BRINDISI, ITALY	
Latitude = 40.65 N	WMO No. 163200
Longitude = 17.95 E	Elevation = 33 feet
Period of Record = 1973 to 1996	Average Pressure = 29.90 inches Hg

Design Criteria Data

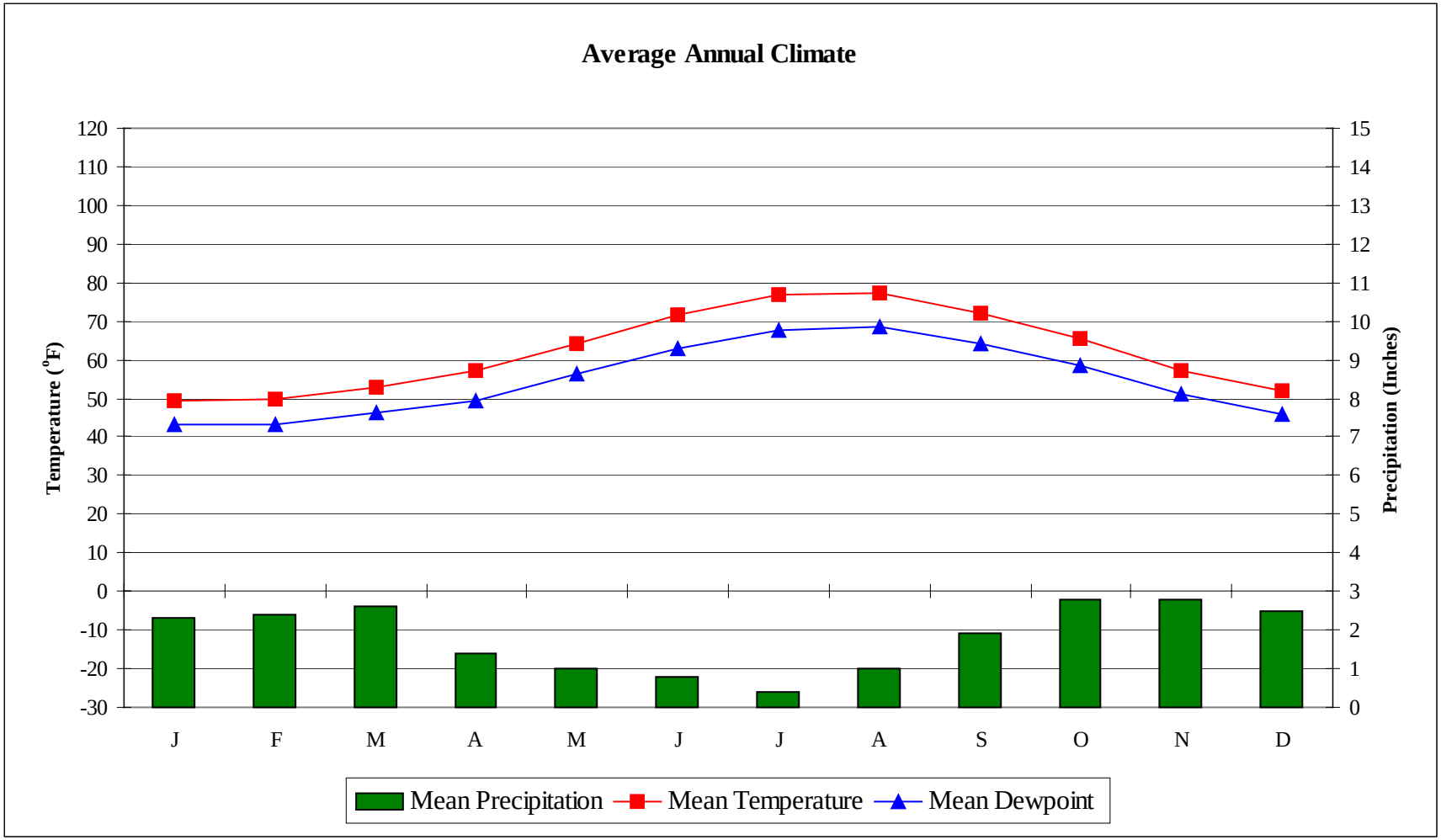
		Mean Coincident (Average) Values			
Dry Bulb Temperature (T)	**Design Value (^oF)**	Wet Bulb Temperature (^oF)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	97	72	81	12.7	S
0.4% Occurrence	90	73	99	10.5	S
1.0% Occurrence	86	75	116	9.0	S
2.0% Occurrence	84	75	116	8.9	NNW
Mean Daily Range	12	-	-	-	-
97.5% Occurrence	43	40	33	8.2	W
99.0% Occurrence	39	37	28	6.9	W
99.6% Occurrence	36	35	27	6.5	W
Median of Extreme Lows	32	30	22	7.1	W
		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	82	86	157	8.2	NNW
0.4% Occurrence	80	84	146	8.1	NNW
1.0% Occurrence	78	83	136	8.1	NW
2.0% Occurrence	77	82	132	8.0	NW
		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	159	85	1.05	8.0	NNW
0.4% Occurrence	150	84	0.99	8.0	NNW
1.0% Occurrence	141	82	0.94	8.0	NNW
2.0% Occurrence	132	81	0.88	7.8	NW
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	15	585	740	2115

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
8	N/A	N/A	3.6 + 0.6
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 (#)**
64.7	N/A	N/A	1

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

BRINDISI, ITALY WMO No. 163200



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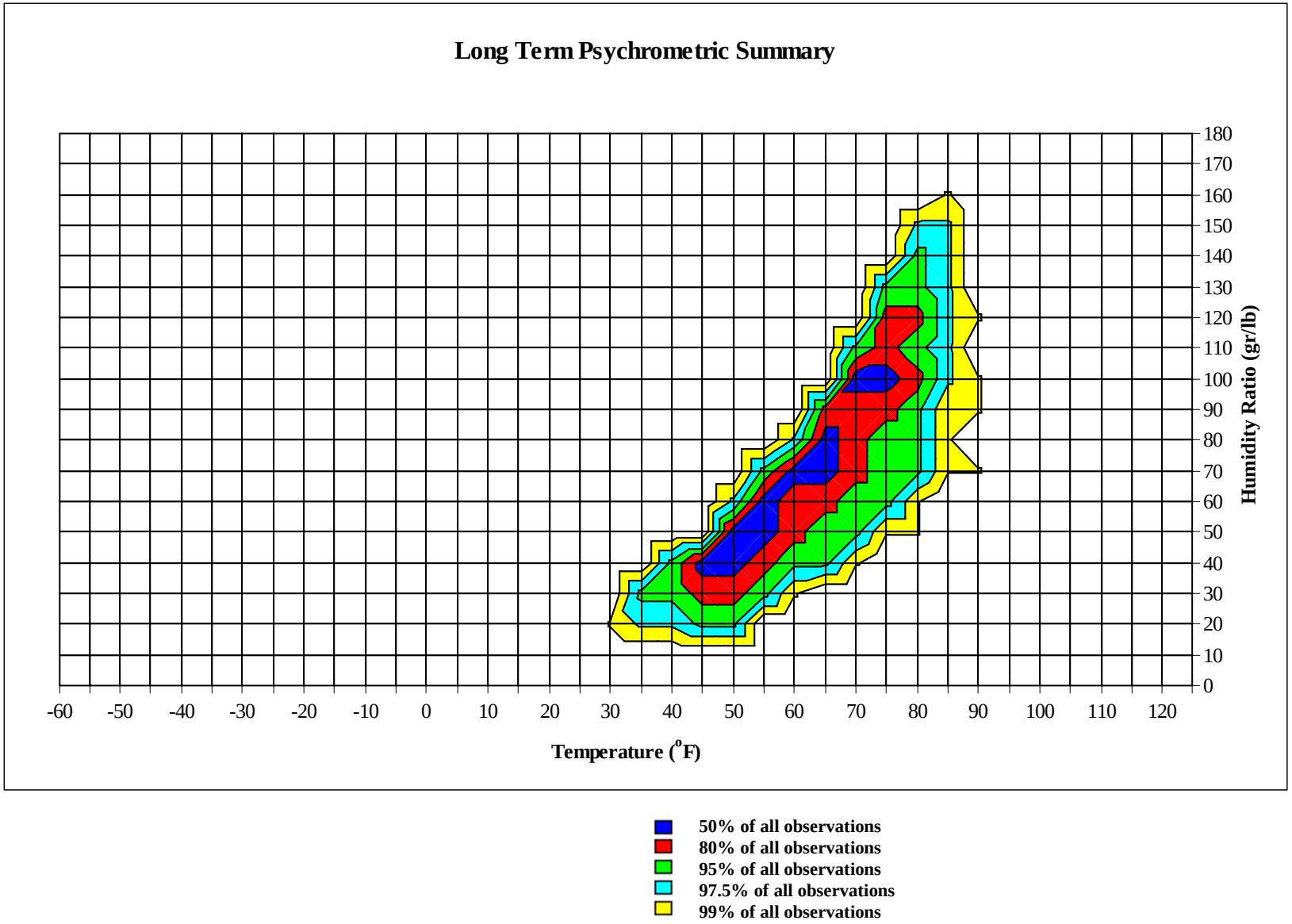
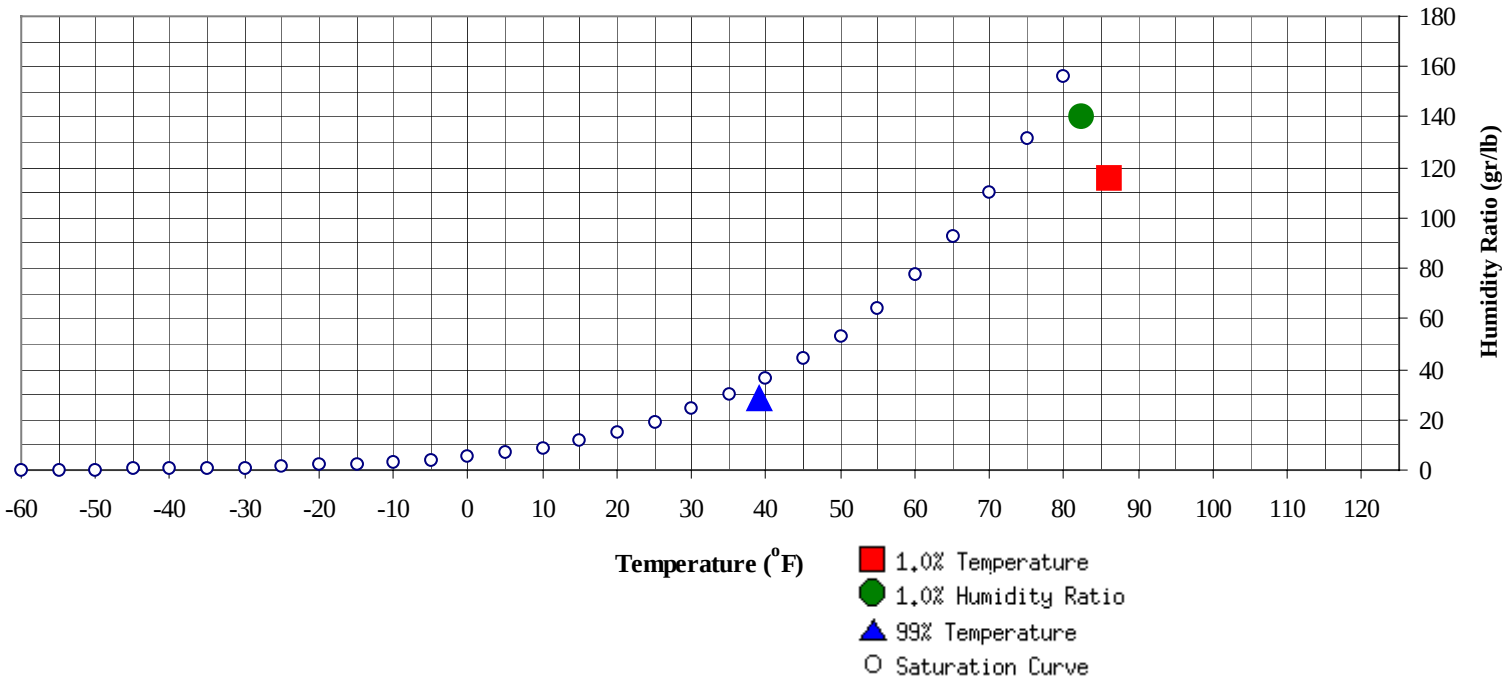


BRINDISI, ITALY WMO No. 163200

Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)
99% Dry Bulb	39	28.5	13.8

	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
1.0% Humidity Ratio	140.7	82.2	78.3	77	41.8

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	86	115.6	75.1	38.8

BRINDISI, ITALY WMO No. 163200

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)
105 / 109															
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84															
75 / 79															
70 / 74						0	0	0	0	57.7		2	1	3	60.0
65 / 69		1	0	1	60.1	0	2	0	2	59.0		9	2	11	59.0
60 / 64	1	12	3	16	56.5	1	15	4	20	56.4	2	44	17	63	56.8
55 / 59	16	61	31	108	53.0	19	67	37	123	52.8	36	98	77	211	53.3
50 / 54	77	110	112	299	48.7	63	80	93	237	48.5	95	71	103	270	48.9
45 / 49	86	45	74	205	43.8	77	43	64	185	43.6	78	18	38	135	44.1
40 / 44	43	13	19	75	39.5	40	13	19	72	39.2	24	3	6	33	39.9
35 / 39	20	4	8	32	36.2	20	3	5	28	35.9	11	2	2	15	35.5
30 / 34	5	1	1	7	31.1	4	0	1	5	31.1	2	1	1	4	31.3
25 / 29	0		0	0	26.0	0			0	27.5		0		0	28.0
20 / 24	0			0	20.0										

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.

BRINDISI, ITALY WMO No. 163200

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)
105 / 109												0	0	0	71.5
100 / 104												0	0	0	72.5
95 / 99												0	0	0	72.0
90 / 94							0		0	71.7	0	4	1	5	71.0
85 / 89							1	0	1	66.8	0	8	3	11	70.2
80 / 84		0		0	59.7	0	5	2	7	66.2	1	31	15	47	70.5
75 / 79		2	1	3	59.5	0	26	10	36	65.9	12	98	53	163	69.3
70 / 74	0	13	4	17	59.5	7	75	39	121	64.0	72	78	100	250	66.5
65 / 69	0	30	10	40	58.4	27	67	55	149	61.8	83	17	48	149	63.5
60 / 64	13	89	53	155	56.9	95	63	97	254	59.0	60	4	18	82	59.9
55 / 59	79	85	110	274	53.4	90	10	39	139	55.0	11	0	1	12	55.6
50 / 54	101	20	55	176	49.4	27	1	5	33	50.5	0			0	50.3
45 / 49	40	2	7	49	44.8	3		0	3	45.8					
40 / 44	6	0	0	6	40.5										
35 / 39	1			1	37.4										
30 / 34	0			0											
25 / 29															
20 / 24															

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.

BRINDISI, ITALY WMO No. 163200

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)				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)
105 / 109							0		0	67.0					
100 / 104		1	0	1	73.5		0	0	0	70.1					
95 / 99		3	1	4	73.7		1	0	1	72.4		0	0	0	73.1
90 / 94		9	4	13	73.7		9	3	12	74.3		2	1	3	71.3
85 / 89	0	28	10	38	75.3	0	31	11	42	76.8		4	1	5	72.7
80 / 84	8	101	51	160	74.1	10	117	58	184	75.1	0	45	10	55	73.3
75 / 79	76	93	114	284	71.2	90	78	118	286	71.7	20	116	68	203	70.8
70 / 74	121	12	62	195	67.6	102	12	50	164	67.9	86	56	105	247	67.3
65 / 69	32	1	5	38	63.7	34	1	7	42	64.3	68	14	39	122	63.4
60 / 64	9	0	1	10	59.7	11	0	1	12	60.6	50	4	14	68	59.6
55 / 59	1	0		1	55.1	1			1	56.3	15	0	2	17	55.2
50 / 54											1		0	1	52.0
45 / 49															
40 / 44															
35 / 39															
30 / 34															
25 / 29															
20 / 24															

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.

BRINDISI, ITALY WMO No. 163200

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)
105 / 109															
100 / 104															
95 / 99															
90 / 94															
85 / 89		0	0	0	71.6										
80 / 84		3	0	3	69.8		0		0	67.0					
75 / 79	1	31	8	40	69.2		1	0	1	67.7					
70 / 74	19	82	48	149	66.4	1	9	2	12	65.0		0		0	59.4
65 / 69	52	68	69	189	63.0	5	29	10	44	62.5	0	3	0	3	59.7
60 / 64	97	53	88	238	59.0	38	89	59	186	58.5	5	29	10	44	57.7
55 / 59	59	9	29	97	54.4	79	75	100	254	53.9	46	94	71	211	53.4
50 / 54	18	1	5	24	50.4	70	28	50	148	49.3	82	82	103	267	49.0
45 / 49	3		0	3	46.1	38	8	17	63	44.3	74	31	48	153	44.0
40 / 44						7	1	2	10	40.8	27	7	12	46	40.0
35 / 39						2	0	0	2	37.0	13	2	3	18	36.4
30 / 34						0			0	32.0	1	0	0	1	31.4
25 / 29															
20 / 24															

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.

BRINDISI, ITALY WMO No. 163200

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

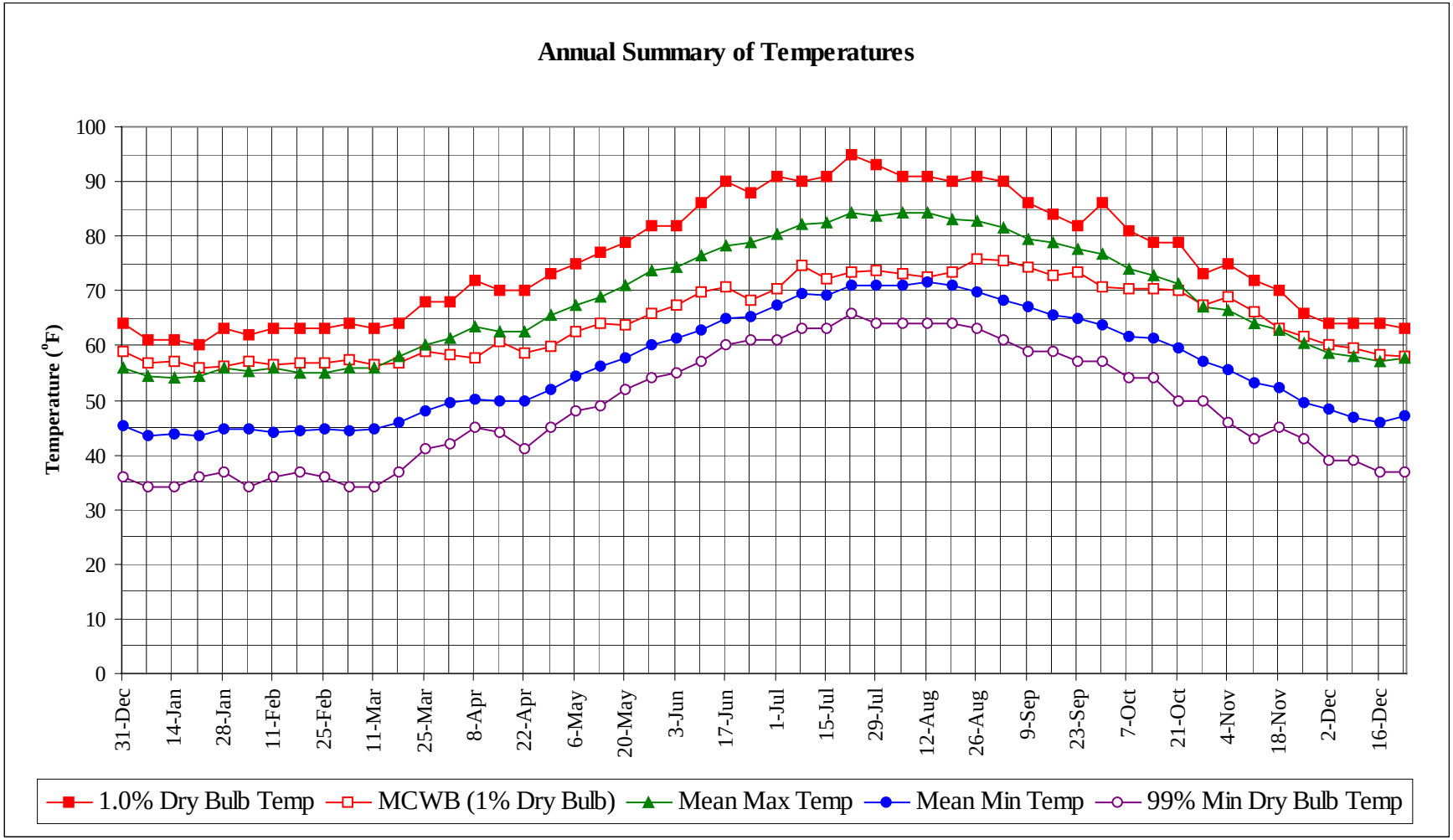
Period of Record = 1973 to 1996

Annual Totals

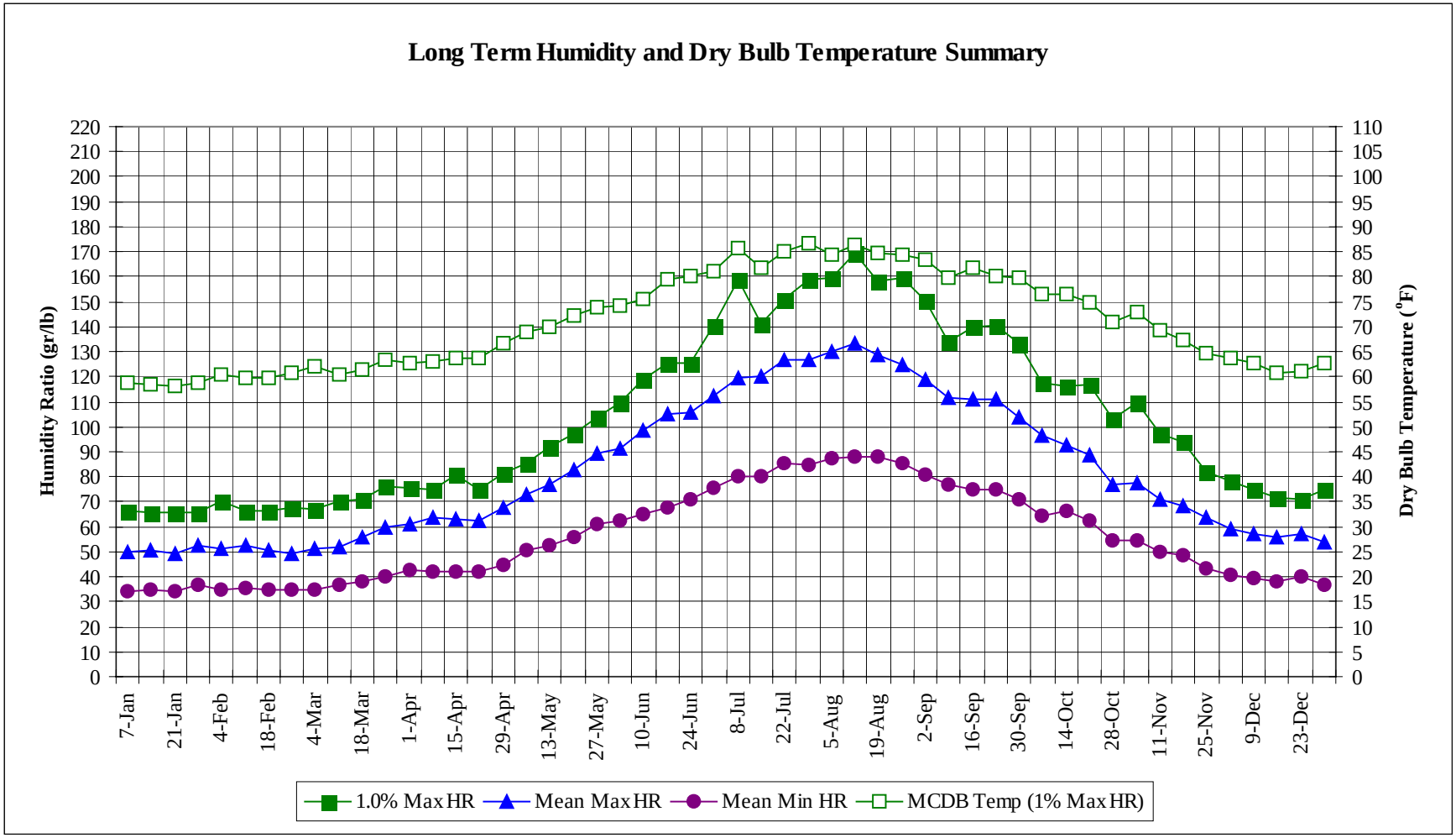
Temperature Range (°F)	Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)
105 / 109		0	0	0	69.3
100 / 104		1	1	2	72.7
95 / 99		4	2	6	73.2
90 / 94	0	23	10	33	73.3
85 / 89	1	72	26	99	75.1
80 / 84	19	303	136	458	73.9
75 / 79	198	445	369	1012	70.7
70 / 74	406	337	407	1150	66.6
65 / 69	300	240	247	787	62.7
60 / 64	379	403	363	1145	58.5
55 / 59	449	502	499	1450	53.7
50 / 54	538	395	529	1462	49.0
45 / 49	402	147	252	800	44.0
40 / 44	148	37	58	243	39.6
35 / 39	67	11	18	96	36.1
30 / 34	13	2	2	17	31.2
25 / 29	1	0	0	1	26.3
20 / 24	0			0	20.0

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.

BRINDISI, ITALY WMO No. 163200



BRINDISI, ITALY WMO No. 163200

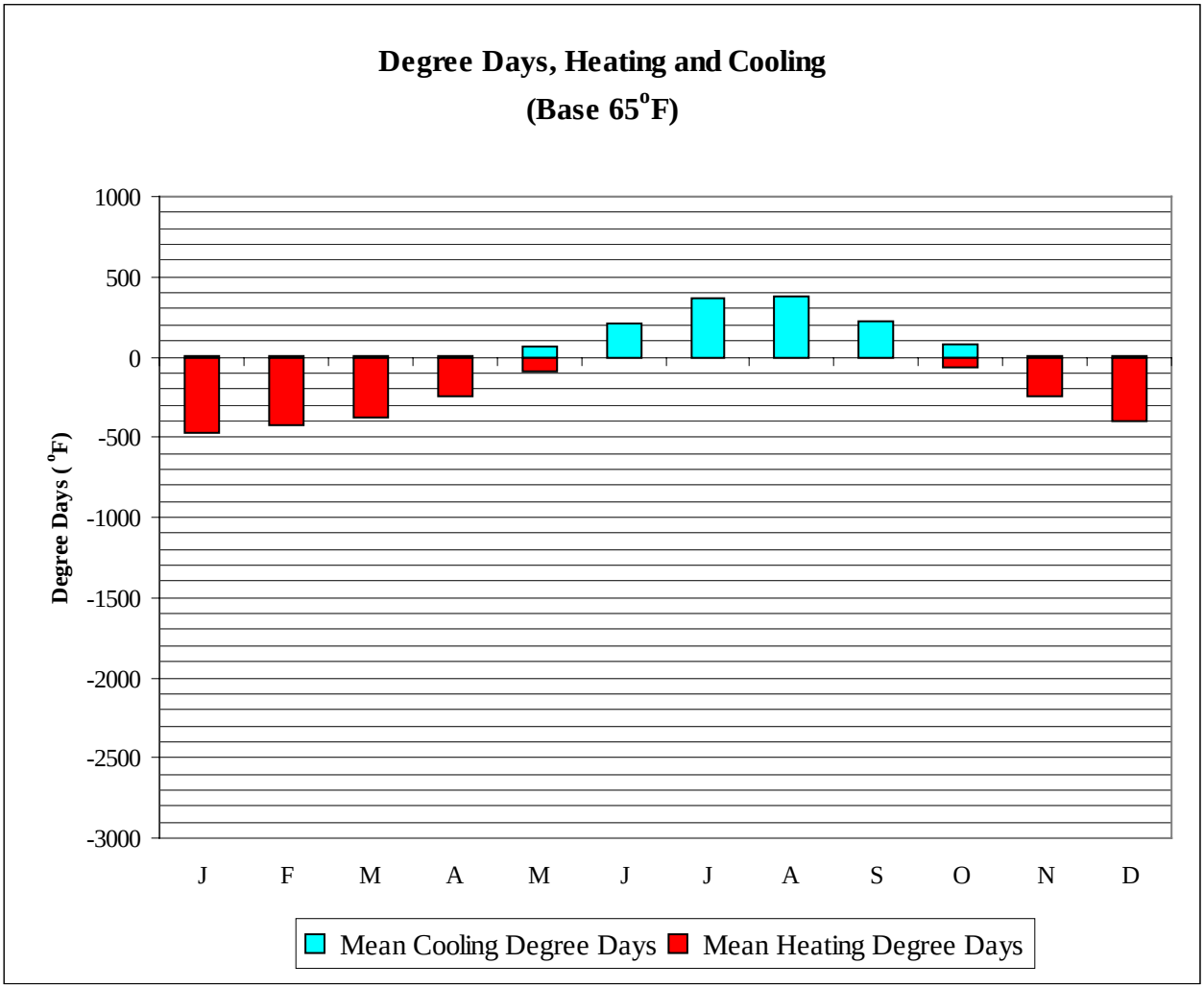


BRINDISI, ITALY WMO No. 163200

Long Term Dry Bulb Temperature and Humidity Summary

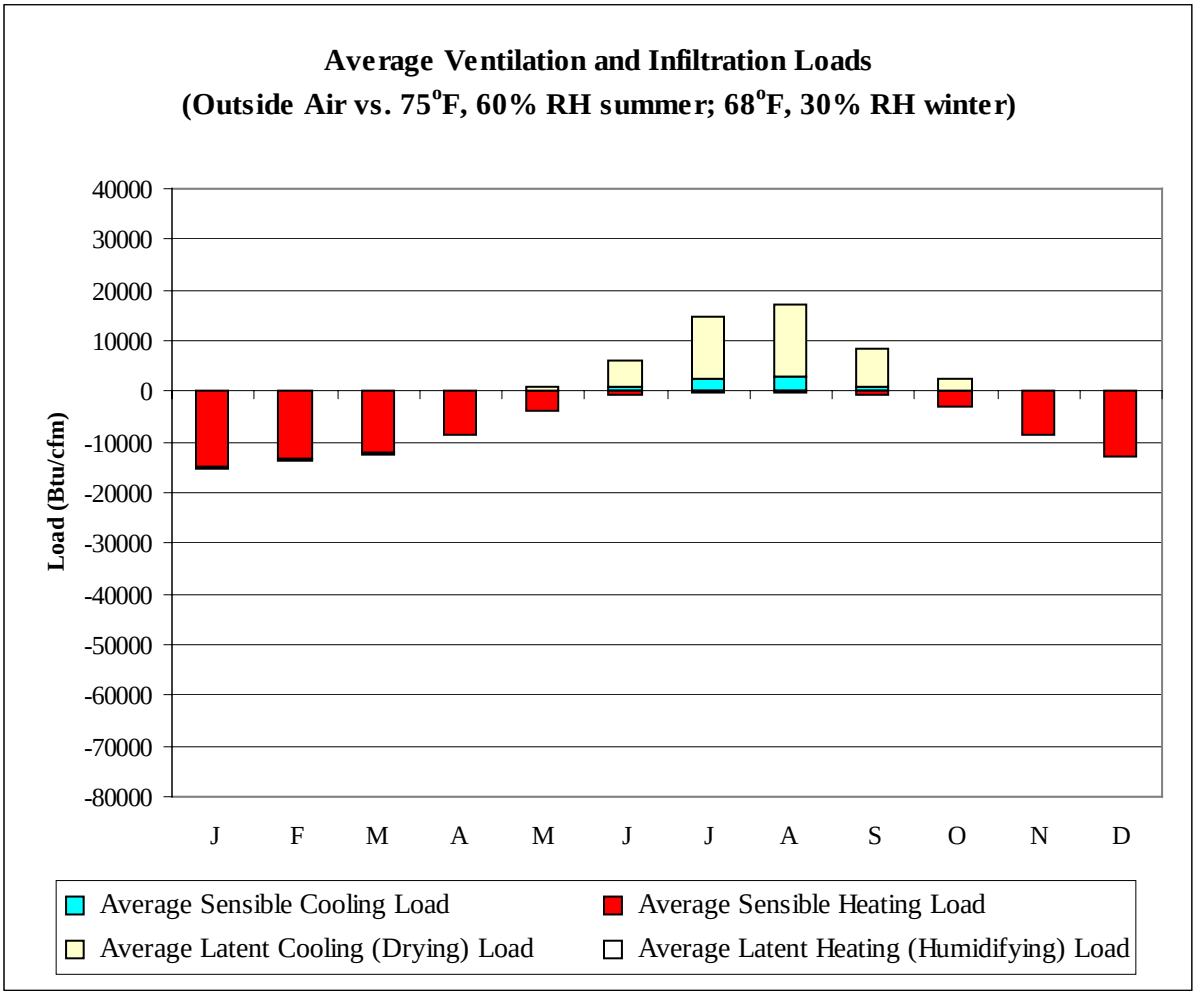
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	61.0	56.7	54.5	43.4	34.0	66.5	58.8	50.2	33.8
14-Jan	61.0	57.1	54.0	43.8	34.0	65.8	58.4	50.3	34.6
21-Jan	60.0	56.0	54.3	43.5	36.0	65.8	58.2	49.4	33.9
28-Jan	63.0	56.3	56.0	44.9	37.0	65.8	58.9	52.6	36.7
4-Feb	62.0	57.0	55.4	44.8	34.0	70.0	60.5	50.9	34.7
11-Feb	63.0	56.6	55.9	44.1	36.0	66.5	59.6	52.6	35.2
18-Feb	63.0	56.7	55.1	44.5	37.0	66.5	59.9	50.8	34.7
25-Feb	63.0	56.7	54.8	44.6	36.0	67.9	60.8	49.4	34.5
4-Mar	64.0	57.4	55.9	44.3	34.0	67.2	62.2	51.3	34.9
11-Mar	63.0	56.5	55.8	44.8	34.0	70.0	60.4	52.1	36.5
18-Mar	64.0	56.8	57.9	45.9	37.0	70.7	61.3	55.6	38.0
25-Mar	68.0	59.0	60.2	48.0	41.0	76.3	63.3	59.5	40.2
1-Apr	68.0	58.3	61.2	49.4	42.0	75.6	62.6	61.2	42.5
8-Apr	72.0	57.6	63.5	50.0	45.0	74.9	63.2	63.7	42.3
15-Apr	70.0	60.7	62.5	49.9	44.0	80.5	63.8	62.7	41.9
22-Apr	70.0	58.7	62.5	49.8	41.0	74.9	63.8	62.2	42.2
29-Apr	73.0	59.9	65.4	52.0	45.0	81.2	66.6	67.9	44.5
6-May	75.0	62.7	67.5	54.2	48.0	85.4	68.9	73.1	50.8
13-May	77.0	64.0	69.0	56.1	49.0	91.7	70.0	76.9	52.4
20-May	79.0	63.7	71.1	57.7	52.0	97.3	72.4	82.8	56.0
27-May	82.0	65.9	73.6	60.1	54.0	103.6	73.9	89.6	60.9
3-Jun	82.0	67.5	74.2	61.4	55.0	109.9	74.2	91.4	62.3
10-Jun	86.0	69.8	76.5	62.8	57.0	119.0	75.5	98.6	65.2
17-Jun	90.0	70.7	78.2	64.9	60.0	125.3	79.5	104.8	67.5
24-Jun	88.0	68.1	78.8	65.2	61.0	125.3	80.0	105.4	70.9
1-Jul	91.0	70.3	80.3	67.4	61.0	140.7	81.2	112.1	75.6
8-Jul	90.0	74.7	82.1	69.6	63.0	158.9	85.8	119.4	80.1
15-Jul	91.0	72.3	82.4	69.3	63.0	141.4	81.9	120.0	80.1
22-Jul	95.0	73.6	84.2	70.9	66.0	151.2	85.1	126.5	85.1
29-Jul	93.0	73.7	83.8	71.0	64.0	158.9	86.6	127.0	84.6
5-Aug	91.0	73.2	84.4	71.1	64.0	159.6	84.4	130.1	87.1
12-Aug	91.0	72.6	84.4	71.5	64.0	169.4	86.3	133.2	87.7
19-Aug	90.0	73.6	83.0	71.0	64.0	158.2	84.7	129.0	87.7
26-Aug	91.0	75.9	82.7	69.6	63.0	159.6	84.4	125.0	85.1
2-Sep	90.0	75.6	81.4	68.3	61.0	150.5	83.5	119.0	80.6
9-Sep	86.0	74.2	79.5	67.1	59.0	133.7	79.9	111.9	76.9
16-Sep	84.0	72.8	78.8	65.6	59.0	140.0	81.8	111.2	74.8
23-Sep	82.0	73.5	77.8	64.9	57.0	140.7	80.1	111.0	75.1
30-Sep	86.0	70.8	76.7	63.6	57.0	133.0	79.7	103.7	70.8
7-Oct	81.0	70.5	74.1	61.6	54.0	117.6	76.6	96.6	64.2
14-Oct	79.0	70.3	72.9	61.2	54.0	116.2	76.6	92.6	66.0
21-Oct	79.0	69.9	71.3	59.6	50.0	116.9	74.7	88.5	62.2
28-Oct	73.0	67.4	67.0	57.1	50.0	102.9	70.9	77.1	54.6
4-Nov	75.0	68.8	66.5	55.7	46.0	109.9	72.9	77.5	54.7
11-Nov	72.0	66.2	64.1	53.2	43.0	97.3	69.4	71.2	50.0
18-Nov	70.0	63.1	62.8	52.3	45.0	93.8	67.3	68.5	48.7
25-Nov	66.0	61.7	60.5	49.6	43.0	81.9	64.8	63.5	43.4
2-Dec	64.0	60.2	58.7	48.2	39.0	78.4	63.8	59.1	40.9
9-Dec	64.0	59.4	57.9	46.8	39.0	74.9	62.8	57.2	39.5
16-Dec	64.0	58.4	57.0	45.9	37.0	71.4	60.9	55.9	37.9
23-Dec	63.0	58.1	57.7	47.0	37.0	70.7	61.2	56.9	40.2
31-Dec	64.0	59.0	55.8	45.4	36.0	74.9	62.7	53.6	37.1

BRINDISI, ITALY WMO No. 163200



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	479
FEB	0	428
MAR	1	381
APR	8	246
MAY	68	85
JUN	212	10
JUL	371	1
AUG	377	1
SEP	224	11
OCT	76	65
NOV	7	242
DEC	0	405
ANN	1346	2354

BRINDISI, ITALY WMO No. 163200



	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	-14815	0	-375
FEB	0	-13285	0	-372
MAR	0	-12263	4	-200
APR	4	-8570	19	-35
MAY	115	-3769	940	-2
JUN	863	-691	5247	0
JUL	2628	-94	12283	-1
AUG	2742	-98	14205	-1
SEP	856	-659	7759	0
OCT	89	-3088	2481	-1
NOV	2	-8496	222	-61
DEC	0	-12910	2	-168
ANN	7299	-78738	43162	-1216

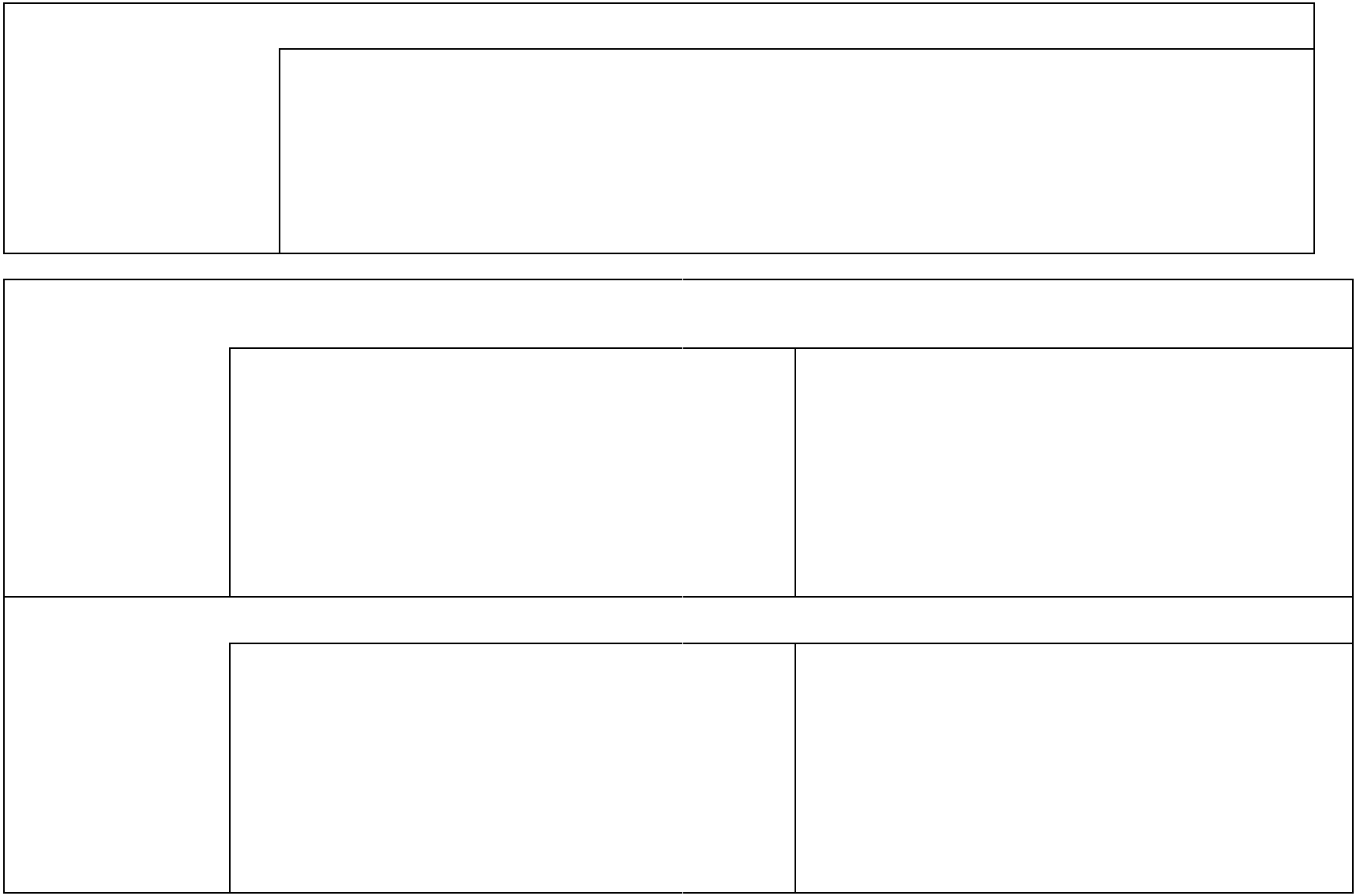
Average Annual Solar Radiation – Nearest Available Site

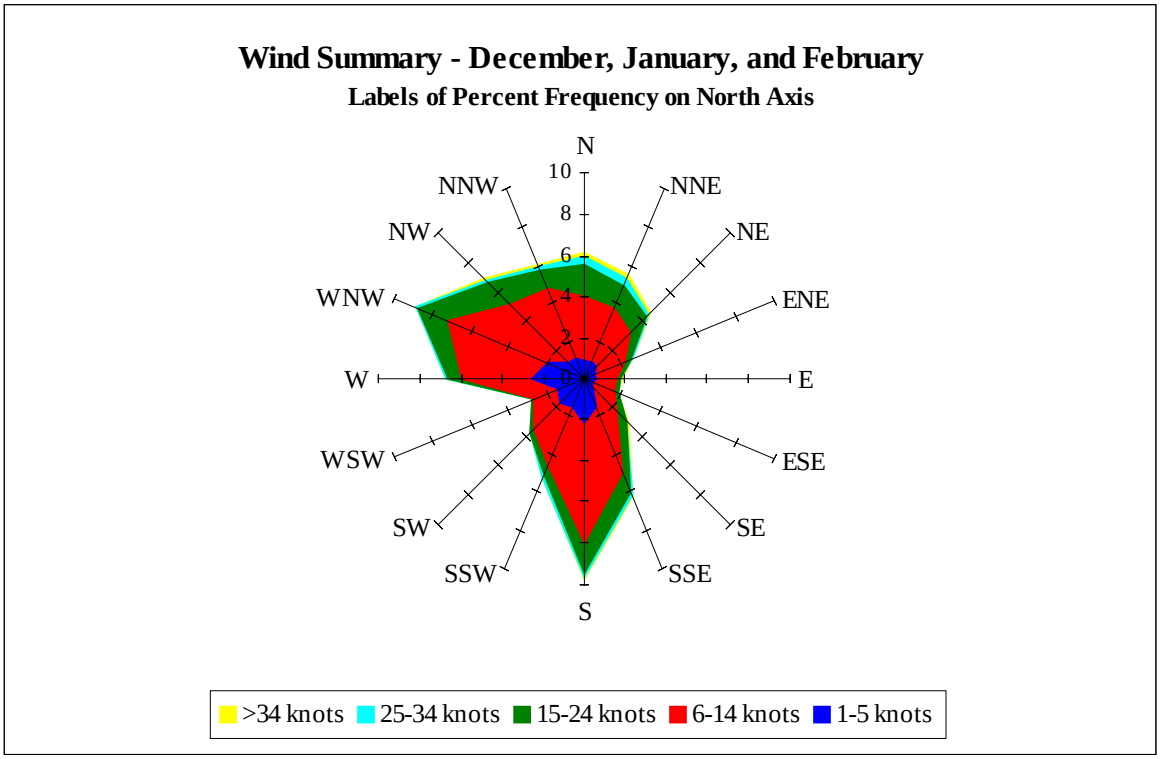
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

No Solar Radiation
Data Available

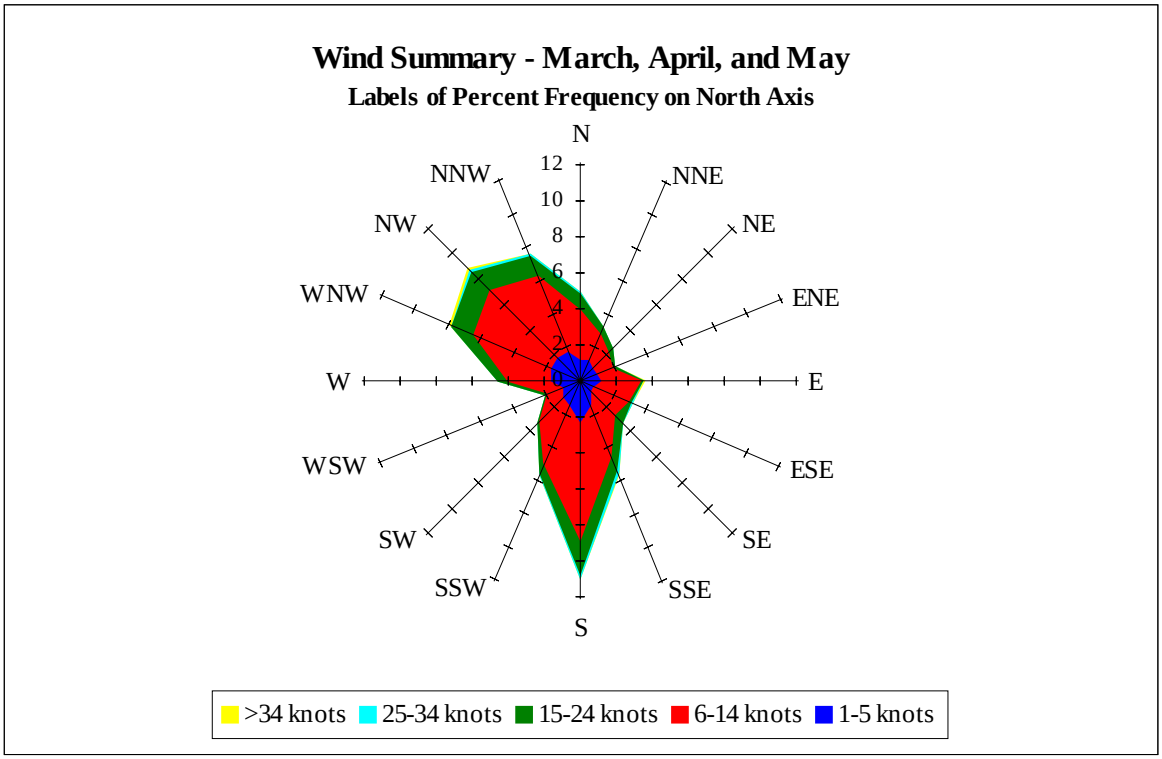
Average Annual Solar Heat and Illumination – Nearest Available Site

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

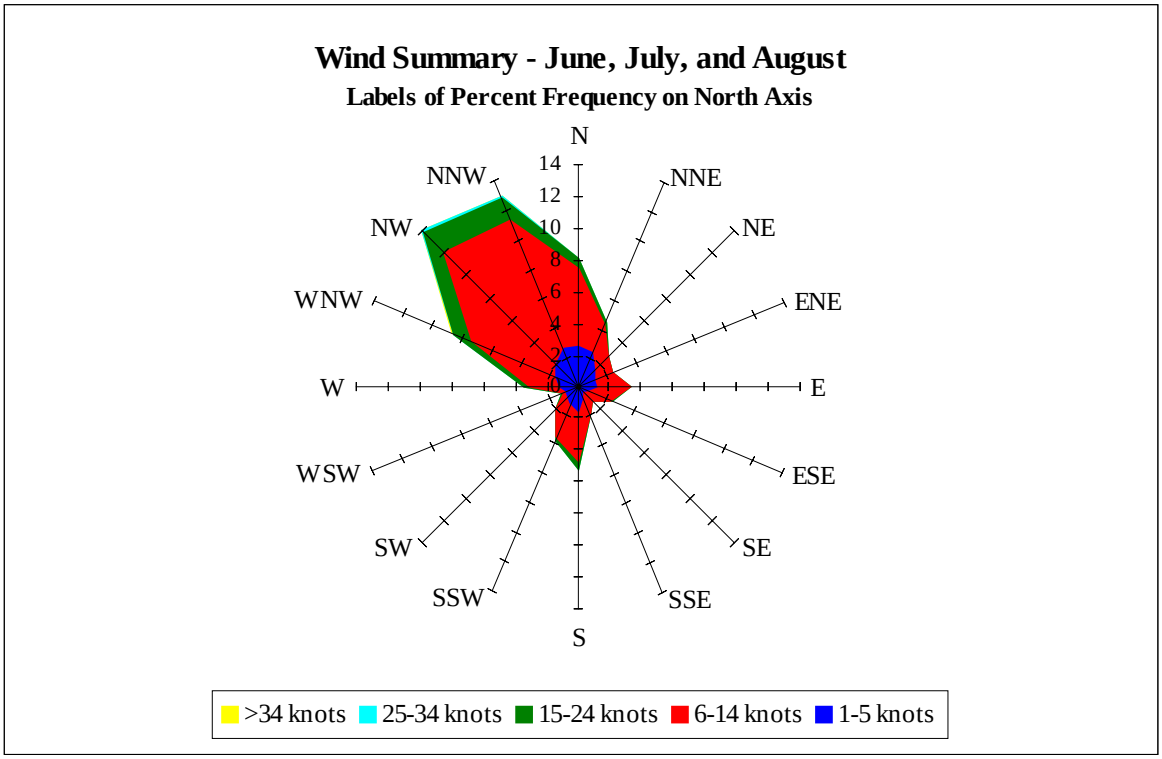




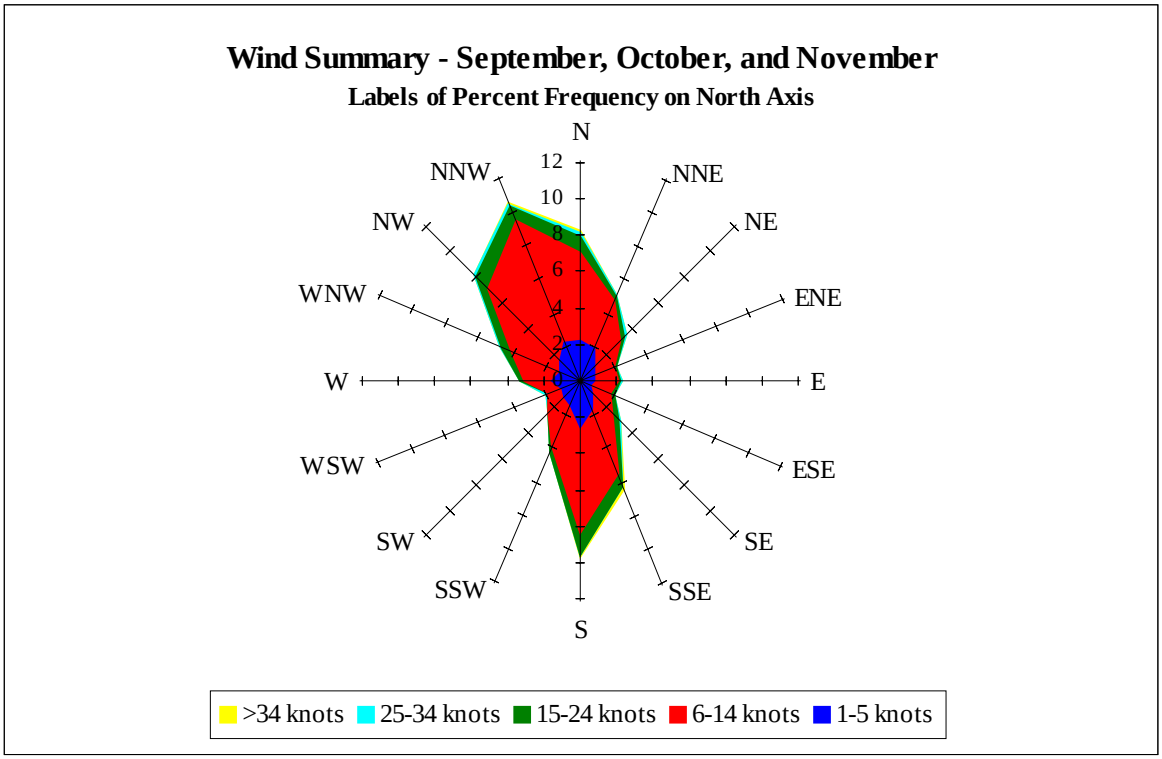
Percent Calm = 18.72



Percent Calm = 21.97



Percent Calm = 23.21



Percent Calm = 22.43