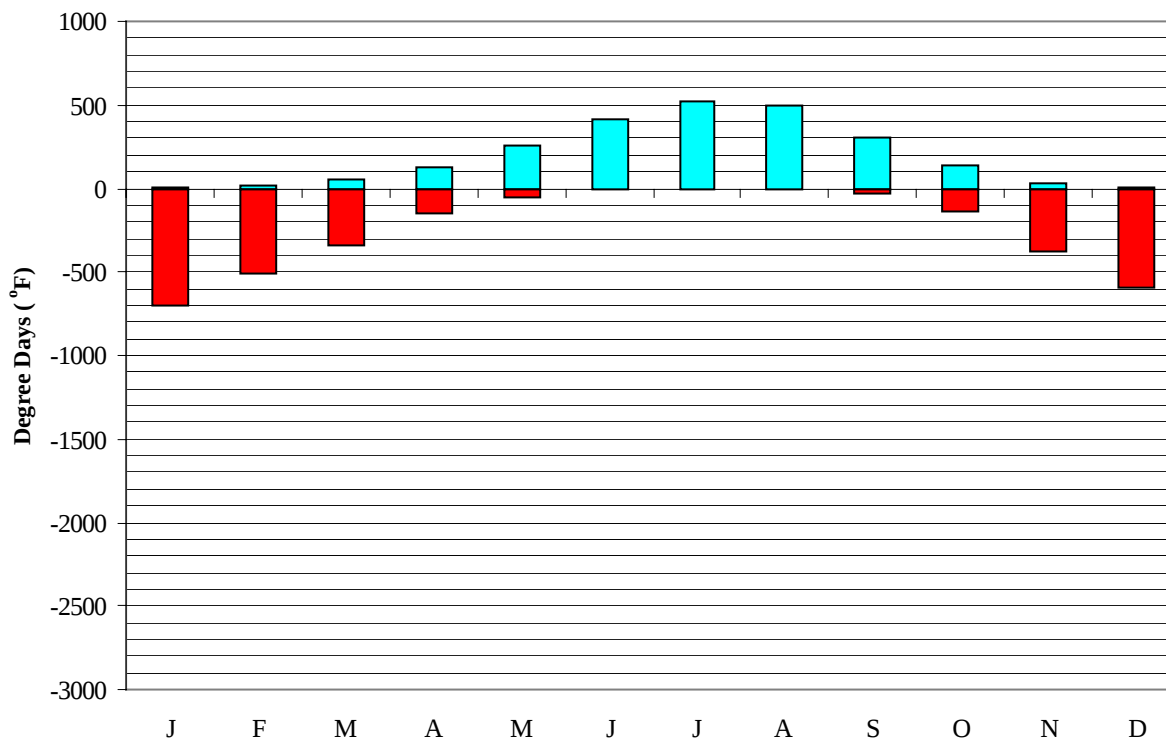
DYESS AFB/ABILENE TX

WMO No. 690190

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	51.6	50.9	29.2	12.0	53.2	52.2	28.3	15.8
14-Jan	73.0	54.4	55.2	32.8	16.0	70.7	60.0	36.0	21.0
21-Jan	75.0	55.9	57.8	34.3	21.0	71.4	62.0	35.6	20.4
28-Jan	76.0	53.3	56.2	34.3	12.0	69.3	62.0	37.0	21.3
4-Feb	77.0	55.6	55.8	33.6	15.0	66.5	59.7	34.9	20.2
11-Feb	78.0	55.6	60.1	36.9	20.0	74.2	65.8	39.3	22.6
18-Feb	82.0	58.0	62.8	38.9	23.0	71.4	65.4	38.7	22.8
25-Feb	84.0	58.2	64.6	41.1	24.0	82.6	65.9	46.7	26.7
4-Mar	84.0	56.4	65.6	41.0	22.0	91.7	68.4	43.3	24.6
11-Mar	86.0	60.2	68.1	44.4	30.0	99.4	68.1	50.2	27.4
18-Mar	88.0	59.7	70.0	45.4	30.0	83.3	68.2	51.7	27.5
25-Mar	86.0	61.5	69.7	46.9	30.0	100.1	72.4	55.9	32.3
1-Apr	88.0	62.6	73.2	48.0	33.0	89.6	71.4	54.5	30.5
8-Apr	89.0	62.5	75.0	51.5	35.0	99.4	73.6	61.8	36.8
15-Apr	90.0	64.9	78.8	54.3	42.0	106.4	75.0	71.9	41.5
22-Apr	91.0	65.5	79.6	55.3	43.0	110.6	75.9	75.0	44.4
29-Apr	92.0	64.1	78.7	56.5	43.0	112.7	75.0	78.3	50.3
6-May	95.0	65.6	82.7	60.0	48.0	119.0	77.6	86.1	54.6
13-May	96.0	68.6	83.9	61.4	49.0	132.3	78.6	88.6	57.7
20-May	97.0	69.1	85.7	63.8	54.0	127.4	81.6	96.4	66.3
27-May	97.0	71.9	86.1	64.4	51.0	133.0	81.3	99.9	68.3
3-Jun	99.0	70.3	88.0	66.8	57.0	136.5	82.0	104.4	75.2
10-Jun	97.0	70.9	89.8	68.0	57.0	132.3	84.8	104.0	76.0
17-Jun	100.0	72.9	92.9	70.6	63.0	126.7	82.7	108.1	78.5
24-Jun	104.0	72.9	93.7	71.3	64.0	126.0	83.6	108.1	78.2
1-Jul	103.0	71.1	94.7	72.5	66.0	131.6	85.1	108.7	79.3
8-Jul	101.0	71.1	94.0	72.8	67.0	133.0	79.4	107.9	79.0
15-Jul	101.0	71.6	94.0	72.5	65.0	131.6	80.6	108.3	78.9
22-Jul	103.0	71.8	94.8	72.3	67.0	126.7	80.6	108.4	79.2
29-Jul	102.0	72.4	94.0	72.7	67.0	130.9	78.6	108.6	78.5
5-Aug	101.0	71.4	94.0	72.6	66.0	130.2	78.8	107.4	78.7
12-Aug	102.0	72.5	94.4	72.3	66.0	131.6	81.1	108.4	79.4
19-Aug	101.0	71.6	94.4	71.6	63.0	126.7	80.6	106.1	77.0
26-Aug	100.0	72.6	91.2	70.2	63.0	124.6	76.0	105.6	77.6
2-Sep	99.0	72.6	89.7	68.1	57.0	130.2	83.6	102.9	75.5
9-Sep	96.0	70.8	86.8	66.2	53.0	123.9	83.4	101.1	74.4
16-Sep	95.0	71.8	84.6	64.6	49.0	135.1	78.2	96.8	70.6
23-Sep	97.0	67.5	82.3	60.1	46.0	117.6	80.8	81.7	57.6
30-Sep	92.0	65.9	82.3	59.2	45.0	123.2	80.3	79.4	55.3
7-Oct	92.0	64.6	79.5	56.2	41.0	114.1	75.1	74.6	50.0
14-Oct	89.0	66.8	77.2	54.5	41.0	114.1	75.8	72.0	46.4
21-Oct	86.0	64.0	73.6	52.4	40.0	102.2	71.5	68.3	43.8
28-Oct	84.0	64.3	70.2	48.0	30.0	97.3	75.4	62.1	39.7
4-Nov	83.0	60.1	68.5	45.6	31.0	97.3	70.4	55.8	34.1
11-Nov	79.0	62.2	66.0	43.9	25.0	105.7	71.7	54.2	32.4
18-Nov	79.0	59.5	64.7	42.2	28.0	92.4	68.2	50.3	28.3
25-Nov	77.0	59.0	59.9	37.8	22.0	93.1	67.4	40.9	23.7
2-Dec	75.0	56.1	61.2	37.2	25.0	79.8	66.3	42.0	23.4
9-Dec	76.0	56.2	57.9	36.4	20.0	74.9	63.8	39.4	22.8
16-Dec	73.0	54.4	55.6	33.4	11.0	72.1	61.9	37.7	20.5
23-Dec	72.0	53.6	54.4	32.8	9.0	79.1	67.4	34.6	20.4
31-Dec	70.0	51.7	51.3	30.9	15.0	69.3	61.0	33.4	18.9

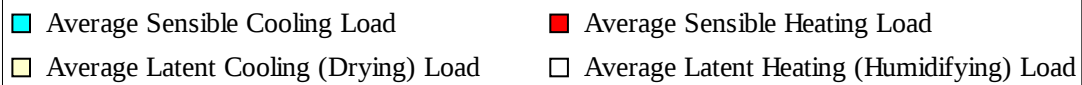
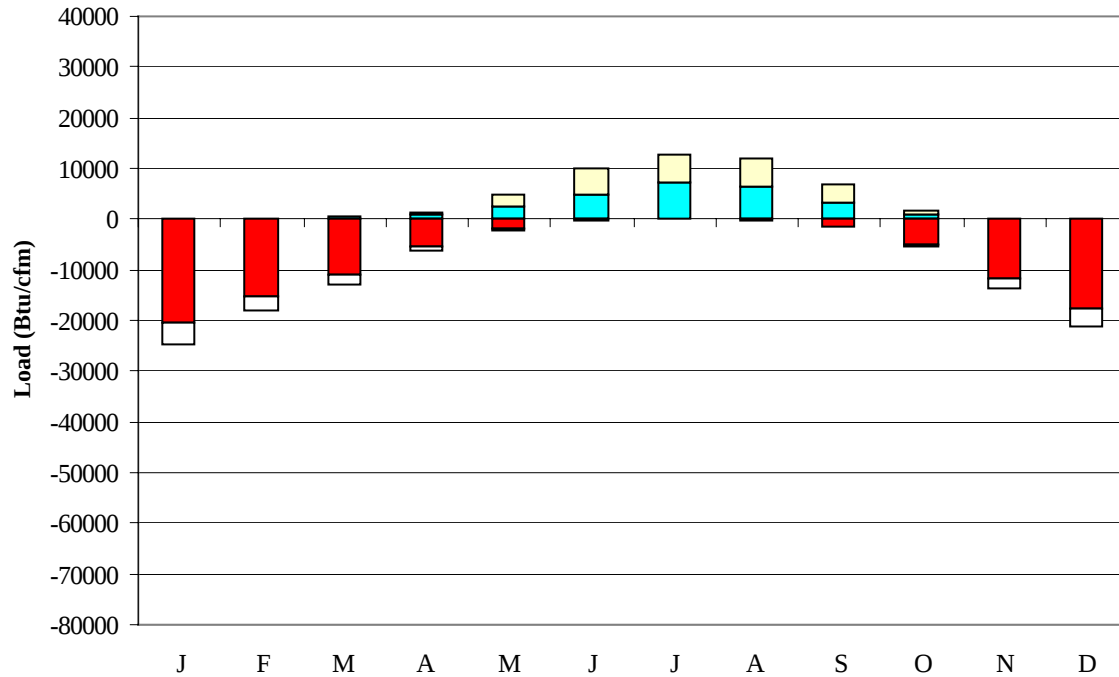
Degree Days, Heating and Cooling
(Base 65°F)



■ Mean Cooling Degree Days ■ Mean Heating Degree Days

	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	7	700
FEB	18	511
MAR	57	347
APR	127	154
MAY	252	48
JUN	412	6
JUL	525	0
AUG	501	1
SEP	302	35
OCT	139	140
NOV	35	382
DEC	10	598
ANN	2386	2922

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	15	-20455	1	-4384
FEB	79	-15255	0	-2968
MAR	339	-10875	99	-2044
APR	932	-5296	459	-917
MAY	2443	-1987	2408	-62
JUN	5001	-345	5164	-1
JUL	7080	-35	5718	0
AUG	6598	-80	5480	0
SEP	3174	-1387	3827	-26
OCT	1026	-4908	828	-361
NOV	127	-11846	161	-1728
DEC	15	-17693	4	-3498
ANN	26829	-90162	24149	-15989

Average Annual Solar Radiation – Nearest Available Site

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

City: ABILENE
 State: TX
 WBAN No: 13962
 Lat(N): 32.43
 Long(W): 99.68
 Elev(ft): 1752

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 0.324
 Vert Gap: 0.258

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	980	1240	1620	1920	2070	2220	2200	2000	1660	1390	1060	900	1610
	Std Dev	88	97	131	135	122	102	140	110	122	115	81	74	31
	Minimum	800	1070	1390	1680	1810	2050	1900	1740	1470	1170	910	720	1540
	Maximum	1140	1440	1880	2130	2250	2500	2500	2240	1880	1560	1200	1050	1680
	Diffuse	350	440	550	650	740	730	710	680	610	450	370	320	550
Clear Day	Global	1240	1580	2000	2380	2590	2650	2600	2410	2070	1660	1300	1140	1970
NORTH	Global	250	310	380	460	570	660	630	500	410	330	270	230	420
	Diffuse	250	310	380	450	500	520	500	460	400	330	270	230	380
Clear Day	Global	230	280	350	430	590	700	650	480	370	300	240	210	400
EAST	Global	630	760	950	1070	1100	1160	1220	1160	960	830	670	580	920
	Diffuse	300	380	470	550	590	610	600	570	500	400	330	280	470
Clear Day	Global	860	1040	1240	1380	1420	1420	1410	1360	1230	1060	880	790	1180
SOUTH	Global	1400	1380	1270	990	740	640	690	870	1090	1370	1400	1400	1100
	Diffuse	410	460	520	530	530	520	520	530	520	470	420	380	480
Clear Day	Global	2070	1990	1670	1170	810	670	720	990	1430	1830	2010	2050	1450
WEST	Global	650	800	980	1110	1160	1220	1200	1100	980	880	700	610	950
	Diffuse	310	380	480	560	600	620	620	580	510	410	330	280	470
Clear Day	Global	860	1040	1240	1380	1420	1420	1410	1360	1230	1060	880	790	1180

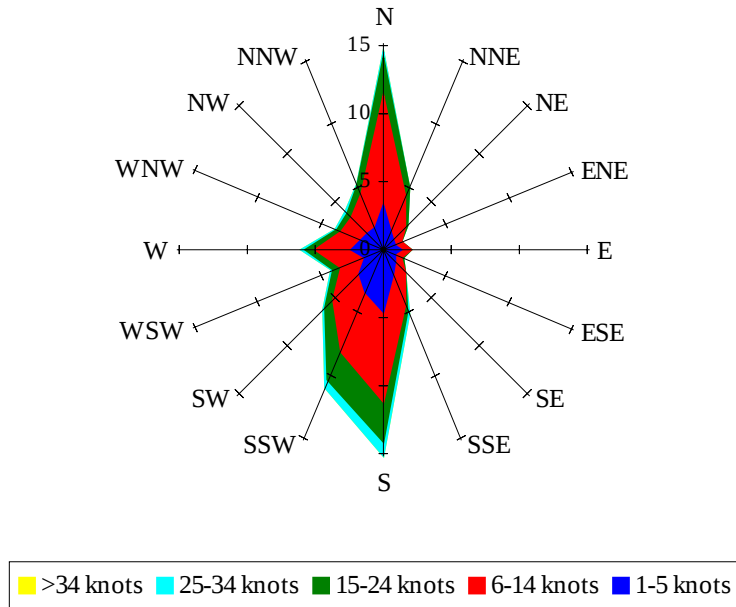
Average Annual Solar Heat and Illumination – Nearest Available Site

(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	660	870	1160	1400	1520	1630	1620	1460	1200	990	720	600	1150
NORTH	Unshaded	170	210	270	310	370	410	390	330	280	230	190	160	280
	Shaded	160	200	250	300	350	380	370	310	260	220	170	150	260
EAST	Unshaded	430	530	670	760	780	830	870	830	690	590	470	400	650
	Shaded	410	500	630	700	720	760	800	760	640	550	440	380	610
SOUTH	Unshaded	1040	990	850	600	430	380	400	510	700	960	1030	1050	740
	Shaded	1030	940	720	450	350	340	340	380	560	880	1020	1030	670
WEST	Unshaded	450	560	700	800	830	870	850	790	700	620	490	420	670
	Shaded	430	530	650	730	760	800	790	730	650	590	460	400	630

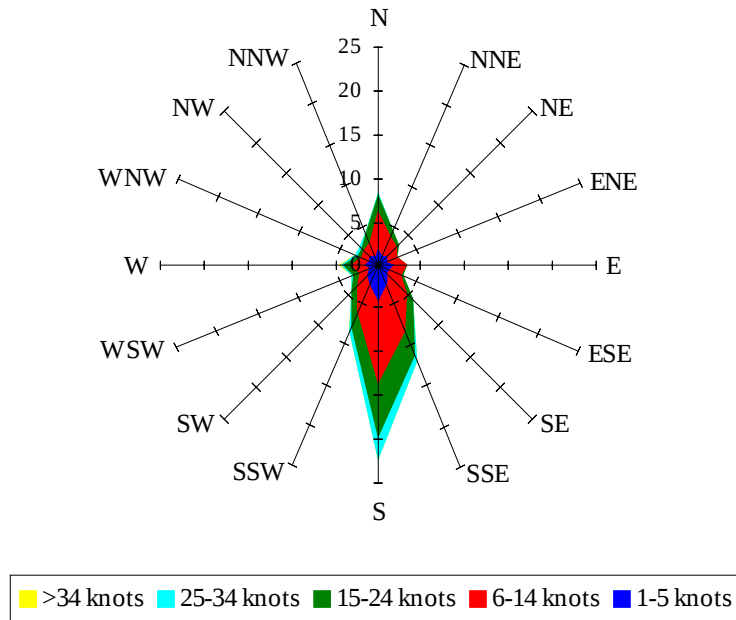
AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	32	74	93	83	46	33	77	103	104	80
	M.Cloudy	19	49	66	57	32	23	56	77	82	63
NORTH	M.Clear	8	14	16	15	10	24	16	17	17	16
	M.Cloudy	8	16	19	17	11	15	17	19	18	17
EAST	M.Clear	75	71	24	15	10	68	80	46	17	16
	M.Cloudy	27	41	23	17	11	34	54	38	18	17
SOUTH	M.Clear	27	62	77	69	39	10	16	32	33	19
	M.Cloudy	13	36	51	44	24	9	17	29	30	19
WEST	M.Clear	8	14	16	60	82	10	15	17	39	76
	M.Cloudy	8	16	19	39	42	9	17	19	34	57
M.Clear	(% hrs)	45	46	46	47	45	48	48	47	50	52
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	18	63	91	91	64	13	48	63	50	16
	M.Cloudy	11	41	61	65	45	8	31	41	32	11
NORTH	M.Clear	6	14	16	16	14	5	10	12	11	5
	M.Cloudy	5	14	18	19	15	4	11	14	11	5
EAST	M.Clear	53	79	45	16	14	46	54	14	11	5
	M.Cloudy	17	40	32	19	15	13	27	14	11	5
SOUTH	M.Clear	10	43	66	66	45	34	80	96	83	38
	M.Cloudy	6	26	41	45	30	10	36	47	39	15
WEST	M.Clear	6	14	16	42	76	5	10	12	53	50
	M.Cloudy	5	14	18	32	45	4	11	14	27	18
M.Clear	(% hrs)	50	50	46	44	48	44	44	46	46	45

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



Percent Calm = 10.82

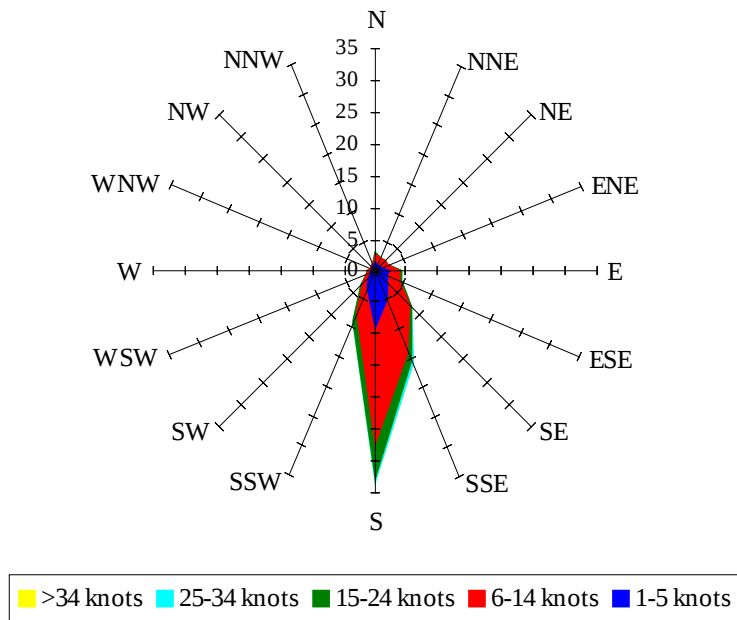
Wind Summary - March, April, and May **Labels of Percent Frequency on North Axis**



Percent Calm = 6.67

Wind Summary - June, July, and August

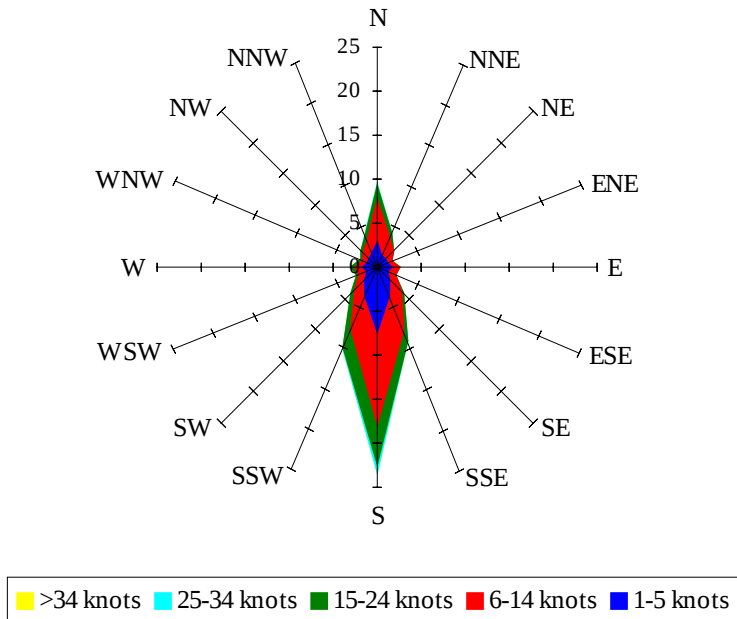
Labels of Percent Frequency on North Axis



Percent Calm = 8.28

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 12.28