LIMA/JORGE CHAVEZ PR	
Latitude = 12.00 S	WMO No. 846280
Longitude = 77.12 W	Elevation = 43 feet
Period of Record = 1973 to 1996	Average Pressure = 29.83 inches Hg

Design Criteria Data

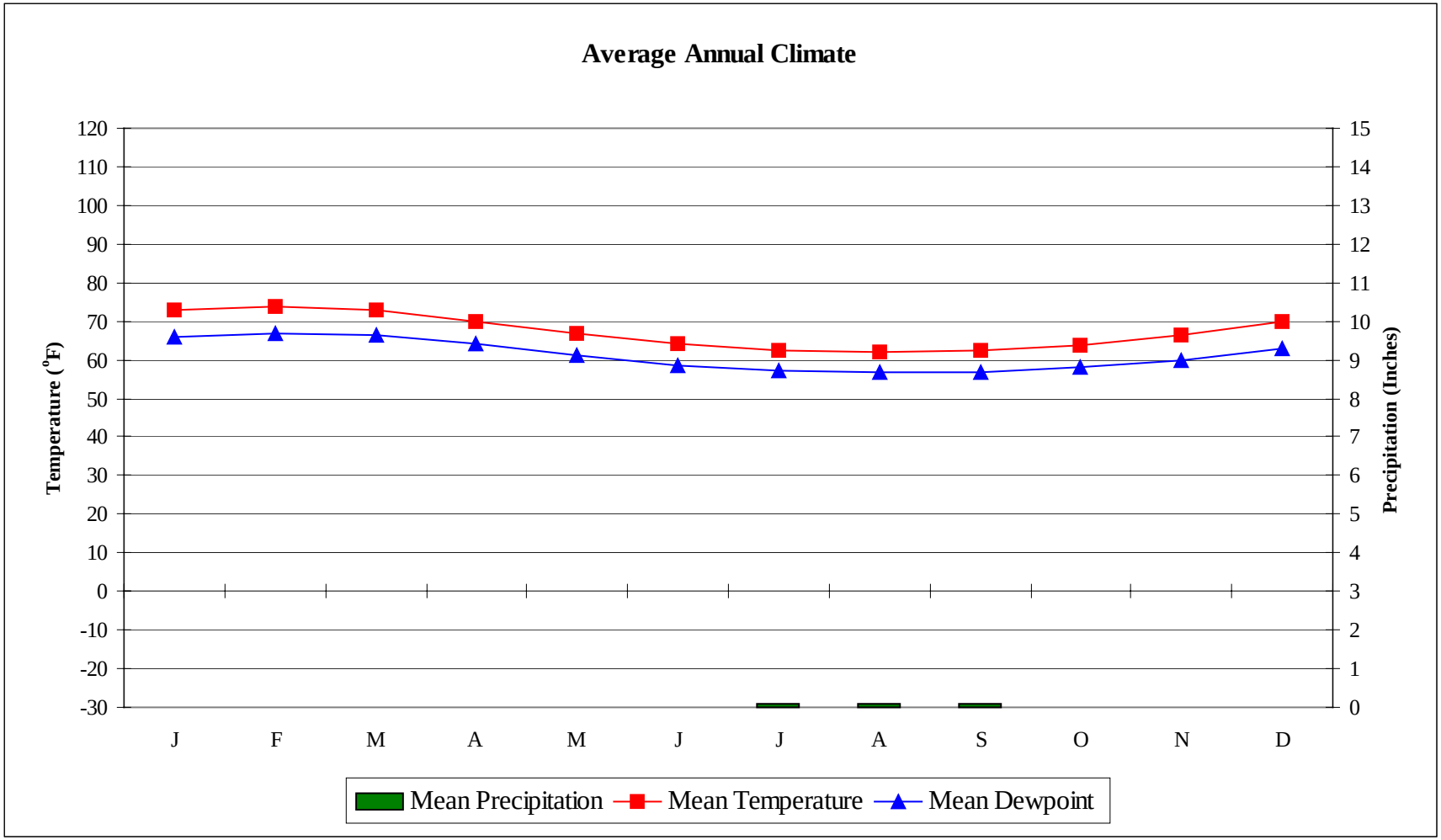
		Mean Coincident (Average) Values			
Dry Bulb Temperature (T)	**Design Value (^oF)**	Wet Bulb Temperature (^oF)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	86	76	117	13.1	S
0.4% Occurrence	84	74	110	12.3	S
1.0% Occurrence	82	72	105	11.9	S
2.0% Occurrence	81	72	104	11.8	S
Mean Daily Range	9	-	-	-	-
97.5% Occurrence	59	57	67	5.0	S
99.0% Occurrence	57	56	65	3.4	S
99.6% Occurrence	57	56	65	3.4	S
Median of Extreme Lows	54	54	61	1.5	ENE
		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	76	82	123	12.3	SSE
0.4% Occurrence	76	82	123	12.3	SSE
1.0% Occurrence	74	80	116	11.4	SSE
2.0% Occurrence	73	79	111	11.1	S
		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	125	80	0.83	11.4	SSE
0.4% Occurrence	125	80	0.83	11.5	SSE
1.0% Occurrence	118	79	0.78	11.1	SSE
2.0% Occurrence	111	77	0.74	10.2	SSE
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	234	215	2198

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
9	N/A	N/A	2.9 + 0.3
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 (#)**
69.6	N/A	N/A	0

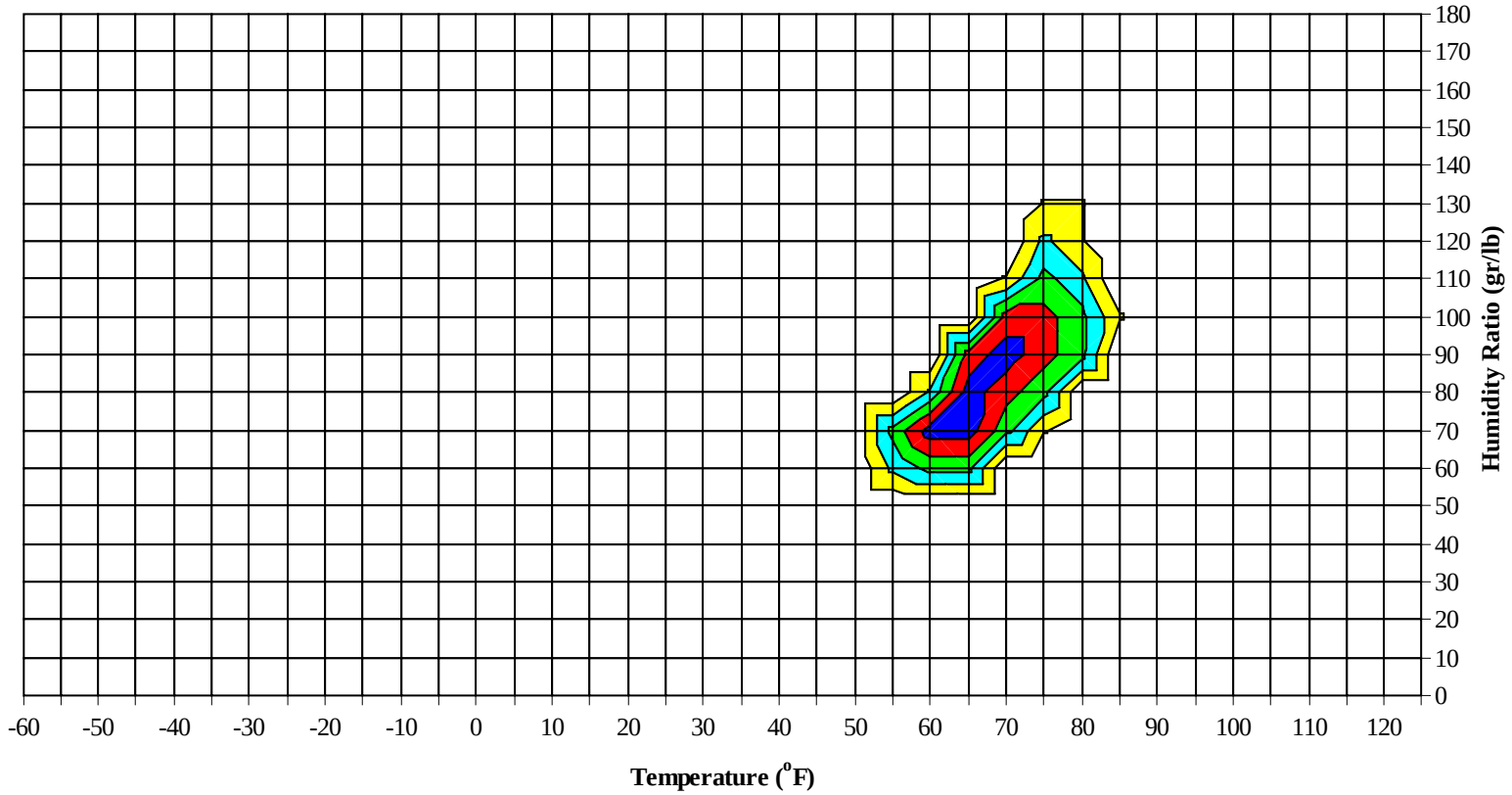
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

LIMA/JORGE CHAVEZ PR WMO No. 846280



LIMA/JORGE CHAVEZ PR WMO No. 846280

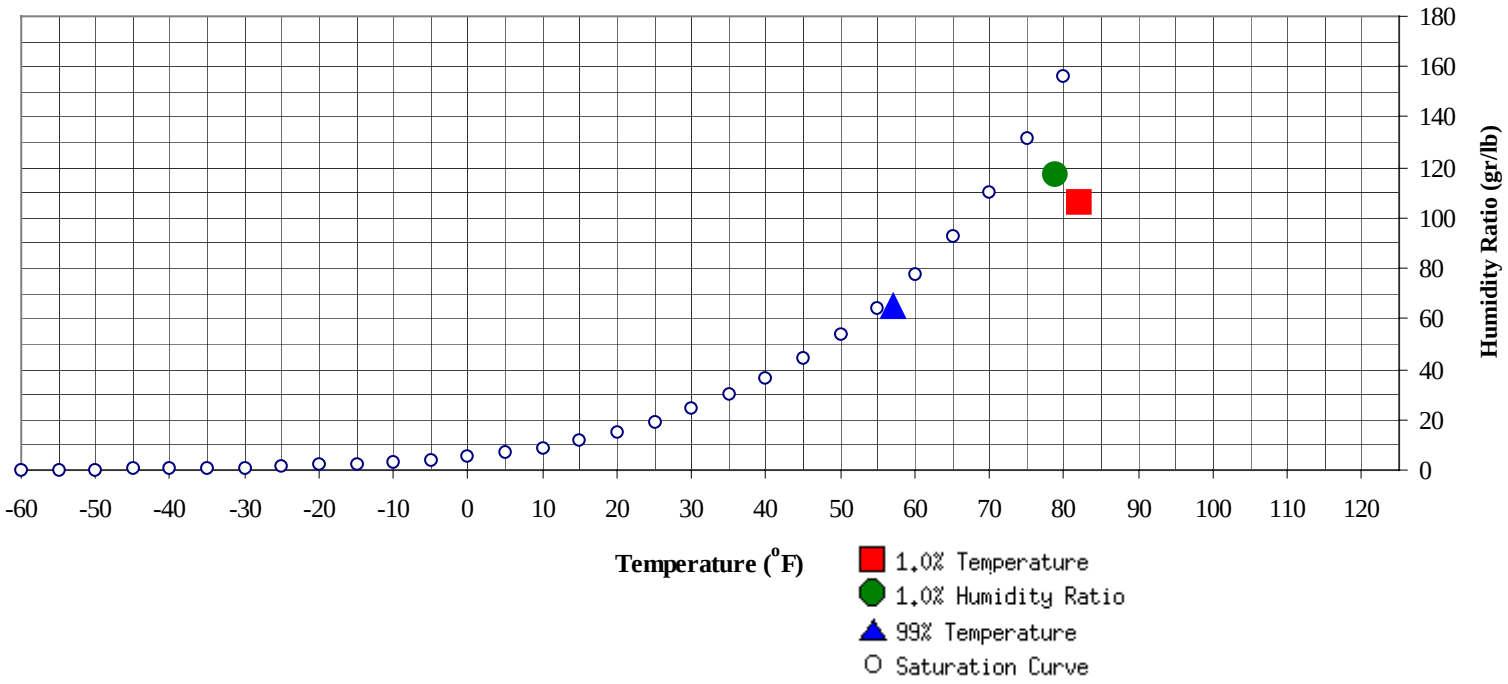
Long Term Psychrometric Summary



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

LIMA/JORGE CHAVEZ PR WMO No. 846280

Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)
99% Dry Bulb	57	65.2	23.8

	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
1.0% Humidity Ratio	117.6	78.7	73.8	71.6	37.3

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	82	106.6	72.8	36.4

LIMA/JORGE CHAVEZ PR WMO No. 846280

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	January 09 To 16	January 17 To 00	January Total Obs	January MCWB (°F)	February Hour Group (LST) 01 To 08	February 09 To 16	February 17 To 00	February Total Obs	February MCWB (°F)	March Hour Group (LST) 01 To 08	March 09 To 16	March 17 To 00	March Total Obs	March MCWB (°F)
90 / 94							0		0	77.5		1		1	77.3
85 / 89	0	5	0	5	76.3		8	0	8	75.6		10		10	75.5
80 / 84	0	45	4	50	72.2	0	60	6	66	72.4	1	52	7	60	72.5
75 / 79	15	137	47	199	70.0	18	117	60	195	70.5	23	125	54	202	70.4
70 / 74	116	54	161	331	67.6	128	36	142	305	68.2	109	54	152	314	67.9
65 / 69	107	6	36	148	65.7	74	3	16	93	66.2	104	6	32	142	65.9
60 / 64	11	0	0	11	63.0	4	0	0	4	63.7	12	1	3	16	63.1
55 / 59															
50 / 54															
45 / 49															

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.

LIMA/JORGE CHAVEZ PR WMO No. 846280

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)
90 / 94															
85 / 89		3		3	75.9		0		0	75.5					
80 / 84	0	17	2	19	73.3		9	0	9	72.8	0	3		3	72.0
75 / 79	13	84	21	118	69.7	9	23	12	44	69.5	5	9	7	21	69.6
70 / 74	25	106	86	217	66.7	6	100	21	127	65.4	6	35	7	49	65.0
65 / 69	121	27	105	253	64.9	54	83	102	239	63.6	19	90	41	151	62.2
60 / 64	80	4	26	109	62.4	162	32	110	304	61.2	165	98	172	435	59.9
55 / 59	1			1	58.2	17	1	3	21	57.8	43	4	13	60	57.2
50 / 54											2	0	0	2	52.9
45 / 49											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.

LIMA/JORGE CHAVEZ PR WMO No. 846280

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)
90 / 94															
85 / 89			0	0	75.0										
80 / 84		0	0	0	69.0										
75 / 79		4	0	4	68.0	0	0	0	0	67.3					
70 / 74	3	18	5	26	64.8	0	11	1	12	63.2	0	15	0	15	63.0
65 / 69	9	69	20	99	61.6	5	60	13	78	61.3	0	76	9	85	61.1
60 / 64	156	147	183	486	59.1	138	168	189	494	59.0	147	142	198	486	59.2
55 / 59	79	10	39	128	56.8	104	10	45	159	56.9	93	7	33	133	57.0
50 / 54	1		0	1	52.6	1		0	1	52.2	0	0		0	51.0
45 / 49															

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.

LIMA/JORGE CHAVEZ PR WMO No. 846280

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)
90 / 94															
85 / 89												0		0	74.4
80 / 84						0	0		0	71.3		11	0	11	72.2
75 / 79	0	1		1	67.2	0	16	1	17	67.4	3	95	15	113	68.5
70 / 74	0	49	2	51	63.7	5	123	19	147	64.6	42	117	99	258	66.2
65 / 69	7	121	36	164	61.8	55	82	107	244	62.9	131	23	111	265	64.4
60 / 64	204	76	199	479	59.7	174	19	111	304	60.7	71	2	23	96	61.8
55 / 59	37	1	11	49	57.1	7	0	1	8	57.3	1		0	1	58.3
50 / 54	0	0	0	0	52.7	0		0	0	53.0	0		0	0	
45 / 49						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.

LIMA/JORGE CHAVEZ PR WMO No. 846280

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)
90 / 94		1		1	77.3
85 / 89	0	26	0	26	75.7
80 / 84	1	189	19	210	72.5
75 / 79	84	592	211	887	69.9
70 / 74	423	713	668	1804	66.8
65 / 69	676	655	627	1958	63.6
60 / 64	1339	710	1242	3291	59.9
55 / 59	393	34	151	578	57.0
50 / 54	5	0	1	6	52.6
45 / 49	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.

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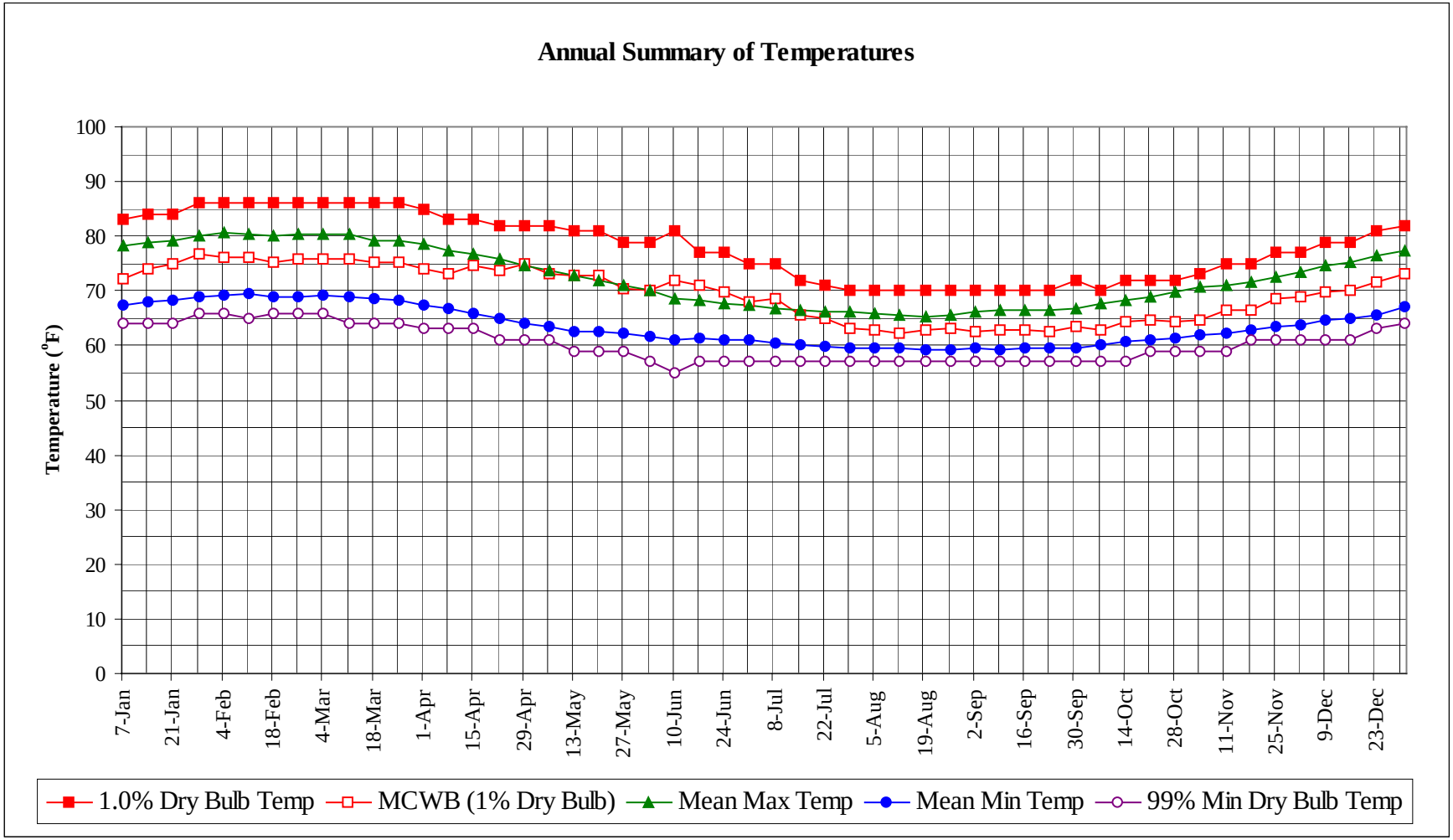

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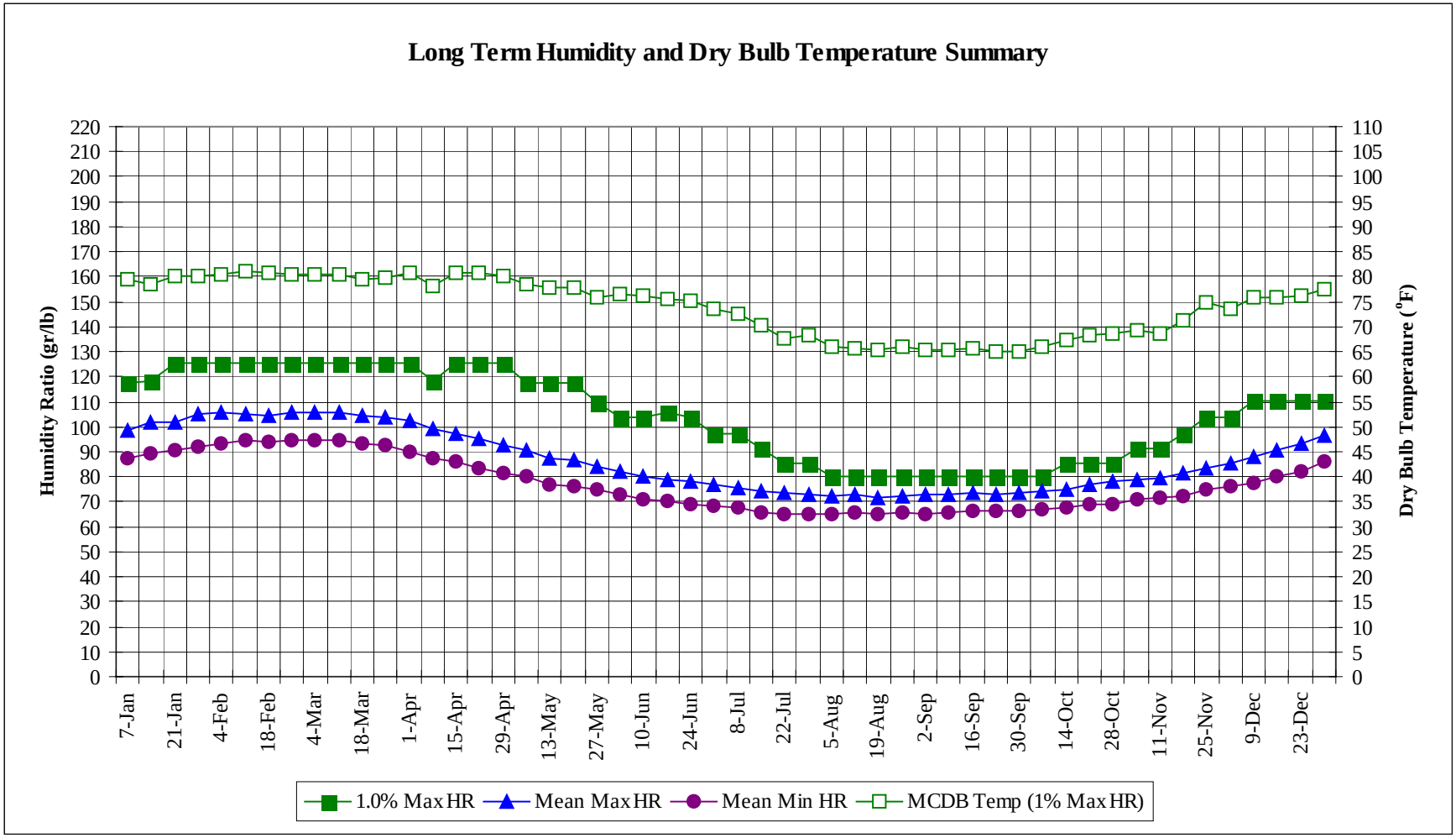
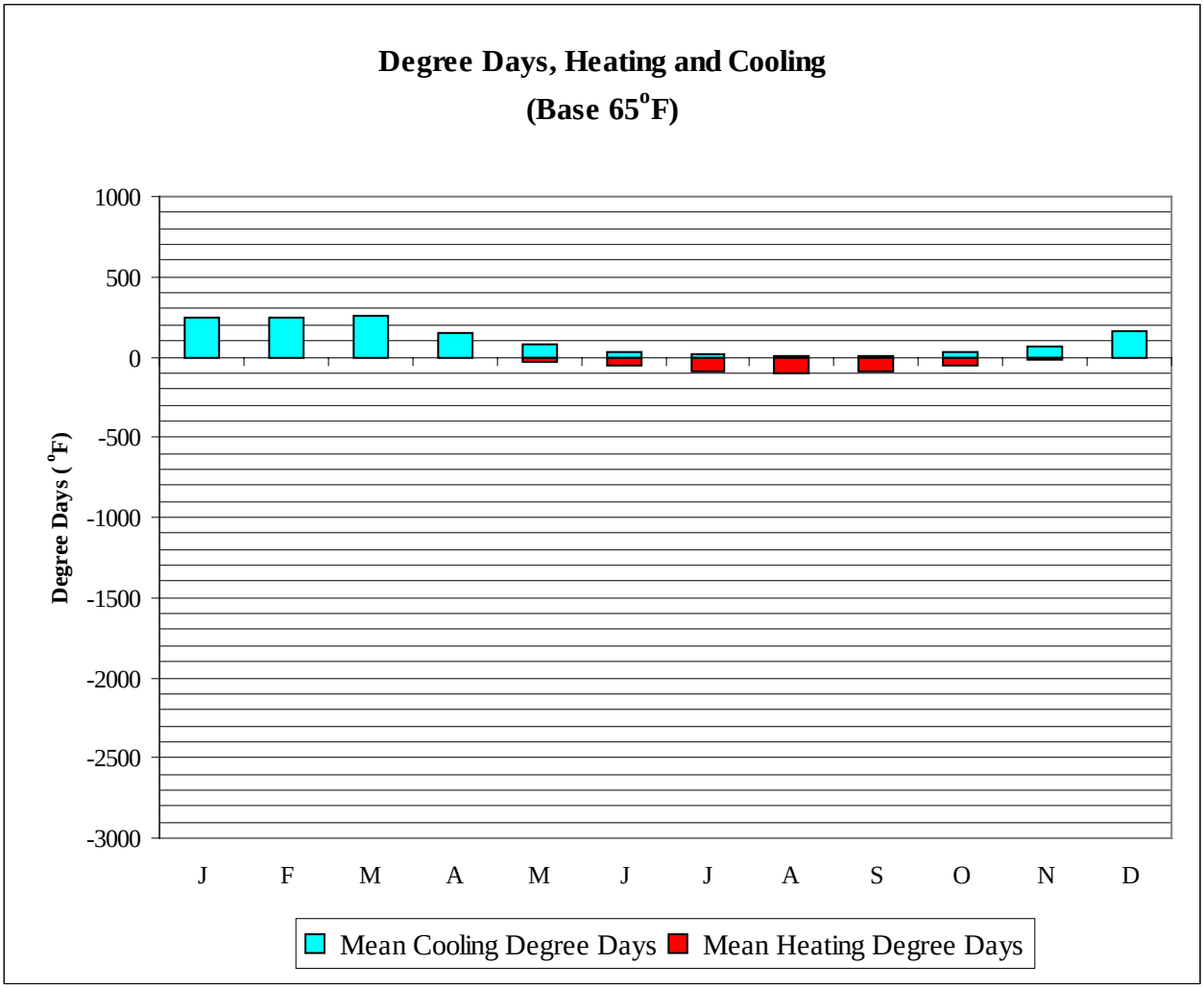


LIMA/JORGE CHAVEZ PR WMO No. 846280

Long Term Dry Bulb Temperature and Humidity Summary

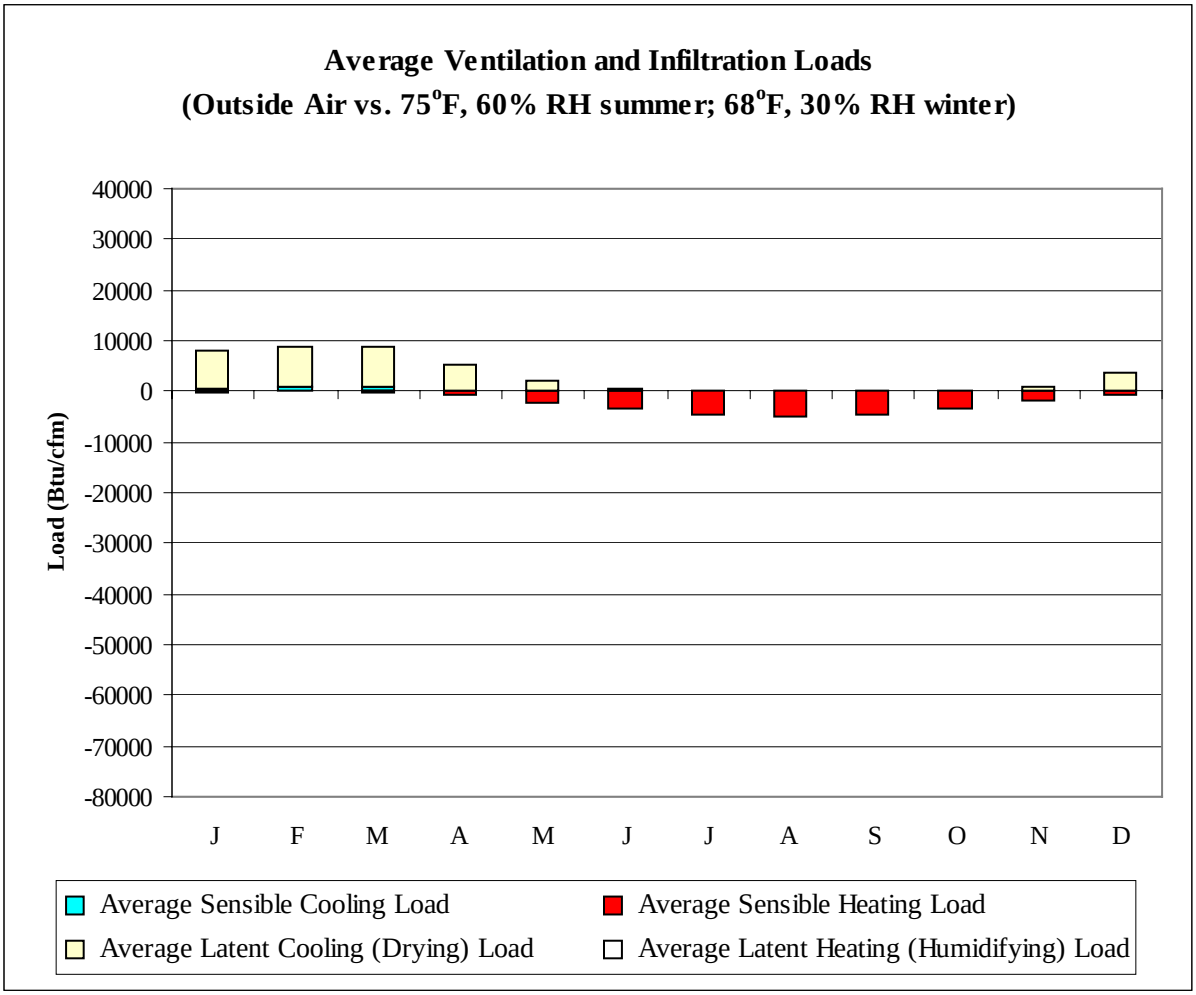
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	83.0	72.3	78.3	67.4	64.0	117.6	79.3	98.6	87.4
14-Jan	84.0	74.1	78.8	67.9	64.0	118.3	78.6	101.7	89.5
21-Jan	84.0	75.0	79.1	68.2	64.0	125.3	80.0	102.1	90.8
28-Jan	86.0	76.9	79.9	68.9	66.0	125.3	80.1	104.9	92.0
4-Feb	86.0	76.1	80.7	69.2	66.0	125.3	80.6	105.6	93.4
11-Feb	86.0	76.1	80.3	69.4	65.0	125.3	81.1	105.1	94.4
18-Feb	86.0	75.1	80.2	68.9	66.0	125.3	80.7	104.6	94.1
25-Feb	86.0	75.8	80.3	69.0	66.0	125.3	80.5	105.9	94.8
4-Mar	86.0	75.9	80.3	69.2	66.0	125.3	80.3	105.9	94.3
11-Mar	86.0	75.7	80.4	69.0	64.0	125.3	80.4	105.6	94.4
18-Mar	86.0	75.1	79.2	68.5	64.0	125.3	79.5	104.2	93.0
25-Mar	86.0	75.2	79.2	68.4	64.0	125.3	79.8	103.5	92.3
1-Apr	85.0	74.0	78.6	67.5	63.0	125.3	80.8	102.1	90.2
8-Apr	83.0	73.0	77.4	66.6	63.0	118.3	78.3	99.3	87.7
15-Apr	83.0	74.8	76.8	65.8	63.0	125.3	80.8	97.2	86.0
22-Apr	82.0	73.7	75.9	65.0	61.0	125.3	80.8	95.1	83.5
29-Apr	82.0	74.8	74.7	64.1	61.0	125.3	80.2	92.9	81.5
6-May	82.0	73.0	73.8	63.6	61.0	117.6	78.6	90.4	79.9
13-May	81.0	72.8	72.7	62.6	59.0	117.6	77.8	87.7	76.6
20-May	81.0	72.9	71.9	62.5	59.0	117.6	77.9	87.0	76.0
27-May	79.0	70.3	71.0	62.2	59.0	109.9	75.7	84.4	74.9
3-Jun	79.0	70.0	70.1	61.8	57.0	103.6	76.6	82.2	72.9
10-Jun	81.0	71.9	68.7	61.1	55.0	103.6	76.2	80.3	70.7
17-Jun	77.0	70.9	68.4	61.3	57.0	105.7	75.7	79.0	70.2
24-Jun	77.0	69.8	67.8	61.1	57.0	103.6	75.1	78.1	68.8
1-Jul	75.0	68.0	67.4	61.0	57.0	97.3	73.4	76.7	68.5
8-Jul	75.0	68.5	66.8	60.4	57.0	97.3	72.6	75.8	67.7
15-Jul	72.0	65.6	66.4	60.1	57.0	91.0	70.2	74.2	65.9
22-Jul	71.0	65.0	66.1	59.8	57.0	85.4	67.7	73.5	65.2
29-Jul	70.0	63.3	66.1	59.6	57.0	85.4	68.1	72.9	65.0
5-Aug	70.0	62.9	65.8	59.5	57.0	79.8	66.0	72.6	64.9
12-Aug	70.0	62.3	65.5	59.4	57.0	79.8	65.7	72.7	66.0
19-Aug	70.0	62.9	65.3	59.3	57.0	79.8	65.4	71.8	65.1
26-Aug	70.0	63.2	65.6	59.4	57.0	79.8	65.9	72.1	65.8
2-Sep	70.0	62.4	66.3	59.4	57.0	79.8	65.2	72.9	65.2
9-Sep	70.0	62.8	66.4	59.3	57.0	79.8	65.3	73.1	65.9
16-Sep	70.0	62.8	66.5	59.5	57.0	79.8	65.5	73.7	66.6
23-Sep	70.0	62.6	66.5	59.5	57.0	79.8	65.0	72.7	66.3
30-Sep	72.0	63.4	66.9	59.6	57.0	79.8	65.0	73.5	66.4
7-Oct	70.0	62.7	67.7	60.1	57.0	79.8	65.9	74.0	67.2
14-Oct	72.0	64.3	68.3	60.6	57.0	85.4	67.4	75.0	67.9
21-Oct	72.0	64.6	68.8	61.0	59.0	85.4	68.4	76.9	69.0
28-Oct	72.0	64.4	69.6	61.4	59.0	85.4	68.5	78.1	69.1
4-Nov	73.0	64.6	70.6	62.0	59.0	91.0	69.1	79.0	70.8
11-Nov	75.0	66.3	70.9	62.2	59.0	91.0	68.8	79.8	71.9
18-Nov	75.0	66.5	71.7	62.8	61.0	97.3	71.2	81.6	72.3
25-Nov	77.0	68.7	72.5	63.3	61.0	103.6	74.7	83.5	74.9
2-Dec	77.0	68.8	73.5	63.9	61.0	103.6	73.7	85.7	76.4
9-Dec	79.0	69.8	74.5	64.8	61.0	110.6	75.9	87.9	77.7
16-Dec	79.0	70.2	75.2	65.0	61.0	110.6	75.9	90.5	80.2
23-Dec	81.0	71.6	76.5	65.7	63.0	110.6	76.2	93.5	82.1
31-Dec	82.0	73.1	77.5	66.9	64.0	110.6	77.5	96.6	86.0

LIMA/JORGE CHAVEZ PR WMO No. 846280



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	241	0
FEB	248	0
MAR	252	1
APR	155	6
MAY	77	29
JUN	34	59
JUL	15	89
AUG	8	101
SEP	9	91
OCT	24	55
NOV	65	23
DEC	156	5
ANN	1286	459

LIMA/JORGE CHAVEZ PR WMO No. 846280

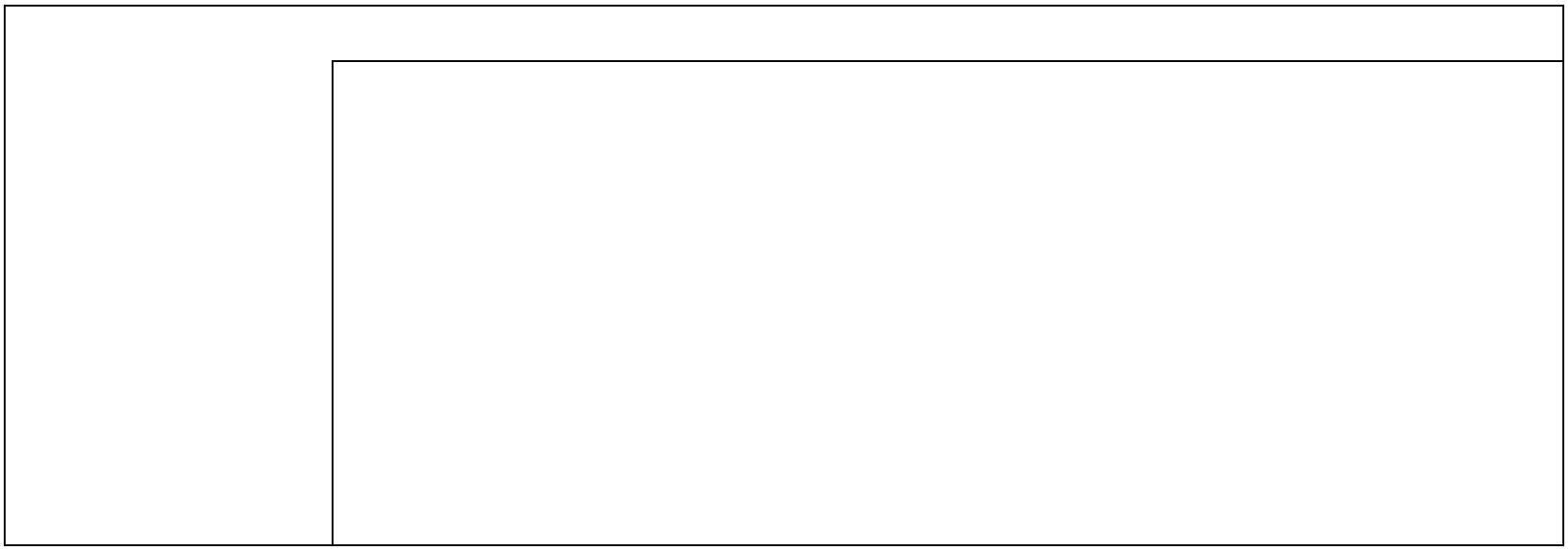


	Average Sensible Cooling Load (Btu/cfm)	Average Sensible Heating Load (Btu/cfm)	Average Latent Cooling Load (Btu/cfm)	Average Latent Heating Load (Btu/cfm)
JAN	720	-111	7294	0
FEB	928	-49	7944	0
MAR	879	-123	7896	0
APR	328	-710	4892	0
MAY	108	-2079	1826	0
JUN	43	-3358	571	0
JUL	4	-4437	177	0
AUG	0	-4848	24	0
SEP	0	-4488	17	0
OCT	0	-3272	109	0
NOV	13	-1881	738	0
DEC	217	-655	3580	0
ANN	3240	-26011	35068	0

Average Annual Solar Radiation – Nearest Available Site

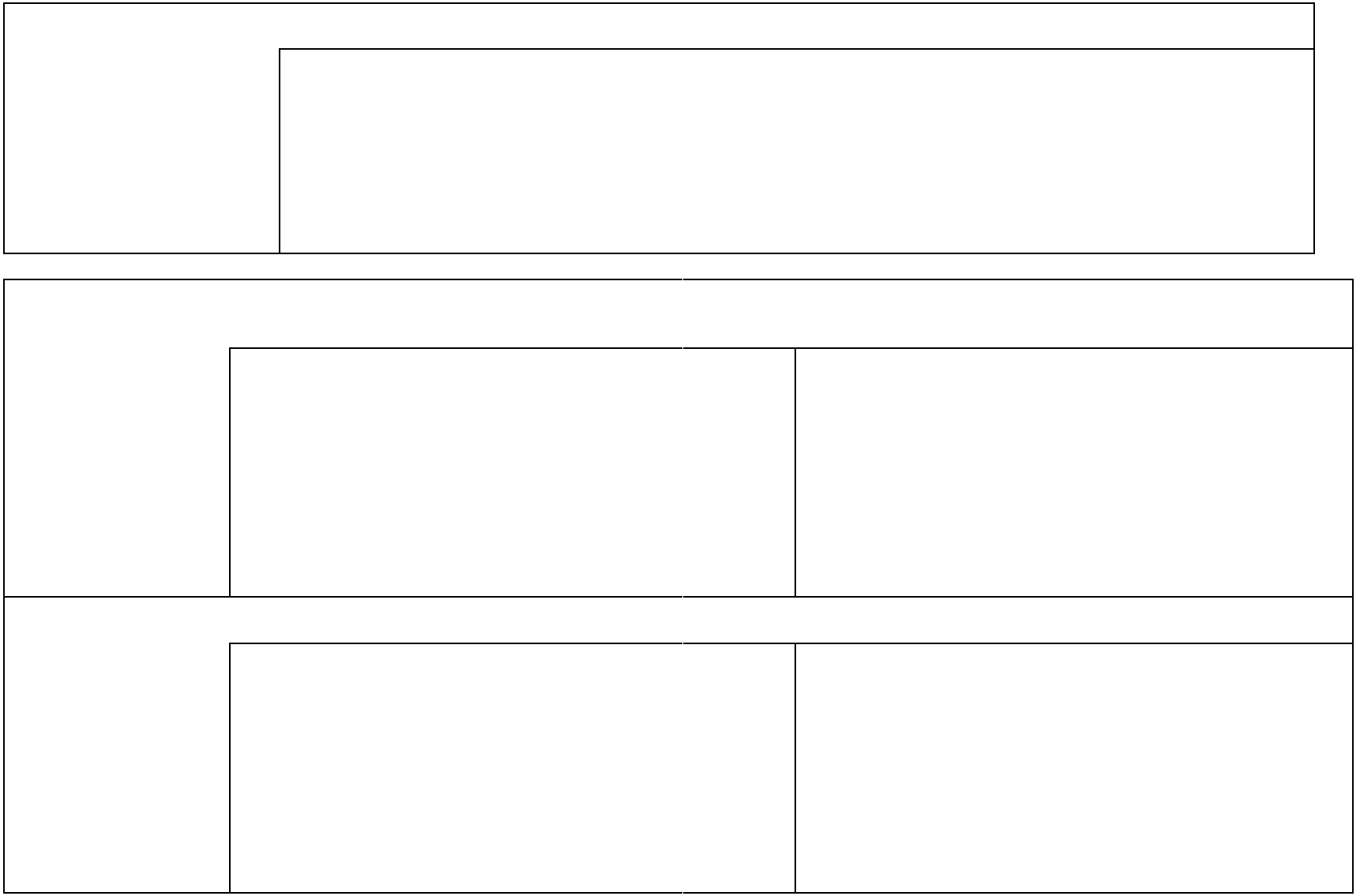
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

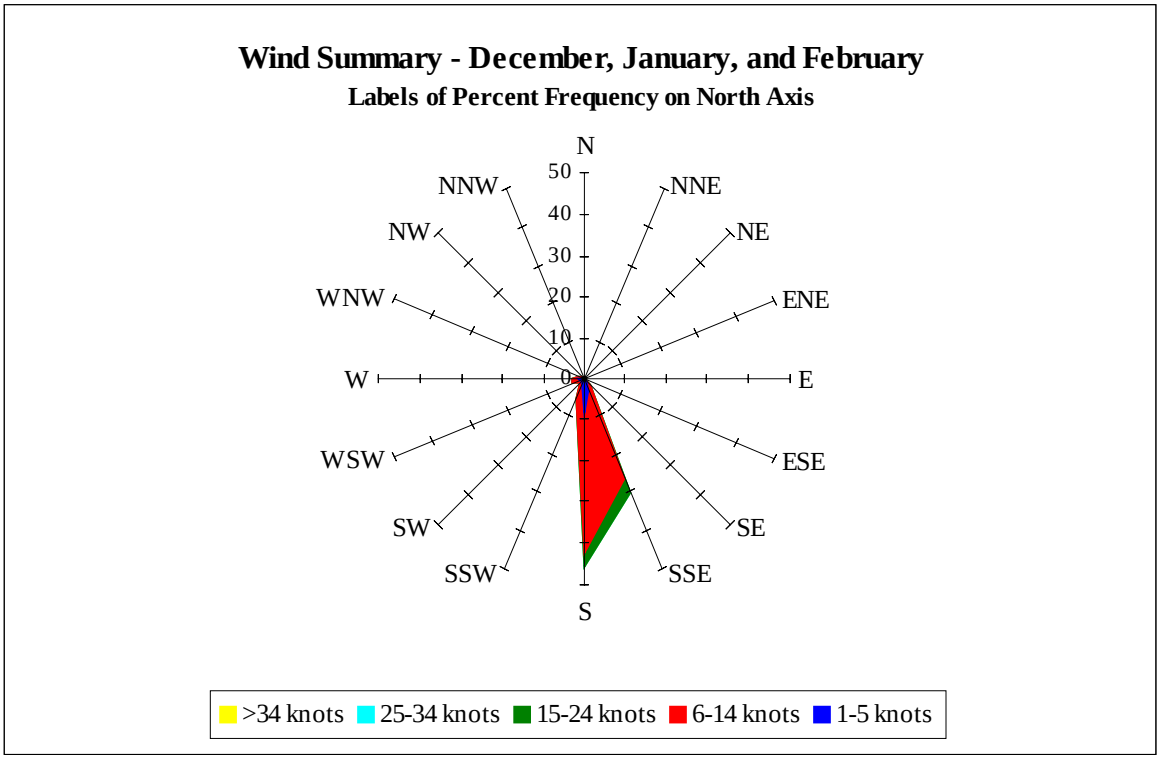
No Solar Radiation
Data Available



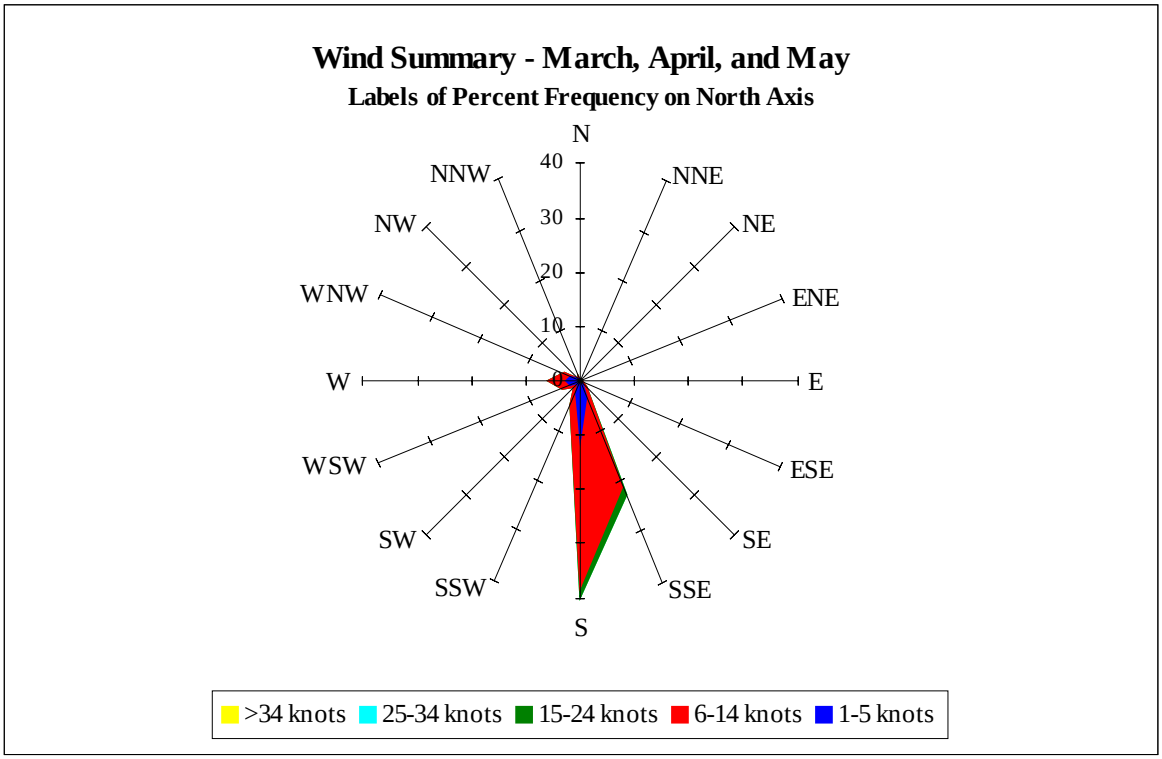
Average Annual Solar Heat and Illumination – Nearest Available Site

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

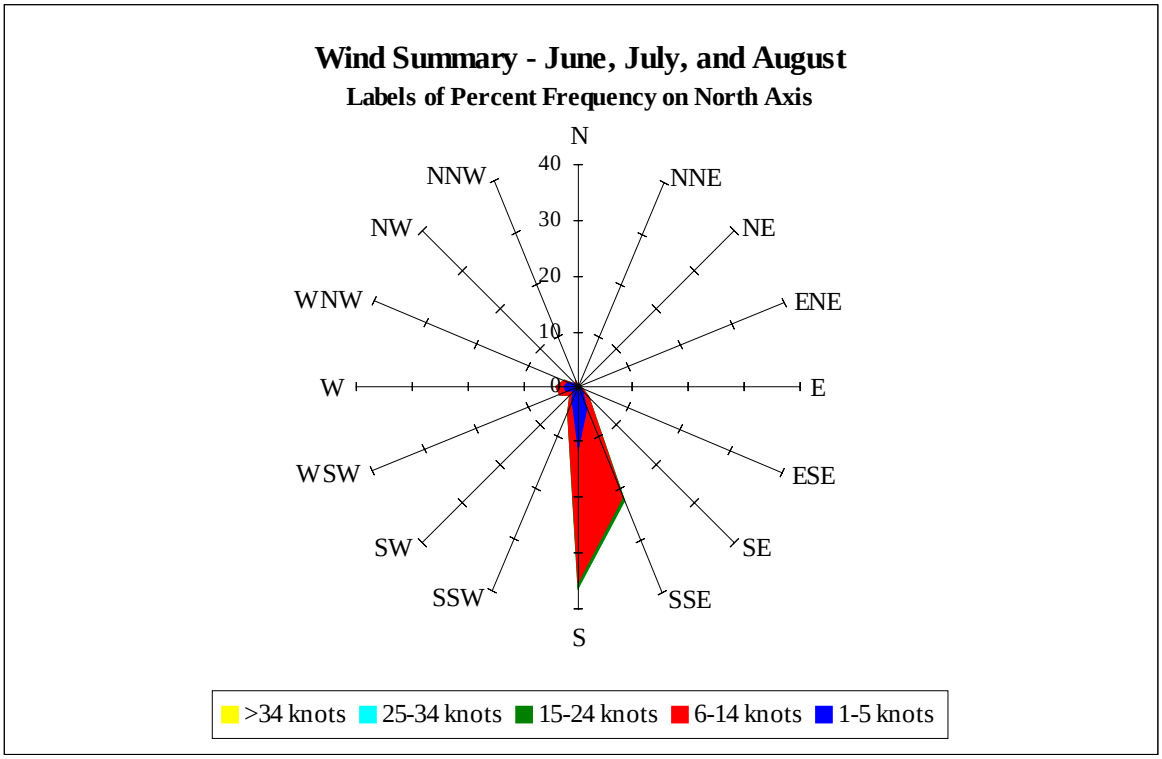




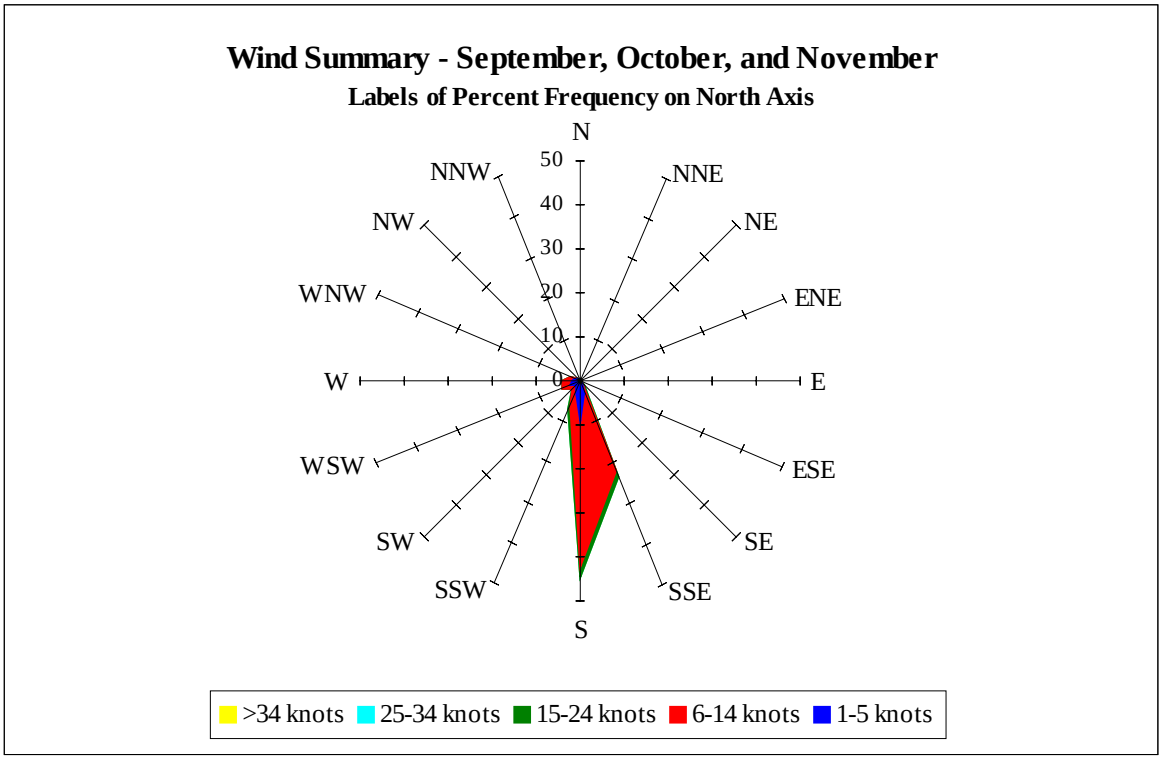
Percent Calm = 7.20



Percent Calm = 15.17



Percent Calm = 18.45



Percent Calm = 9.47