

**March 2008**

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Instrument: Eppley PSP**  
**Watt-Hours per Square Meter**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	10	73 ?	234 ?	291 ?	407 ?	?	?	?	?	?	105 ?	46	0	0	0	0	0	0	1165 ?
2	0	0	0	0	0	0	12	82 ?	326 ?	?	?	?	?	?	?	?	?	52	0	0	0	0	0	0	472 ?
3	0	0	0	0	0	0	16	79 ?	?	?	?	?	?	?	?	?	?	48	0	0	0	0	0	0	142 ?
4	0	0	0	0	0	0	11	61 ?	263 ?	293	407 ?	460 ?	453	341	341 ?	341 ?	104	23	0	0	0	0	0	0	3097 ?
5	0	0	0	0	0	0	17	88 ?	?	?	?	?	?	?	?	?	?	48	0	0	0	0	0	0	153 ?
6	0	0	0	0	0	0	19	90 ?	?	?	?	?	?	?	?	?	?	51	0	0	0	0	0	0	160 ?
7	0	0	0	0	0	0	14	68	170	167	89	151	123	103	98	47 ?	27 ?	24	0	0	0	0	0	0	1080
8	0	0	0	0	0	0	2	16 ?	130	148	86 ?	200	309	355 ?	180 ?	?	?	56	4	0	0	0	0	0	1486 ?
9	0	0	0	0	0	0	27	171	396 ?	622 ?	?	?	?	?	?	?	?	51 ?	1	0	0	0	0	0	1269 ?
10	0	0	0	0	0	0	25	91 ?	?	?	?	?	?	?	?	?	?	51 ?	4	0	0	0	0	0	171 ?
11	0	0	0	0	0	0	23	113 *?	*	*	*	*	709 ?	491	409	361	143	64	11	0	0	0	0	0	2324 *
12	0	0	0	0	0	0	31	185	408	594	735	829	856	799	665	492	267	77	0	0	0	0	0	0	5939
13	0	0	0	0	0	0	34	98 ?	?	?	?	?	?	?	?	?	?	49 ?	4	0	0	0	0	0	184 ?
14	0	0	0	0	0	0	22	123	216	363	356	366	441	532 ?	?	366	242	72	9	0	0	0	0	0	3107 ?
15	0	0	0	0	0	0	39	100 ?	?	?	?	?	?	456 ?	257 ?	229	196	52	1	0	0	0	0	0	1330 ?
16	0	0	0	0	0	0	8	56	164	242	509	267	195	266	422 ?	341	295	82	4	0	0	0	0	0	2851
17	0	0	0	0	0	0	44	155 ?	?	?	?	?	882 ?	835	690	492	299	98	5	0	0	0	0	0	3501 ?
18	0	0	0	0	0	0	33	213	429	608	688	723	569	279	216	184	122	35	2	0	0	0	0	0	4102
19	0	0	0	0	0	0	37	157	266	554	601	577	584	615	397	238	124	55	7	0	0	0	0	0	4212
20	0	0	0	0	0	0	38	61	301	588	792	889	909	850	723	537	319	104	8	0	0	0	0	0	6117
21	0	0	0	0	0	0	51	236	452	648	800	885	896	825	714	533	319	102	5	0	0	0	0	0	6466
22	0	0	0	0	0	0	45	190	388	470	623	761	864	805	668	504	303	90	3	0	0	0	0	0	5715
23	0	0	0	0	0	0	48	231	453	654	804	873	904	802	710	536	317	107	11	0	0	0	0	0	6449
24	0	0	0	0	0	0	30	136	284	464	485	506	585	500	627	548	306	87	12	0	0	0	0	0	4570
25	0	0	0	0	0	0	54	243	466	606	761	899	914	852	721	535	317	110	13	0	0	0	0	0	6490
26	0	0	0	0	0	0	34	219	400	590	775	856	874	814	692	516	304	101	10	0	0	0	0	0	6184
27	0	0	0	0	0	0	54	230	442	620	734	739	762	820	688	508	298	97	10	0	0	0	0	0	6002
28	0	0	0	0	0	2	62	236	443	631	767	840	778	764	536	516	253	97	10	0	0	0	0	0	5935
29	0	0	0	0	0	1	31	71	132	169	257	240	265	304	221	130	46	33	6	0	0	0	0	0	1906
30	0	0	0	0	0	0	10	52 ?	87	113	160	195	96	115	116	73	99	44	8	0	0	0	0	0	1166
31	0	0	0	0	0	2	40	142	285	333	434	363	521	563	272	215	164	79	8	0	0	0	0	0	3420
Avg	0	0	0	0	0	0	30	131	310	444	537	581	613	569	471	375	216	67	5	0	0	0	0	0	3161 ?
S D	0	0	0	0	0	1	16	68	121	191	243	278	278	254	227	169	100	26	4	0	0	0	0	0	2355
S/A	0	0	0	0	0	2.85	0.53	0.52	0.39	0.43	0.45	0.48	0.45	0.45	0.48	0.45	0.46	0.39	0.85	0	0	0	0	0	0.74
Min	0	0	0	0	0	0	2	16	87	113	86	151	96	103	98	47	27	23	0	0	0	0	0	0	142
Max	0	0	0	0	0	2	62	243	466	654	804	899	914	852	723	548	319	110	13	0	0	0	0	0	6490
n	0	0	0	0	0	7	287	278	244	240	234	233	246	248	248	251	259	353	61	0	0	0	0	0	3116

Daylight Data Recovery: 1.2% missing; 0.0% untested; 27.0% exceed the 15% QC threshold -- 4446 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31392F3 Calibration Factor: 7.3961 μV/W/m² Calibration Date: 07/2007

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

March 2008

Direct Normal Solar Radiation  
 Hourly Integrated and Daily Totals  
 Instrument: Eppley NIP  
 Watt-Hours per Square Meter

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	0	0?	0?	0?	0?	?	?	?	?	?	2?	0	0	0	0	0	0	0	2?
2	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	1	0	0	0	0	0	0	1?
3	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	1	0	0	0	0	0	0	1?
4	0	0	0	0	0	0	0	0?	0?	0	0?	0?	0	0	0	1?	0	0	0	0	0	0	0	0	2?
5	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	2	0	0	0	0	0	0	2?
6	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	1	0	0	0	0	0	0	1?
7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8	0	0	0	0	0	0	0	0	0	0	0	1	1	1?	0?	?	?	0	0	0	0	0	0	0	4?
9	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	?	2?	0	0	0	0	0	2?
10	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	?	1?	0	0	0	0	0	1?
11	0	0	0	0	0	0	0	0*?	*	*	*	*	250*?	213	130	231	2	56	0	0	0	0	0	0	883*
12	0	0	0	0	0	0	171	532	712	773	793	850	900	890	838	800	627	386	60	0	0	0	0	0	8333
13	0	0	0	0	0	0	27	54?	?	?	?	?	?	?	?	?	?	62?	0	0	0	0	0	0	143?
14	0	0	0	0	0	0	5	13	22	39	13	8	32	89?	145?	254	287	103	12	0	0	0	0	0	1022?
15	0	0	0	0	0	0	57	85?	?	?	?	?	94?	51?	25?	24	44	15	0	0	0	0	0	0	395?
16	0	0	0	0	0	0	1	1	2	8	57	3	1	53	181	241	460	248	28	0	0	0	0	0	1285
17	0	0	0	0	0	0	212	435?	?	?	?	?	989?	976	866	703	598	258	0	0	0	0	0	0	5039?
18	0	0	0	0	0	0	89	587	748	604	495	448	237	0	1	1	0	0	0	0	0	0	0	0	3210
19	0	0	0	0	0	0	10	120	138	495	266	185	204	229	81	21	2	17	0	0	0	0	0	0	1768
20	0	0	0	0	0	0	86	16	311	748	947	982	982	968	929	864	729	460	114	0	0	0	0	0	8137
21	0	0	0	0	0	0	310	689	843	918	953	965	949	875	893	851	740	465	92	0	0	0	0	0	9542
22	0	0	0	0	0	0	51	209	344	225	250	593	824	762	701	695	527	248	?	0	0	0	0	0	5431
23	0	0	0	0	0	0	184	558	745	854	901	874	907	788	817	774	681	398	9	0	0	0	0	0	8490
24	0	0	0	0	0	0	21	140	64	125	54	40	92	56	410	769	526	191	40	0	0	0	0	0	2528
25	0	0	0	0	0	0	240	634	791	724	700	910	934	917	867	767	613	361	41	0	0	0	0	0	8499
26	0	0	0	0	0	0	13	367	451	536	769	821	819	802	767	702	565	294	34	0	0	0	0	0	6940
27	0	0	0	0	0	0	165	483	653	669	617	541	607	805	752	673	538	266	22	0	0	0	0	0	6790
28	0	0	0	0	0	0	145	430	576	674	727	659	528	598	378	605	302	61	0	0	0	0	0	0	5682
29	0	0	0	0	0	0	0	0	0	0	1	0	3	3	1	0	0	0	0	0	0	0	0	0	9
30	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	1	1	0	0	0	0	6
31	0	0	0	0	0	1	3	13	35	28	15	2	23	63	1	1	2	11	0	0	0	0	0	0	198
Avg	0	0	0	0	0	0	58	173	307	353	360	394	408	397	382	408	315	126	15	0	0	0	0	0	2782?
S/D	0	0	0	0	0	0	87	239	331	353	381	403	410	406	382	358	297	161	29	0	0	0	0	0	3439
S/A	0	0	0	0	0	5.53	1.52	1.38	1.08	1	1.06	1.02	1.01	1.02	1	0.88	0.94	1.28	1.92	0	0	0	0	0	1.24
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Max	0	0	0	0	0	1	310	689	843	918	953	982	989	976	929	864	740	465	114	0	0	0	0	0	9542
n	0	0	0	0	0	7	288	280	233	239	237	235	245	249	255	256	265	353	58	0	0	0	0	0	3127

Daylight Data Recovery: 1.3% missing; 0.0% untested; 26.7% exceed the 15% QC threshold -- 4446 total daylight measurements.

Instrument: Eppley NIP Serial Number: 23398E6 Calibration Factor: 7.1447 μV/W/m² Calibration Date: 07/2007

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

**Elizabeth City State University**  
**36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5**

**March 2008**

**Diffuse Solar Radiation (Shadow Band) on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Instrument: Eppley PSP**  
**Watt-Hours per Square Meter**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	9	33 ?	180 ?	261 ?	307 ?	?	?	?	?	?	79 ?	34	0	0	0	0	0	0	902 ?
2	0	0	0	0	0	0	12	32 ?	63 ?	?	?	?	?	?	?	?	?	24	0	0	0	0	0	0	130 ?
3	0	0	0	0	0	0	13	31 ?	?	?	?	?	?	?	?	?	?	23	0	0	0	0	0	0	68 ?
4	0	0	0	0	0	0	11	50 ?	233 ?	263	348 ?	359 ?	428	322	301	275 ?	97	23	0	0	0	0	0	0	2709 ?
5	0	0	0	0	0	0	10	28 ?	?	?	?	?	?	?	?	?	?	15	0	0	0	0	0	0	53 ?
6	0	0	0	0	0	0	18	42 ?	?	?	?	?	?	?	?	?	?	29	0	0	0	0	0	0	90 ?
7	0	0	0	0	0	0	16	68	166	167	89	151	123	99	86	44	24	24	0	0	0	0	0	0	1055
8	0	0	0	0	0	0	2	15	125	122	76	172	309	314 ?	156 ?	?	?	26	4	0	0	0	0	0	1321 ?
9	0	0	0	0	0	0	13	38	54 ?	61 ?	?	?	?	?	?	?	?	18 ?	1	0	0	0	0	0	185 ?
10	0	0	0	0	0	0	17	36 ?	?	?	?	?	?	?	?	?	?	26 ?	4	0	0	0	0	0	83 ?
11	0	0	0	0	0	0	16	46 *?	*	*	*	*	290 ?	295	317	234	143	57	11	0	0	0	0	0	1408 *
12	0	0	0	0	0	0	16	45	57	69	87	88	90	91	94	73	57	26	0	0	0	0	0	0	794
13	0	0	0	0	0	0	20	40 ?	?	?	?	?	?	?	?	?	?	27 ?	4	0	0	0	0	0	90 ?
14	0	0	0	0	0	0	21	115	192	304	340	361	389	366 ?	243 ?	211	137	56	9	0	0	0	0	0	2743 ?
15	0	0	0	0	0	0	25	50 ?	?	?	?	?	281 ?	345 ?	237 ?	202	165	45	1	0	0	0	0	0	1351 ?
16	0	0	0	0	0	0	8	56	164	233	413	263	195	201	277	176	91	30	3	0	0	0	0	0	2112
17	0	0	0	0	0	0	19	39 ?	?	?	?	?	81 ?	81	103	114	90	53	5	0	0	0	0	0	586 ?
18	0	0	0	0	0	0	20	63	98	239	295	337	359	279	216	184	122	35	2	0	0	0	0	0	2250
19	0	0	0	0	0	0	36	117	206	231	371	403	398	412	332	225	123	53	7	0	0	0	0	0	2914
20	0	0	0	0	0	0	26	58	135	122	84	84	89	87	85	76	63	34	6	0	0	0	0	0	949
21	0	0	0	0	0	0	21	54	70	80	88	92	97	122	96	76	58	31	4	0	0	0	0	0	888
22	0	0	0	0	0	0	40	125	215	292	381	245	161	186	171	123	113	47	1	0	0	0	0	0	2098
23	0	0	0	0	0	0	29	76	100	109	115	143	131	160	134	112	74	41	11	0	0	0	0	0	1235
24	0	0	0	0	0	0	31	96	250	373	436	468	485	444	332	125	103	57	10	0	0	0	0	0	3210
25	0	0	0	0	0	0	26	65	89	142	215	135	112	108	106	106	89	47	12	0	0	0	0	0	1253
26	0	0	0	0	0	0	31	108	174	225	171	164	165	159	143	122	95	50	9	0	0	0	0	0	1615
27	0	0	0	0	0	0	33	87	122	181	233	259	214	160	147	127	96	49	10	0	0	0	0	0	1718
28	0	0	0	0	0	?	42	102	147	171	178	251	280	247	233	167	120	83	10	0	0	0	0	0	2030
29	0	0	0	0	0	1	31	71	132	169	257	240	265	303	221	130	46	33	6	0	0	0	0	0	1905
30	0	0	0	0	0	0	10	39	87	113	160	195	96	115	116	73	99	44	8	0	0	0	0	0	1154
31	0	0	0	0	0	3 ?	40	139	253	294	413	363	475	469	272	214	163	76	8	0	0	0	0	0	3182
Avg	0	0	0	0	0	0	21	63	144	192	241	239	240	233	192	145	98	39	5	0	0	0	0	0	1356 ?
S D	0	0	0	0	0	1	11	32	62	86	126	113	133	123	85	63	36	16	4	0	0	0	0	0	992
S/A	0	0	0	0	0	3.79	0.49	0.51	0.43	0.45	0.52	0.47	0.56	0.53	0.44	0.43	0.37	0.42	0.88	0	0	0	0	0	0.73
Min	0	0	0	0	0	0	2	15	54	61	76	84	81	81	85	44	24	15	0	0	0	0	0	0	53
Max	0	0	0	0	0	3	42	139	253	373	436	468	485	469	332	275	165	83	12	0	0	0	0	0	3210
n	0	0	0	0	0	5	278	287	244	244	236	235	249	249	255	254	264	353	61	0	0	0	0	0	3138

Daylight Data Recovery: 1.2% missing; 0.0% untested; 26.5% exceed the 15% QC threshold -- 4446 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31393F3 Calibration Factor: 7.6820 μV/W/m² Calibration Date: 07/2007

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

**Elizabeth City State University**  
**36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5**

**March 2008**

**Dry Bulb Temperature (Roof)**  
**Hourly and Daily Averages**  
**Instrument: CSI HMP-35C**  
**Degrees Celsius**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	8	7.5	7.2	8	8.3	8.4	8.4	8.9	10.2	11.4	13.1	14.8	15.6	16.1	16.2	16.3	16.1	14.8	13.3	12.3	10.1	8	7.5	6.8	11.1
2	6.1	5.1	4.7	4.1	3.7	3.3	2.7	3.8	5.3	6.2	7.5	8.8	10	11	11.9	10	8.9	7.8	6.8	6	5.4	5.2	5	4.5	6.4
3	4.3	4.8	4.4	5	5	5.2	5.4	7	9.9	13	14.7	16.7	18.3	19.3	19.9	19.7	18.7	17.5	16	15.4	15.1	14.7	14.4	14.6	12.5
4	14.6	13.8	13	13.1	13.7	14.9	15	15.7	17.7	18.8	20.6	21.4	21.8	21.5	21.7	21.5	20.5	19.8	19.2	18.9	19.3	19.8	20.1	20.4	18.2
5	20.3	20	15.3	15.5	15.8	15.7	15.2	14.7	14.6	14.8	15	15.7	16.6	17.2	17.6	18	18.1	17.8	16.4	15.3	14	12.7	12.7	11.2	15.8
6	10.6	9.7	9.2	8.6	8.1	7.6	7.6	8.7	10.4	12.2	13.3	14.4	14.9	15.3	14.7	14	13.1	11.5	10.1	9.4	9.5	9.5	9.4	9.8	10.9
7	10.1	10.1	10	9.8	9.8	10.1	10.7	11.5	12.9	14.8	16.1	16.3	16.9	17.3	17.7	18.1	18	17.9	18.8	19.8	20.5	20.3	19.7	18.8	15.3
8	18.6	19	18.8	18.8	19	19.5	19.3	19.4	20.3	21.2	20	19.5	20.3	20.2	18.6	17.9	15.7	13.2	11.9	10.8	9.9	8.7	6.8	4.7	16.3
9	3.7	3.2	2.4	1.9	1.4	0.7	0.1	0.4	1.5	3	4.3	5.7	7	8.3	9.1	9.5	9.7	9.5	8.3	7.6	6.8	5.9	5.1	4.6	5
10	3.2	3	2.8	2.7	3.6	3.2	3.5	4.9	6.9	8	8.7	9.6	10.4	11.3	12.2	12.1	11.2	10.6	10.2	9.8	9.3	8.9	9	9	7.7
11	9.2	9.6	9.7	9.4	8.3	7.4	7	7.7	9.8 *	12.4 *	13.4	14.6	15.8	15.4	14.2	13.1	12.3	11.1	9.9	9.5	9.6	9.8	9.9	10.2	10.8
12	11.1	11.7	11.4	11	10.6	10.2	9.6	9.8	10.9	12.1	13.6	14.6	15.8	16.4	17	17.8	18	17.9	16.2	13.6	11	10.2	10.1	10	12.9
13	9.7	9.3	8.5	7.7	8	7.9	8	9.1	11.1	12.7	14	15.1	16.6	17.7	19	20.8	21.2	19.9	17.7	17	16.4	16.2	15.8	15.5	14
14	14.9	14.1	13.5	13.3	12.9	12.6	12.6	13.4	14.6	15.8	17.1	17.8	19.1	20.7	21.3	21.6	21.4	20	18.7	17.7	16.9	16.5	16.5	16	16.6
15	15.1	14.7	14.3	14	14.4	14.1	13.4	13.8	15.2	16	17.1	18.2	18.6	18.5	16.4	15.5	14	12.8	12.2	11.6	10.4	10	10.1	10.2	14.2
16	10.1	10	9.8	9.2	8.6	8.1	8.3	8.4	8.9	9.7	10.8	10.9	10.7	10.7	11.8	12.4	12.9	13.3	11.1	9.6	8.9	8.4	7.2	6.5	9.8
17	5.6	4.9	3.5	2.2	1.5	2.1	3.3	4.1	5	5.8	6.9	7.8	8.7	9.5	10	10	9.8	8.8	7.1	6.6	6.5	6.1	5.5	4.6	6.1
18	4.9	3.9	3.4	3	3.7	3.2	3.5	6	8.4	9.7	10.6	11.4	12.4	11.7	11.4	11.9	11.8	12.2	11.8	11.4	10.7	11	12.1	12.9	8.9
19	13.4	13.6	13.8	14.1	14.7	15.1	15.2	16.2	17.2	19.1	20.8	21.6	22.4	23.1	23.3	23.4	22.5	21.5	20.9	20.4	20.2	20.1	19.1	19.1	18.8
20	19.4	19.9	20.1	20	19.3	17.2	15.4	13.5	12.6	13.2	13.2	13.4	13.8	14.6	15.3	15.9	15.7	14.9	13.3	12	11	9.9	9.2	8.3	14.6
21	7.9	7.4	7.1	5.2	4.7	4.2	4.1	5.8	8.4	10.4	12.1	13.7	14.7	15.3	15.9	16.5	16.9	16.6	14.7	13	11.6	11.3	11.2	11.2	10.8
22	11.5	11.1	11	10.8	10.4	10.5	11.2	12.7	14.6	16.1	17.7	19.6	21	21.7	22.3	22.7	22.6	21.1	10.9	9.2	8.4	8.5	7.7	7.2	14.2
23	6.8	6.5	5.9	5.6	5.4	4.9	4.5	5.6	7.3	8.3	8.7	9.1	9.7	9.4	9.4	9.7	9.2	8.2	6.7	6	5.9	5.8	6.1	6.4	7.1
24	7	6.8	6.8	6.7	6.7	6.5	5.9	6.3	7.6	8.9	9	9.1	9.3	9.6	9.8	10.1	9.6	9	7.9	7.1	6.4	6	5.8	5.6	7.6
25	5.1	4.1	3.3	3.1	2.6	2.2	2.4	4.2	6.6	8.3	9.2	10.2	11	11.8	12.2	11.1	10.5	10.3	8.6	8.1	7.6	7.6	8.1	8.4	7.4
26	8.1	8	8.2	7.9	7.8	7.8	8.1	9.3	10.7	12.2	14.3	16.6	18.4	19.5	20.4	20.5	20.7	20.2	18.4	16.2	15	14.4	13.9	13.2	13.7
27	12.3	11.8	11.2	10.7	10.2	9.9	10.2	11.8	14	16.5	18.5	19.9	21.4	22	22.7	23	22.7	21.9	19.5	18.1	17.1	16.5	16.2	16	16.4
28	15.8	15.6	15.4	15.3	15	14.8	14.8	16.5	18.4	20.3	21.7	22.8	24.2	24.9	25.3	25.9	25.8	25	23.6	22.5	21.8	18.8	15.1	13.3	19.7
29	12.2	11.2	11	10.2	9.7	8.9	8.6	8.3	7.7	7.4	6.9	6.6	6.6	6.9	6.9	7	6.9	6.8	6.6	6.5	6.7	6.9	7	7	7.9
30	7.3	7.5	7.5	7.5	7.7	7.7	7.7	7.7	7.2	6.9	7.1	7.7	7.7	7.4	7.8	7.8	7.9	8.2	8.7	9	9.3	9.6	9.5	8.7	8
31	8.7	9.6	10.6	11	11.2	11.6	12.2	13.5	15.2	16.5	17.4	17.4	17.7	18.1	18.4	18.4	18.2	17.8	17.1	16.5	16.3	16.1	16.1	15.9	15.1
Avg	10.2	9.9	9.5	9.2	9.1	8.9	8.8	9.6	11	12.3	13.3	14.2	15.1	15.6	15.8	15.9	15.5	14.8	13.3	12.5	11.9	11.4	11	10.7	12.1
S D	4.6	4.7	4.6	4.8	4.8	4.9	4.7	4.5	4.4	4.5	4.7	4.8	4.9	5	5	5.2	5.2	5.1	4.8	4.7	4.8	4.6	4.5	4.6	4.1
S/A	0.45	0.48	0.49	0.52	0.53	0.55	0.54	0.47	0.4	0.37	0.35	0.33	0.33	0.32	0.32	0.33	0.34	0.34	0.36	0.38	0.4	0.41	0.41	0.43	0.34
Min	3.2	3	2.4	1.9	1.4	0.7	0.1	0.4	1.5	3	4.3	5.7	6.6	6.9	6.9	7	6.9	6.8	6.6	6	5.4	5.2	5	4.5	5
Max	20.3	20	20.1	20	19.3	19.5	19.3	19.4	20.3	21.2	21.7	22.8	24.2	24.9	25.3	25.9	25.8	25	23.6	22.5	21.8	20.3	20.1	20.4	19.7
n	372	372	372	372	372	372	372	372	365	365	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8914

Data Recovery: 0.2% missing; 0.0% untested; 0.0% failed QC -- 8928 total measurements.

Instrument: CSI HMP-35C    Serial Number: P0520031    Calibration Factor: 1.00 deg C/mV    Calibration Date: 03/1988

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

**Elizabeth City State University**  
**36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5**

**March 2008**

**Relative Humidity (Roof)**  
**Hourly and Daily Averages**  
**Instrument: CSI HMP-35C**  
**Percent**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily	
1	85.5	95	98.7	95	91.4	88.8	87.7	87.4	81.2	75.8	67.5	55.7	50.9	41.7	35.1	29.6	27.8	29.3	35	36.5	54.4	78.5	82	84.9	66.5	
2	89	91.7	85.1	82.5	82.3	82.7	85.8	81.1	74.3	70.3	65.1	59.6	55.7	52.2	51	64.9	68.7	71.7	77.8	81	85.5	90	89.8	93.2	76.3	
3	96.1	95	97.8	98.3	97.7	96.9	92.3	85.2	68.3	54.8	59.3	64.2	66.2	65.7	65.9	68.9	74.8	80	86	89.1	90.8	92.2	93.7	94.2	82.2	
4	96	98.8	101.3	101.5	96.8	88.6	88.7	89.5	84.6	81	76.5	74.3	76.1	78	79.2	80.9	85	89.4	93.2	96.7	96.2	96.4	97.1	97.5	89.3	
5	99.3	101.1	?	104.3 ?	102	99.6	91.8	85.6	81.6	76.2	69.8	61.7	62.8	58.8	56.7	55.3	55.2	57.4	65.1	68.8	73.2	81	78.9	91.5	77.3	
6	91.4	90.4	86.3	87.5	96.4	96.9	96.9	97.5	91.8	86.4	83.8	81.1	80.4	79.3	82.1	83.4	86.6	92.4	97.7	101.6	103.2	104.2	104.9 ?	104.7 ?	91.9	
7	104.7	104.8 ?	104.8 ?	?	?	?	?	?	?	103	99.9	101.7 ?	?	?	?	?	?	?	?	?	102.9 ?	101.5	101.4	101.5	100.3	102.4 ?
8	100.3	99.6	102.6	104.5 ?	?	103.8	104.8 ?	?	103.3	100.5	104.1 ?	103.1 ?	95.2	82.8	77.3	48.5	48.7	52	55.7	59.4	62.9	69.2	59.9	58.9	81.7 ?	
9	61.3	62.6	69	71.7	69.7	71.8	71.9	68.9	60	53	47.6	44	43.7	41.2	40.2	40.1	39.1	41.6	48.7	52.1	54.9	60.3	63.7	63.8	55.9	
10	75.1	77.1	75.9	76.5	75.1	85.5	89.3	83	74.1	68.6	66.7	64.7	62.6	58.9	60.2	67.4	73.9	81.2	81.6	78.4	80.3	82.2	86.4	91.7	75.7	
11	94.5	95.5	93	92.3	94.9	97.4	98.3	95.2	83.7 *	71.7 *	68.7	63.6	60.3	62.9	69.4	71.5	77.6	86.5	95.7	100	101.1	100.6	101.2	101	86.5	
12	100.7	99.4	98.8	96.6	97.3	95	92.1	82.3	69.2	52.7	44.8	43.7	42.5	40	39.6	37.6	36	37.5	42.2	58.9	84.7	88.4	80.3	83.6	68.5	
13	83.2	87.3	87.6	86.6	93.6	101.7	103.2	98.9	91	82.9	78.2	77.2	74.7	72.9	69.2	54.2	48.1	52.3	61.6	62.5	61.9	58.9	61.4	65.9	75.6	
14	69.3	74.7	79.6	81.3	82.7	84.4	84.4	80.9	76	71.7	67.5	65.8	60.7	53.3	49.7	48.1	49.9	51.7	54.9	62.8	71.9	80.6	78.9	79.2	69.2	
15	81.9	81.5	80.8	82.4	83.1	84.9	87.5	85	77.8	68.6	65.2	60.5	60	64.1	73.8	77	82.1	85.8	90	95.3	103.2 ?	?	?	?	79.5 ?	
16	?	?	?	?	?	?	104.3 ?	101.9	98.3	93.5	88.1	85.4	88.7	90.4	79.8	72.1	68.2	64.1	76.1	83.3	85.6	82.3	77.3	72.5	84 ?	
17	71.3	74.4	81.3	87.5	90.9	85.3	71.8	68.8	66.4	62.8	59	55.8	51.3	47.5	46.9	44.4	53.1	58.2	64.3	65.3	67.9	72.9	80.1	84.3	67.1	
18	86.2	91.1	92.9	94.7	93.7	97.1	100.6	93	74.8	68.1	66.1	61.4	58.1	70.2	68.6	70.7	79.6	79.9	83.5	87.5	94.1	97.7	97.4	95.6	83.4	
19	95.2	96.3	96.9	98	97.3	97.5	97.9	95	93.3	89	84.3	82.1	79.4	76.6	75.2	73	78	85	88.6	92.9	95.5	97.3	103.8	104.5	90.5	
20	104	102	98.4	94.4	92.3	86.3	83.1	75.1	63.2	58.9	56.2	49.2	42.2	39.3	34.2	31.7	33.9	33.8	35.5	38.1	44	51.6	54.8	55.7	60.7	
21	54.6	56.2	55.5	64.7	66.2	68.1	69.2	64.7	56.9	49.5	39.5	31.9	29.9	30.7	29.7	28.4	27.9	29.8	38.6	50.6	71.9	76.7	75.3	75.2	51.7	
22	72.5	72.1	71.3	76.3	80.3	81.1	82	82	81.2	77.9	68.9	59	52.1	46.8	40.9	37.8	37.5	46.2	94	95.1	97	95.2	98	97.9	72.6	
23	98.9	98.8	99	98.9	90.5	83.9	84	76.5	69.5	58.3	52.8	50.6	51.4	52.8	53.2	54.1	56.2	60.4	70.9	77.9	80.5	81.2	78.9	78.7	73.3	
24	79.2	79.5	80	83.6	83.2	84.2	86	81.9	73.8	63.3	63	59.8	54.5	57.9	61.3	52.5	48.4	59	66.2	68.6	72.2	74.7	77	78.3	70.3	
25	83	87.7	91	86.9	84.1	85.2	84.8	78	72	60.5	50.4	42.1	37.4	35.4	36.8	49.9	51.6	52.6	66.5	75.1	77.2	79.6	76.4	72.7	67.4	
26	73.7	72.1	72.5	76.7	78.5	78	76.8	71.1	62.5	58.1	53	47.4	44.3	41.4	40.3	40.4	41.2	43.1	51.3	64.9	68.9	70.4	70.2	73.2	61.3	
27	77.2	79.2	82.7	84.8	86.9	89.2	88.8	81.9	70.3	60.2	51.1	46.5	39.5	37.1	36.7	37.9	39.3	49.1	63.8	67.2	73	76.6	77.3	82.1	65.8	
28	87	88.6	88.6	90.1	93.1	95.7	96.9	91.9	83.9	75.4	70.2	66.6	58.6	51.5	46.9	43.8	43.3	51.4	56.7	61.1	66.3	77.4	91.9	96.1	73.9	
29	95.7	97.1	94.1	87.7	81.9	84.4	84.7	84.7	78.1	75.7	73.8	73.8	69	68.3	69.1	71.1	72	73.5	75.9	77.7	78.1	77.3	77.8	77.9	79.1	
30	73.2	70.5	66.3	66.4	69.3	70.5	73.7	75.5	91.4	98.8	99.6	98.1	100.7	104.5 ?	?	103.8 ?	102.7	99.7	97.7	97.7	97.5	96	96.3	103.1 ?	89.3 ?	
31	?	?	104.5	104.3	104.3	103.4	102.2	99.5	93.1	88.7	84.8	84.9	84.5	84.7	83.8	84.2	87.3	90.7	93.4	92.2	91.1	92.7	94.7	97.2	93	
Avg	85.5	86.9	87.5	88.1	87.7	88.5	88.7	84.2	78.2	72.8	68.6	65	61.1	59.6	57	57.4	59.1	62.8	70.3	75.5	80.2	82.8	83.6	85.2	76.2	
S D	13.1	12.8	12.7	10.9	10	9.6	9.9	9.8	11.7	14.8	16.2	17.8	17.6	18.4	17	19	20.4	20.4	19.6	18.5	15.9	13.2	13.7	13.9	11.7	
S/A	0.15	0.15	0.14	0.12	0.11	0.11	0.11	0.12	0.15	0.2	0.24	0.27	0.29	0.31	0.3	0.33	0.35	0.32	0.28	0.25	0.2	0.16	0.16	0.16	0.15	
Min	54.6	56.2	55.5	64.7	66.2	68.1	69.2	64.7	56.9	49.5	39.5	31.9	29.9	30.7	29.7	28.4	27.8	29.3	35	36.5	44	51.6	54.8	55.7	51.7	
Max	104.7	104.8	104.8	104.5	104.3	103.8	104.8	101.9	103.3	103	104.1	103.1	100.7	104.5	83.8	103.8	102.7	99.7	97.7	102.9	103.2	104.2	104.9	104.7	102.4	
n	347	344	341	340	336	348	344	348	351	364	368	362	360	352	348	353	360	360	360	368	365	360	354	347	8480	

Data Recovery: 0.2% missing; 0.0% untested; 4.9% failed QC -- 8928 total measurements.

Instrument: CSI HMP-35C    Serial Number: P0520031    Calibration Factor: 0.10 %/mV    Calibration Date: 01/1999

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

**Elizabeth City State University**  
**36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5**

**March 2008**

**Dry Bulb Temperature (CR10)**  
**Hourly and Daily Averages**  
**Instrument: CSI**  
**Degrees Celsius**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	8.2	7.6	6.9	6.6	6.8	7.3	7.4	8	10	12	13.8	15.7	17.6	18.5	18.9	19	19	17.7	14.9	12.2	10.3	8.9	7.5	6.1	11.7
2	4.8	4	3.5	3	2.4	1.8	1.2	1.6	4.8	8.1	10.9	13.5	15.5	16.7	17.2	16.9	15	12.9	9.6	7	5.4	4.6	4	3.3	7.8
3	2.4	2.1	2.1	2	2.6	3.1	3.4	4.7	8.2	12.4	16.2	18.6	20.7	21.9	22.8	23.5	23.1	21.6	18.8	16.5	15.3	14.5	14.1	13.7	12.7
4	13.7	13.5	12.9	12.3	12.3	12.8	13.7	14.5	17	19.3	21.2	23.3	24.3	24.4	24.4	24.2	23.7	22	20.7	19.8	19.4	19.6	20	20.1	18.7
5	20.2	19.8	18.5	16.6	15.6	15.1	14.9	15.2	16.4	17.5	18.4	19.1	20	20.5	20.8	21.2	21.3	20.7	18.4	15.3	13.2	11.5	10.1	9.8	17.1
6	9	8.9	8.7	8.4	7.9	7.4	7	7.5	10.1	13.1	16	18.3	19.9	20.4	20.2	19.7	18.7	16.8	13.9	11.6	10.5	10.1	9.5	9.3	12.6
7	9.6	9.9	10.1	9.7	9.6	9.7	10	10.8	12	14.1	16	16.7	16.9	17.2	17.7	18	18.2	18.2	18.2	18.6	19.2	19.9	20.1	19.7	15
8	19.1	18.9	18.9	18.8	18.8	19.1	19.3	19.2	19.6	20.6	21	20.1	20	21.6	21.9	21	20	17.6	14.7	12.4	11	9.8	8.5	6.5	17.4
9	4.6	3.4	2.5	1.6	1	0.2	-0.5	0	2.4	4.9	7.6	9.6	11.2	12	12.8	13.3	13.4	12.7	10.3	7.4	5.7	4.3	3.2	2.3	6.1
10	1.6	0.7	0.1	-0.7	-0.1	1	1.3	2.7	6.1	9.3	11.9	13.8	15	15.6	16.3	17	16.4	14.7	12.3	10.2	8.8	8.1	8	8.1	8.3
11	8.4	8.7	9	9.1	8.3	7	6.1	6.5	8.5 *	16.2 *	17.7	19	20.8	21.6	18.8	17.4	15.9	14	12	10.2	9.4	9.3	9.4	9.3	12.2
12	9.7	10.4	10.8	10.3	9.9	9.6	9.1	9.7	11.8	14	16.1	18	19.1	19.5	19.8	20.2	20.6	20.2	18.1	14.5	11.7	9.5	8.8	8.5	13.8
13	8	7.6	7.1	6.6	6.2	6.2	6.3	7.7	10.8	13.9	16.5	18.4	19.8	20.9	21.7	23.3	24.4	23.8	20.6	17.8	16.5	15.8	15.4	15.1	14.6
14	14.8	14	13	12.3	11.7	11.4	11.3	12	13.7	15.6	17.9	19.2	20.2	21.9	23.5	24.1	24.1	23	20.6	18.5	17.3	16.6	16.6	16.5	17.1
15	15.7	14.7	14.1	13.7	13.5	13.6	13.3	13.8	16.1	18.5	20.8	23.1	24.3	24.5	22.7	20	18	16.1	14.1	13	11.8	10.9	10.4	10.4	16.1
16	10.3	10.3	10.2	9.9	9.4	8.8	8.5	8.3	8.6	9.6	11.3	13.1	13	12.7	13.2	14.3	15	15.6	13.8	10.8	8.8	7.5	7	6.2	10.7
17	5.2	4.2	3.1	1.6	0.3	-0.4	0.2	2.8	5.7	7.9	9.6	11.2	12.2	12.6	13.2	13.8	13.9	13.4	10.2	7.1	6.1	5.3	4.5	3.2	7
18	1.9	1.7	0.8	0.2	0.1	0.1	0.2	1.9	7	10.9	13.3	14.9	16.1	15.8	14.5	13.9	13.6	13.3	12.9	12.3	11.2	10.5	10.7	11.6	8.7
19	12.3	12.8	13.2	13.4	13.6	14	14.3	15	17.1	19.2	21.9	23.6	24.5	25.4	26	25.6	24.8	23.5	22.3	21.3	20.7	20.5	19.9	19.2	19.3
20	19	19.2	19.6	20	19.8	19	17.2	16	14.7	15.3	16.5	17	17.3	17.3	17.6	18.3	18.7	18	15.7	12.8	10.8	9.4	8.4	7.5	16.1
21	6.7	6.1	5.4	4.6	3.2	2.4	2.1	4.3	8.5	12.5	15.2	17	18.6	19	19	19.4	19.7	19.4	17.2	13.4	11.3	10.4	9.9	9.8	11.5
22	10.2	10.4	10.2	10.1	9.9	9.6	9.7	11.2	13.7	16.4	18.5	20.6	22.6	23.7	24.4	24.9	25.1	24.6	19.9	13.6	10.3	9.1	8.5	7.4	15.2
23	6.7	6	5.2	4.5	4.3	4	3.5	4.8	7.6	10.1	11.8	12.9	13.6	13.8	13.6	13.9	13.9	12.8	9.9	6.9	5.7	5.3	5.1	5.4	8.4
24	5.8	6.2	6.3	6.1	6.1	6.1	5.9	6.1	7.1	9.2	11	11.7	12	12.5	12.7	13.4	13.5	12.2	10.1	7.9	6.6	5.6	5	4.7	8.5
25	4.2	3.5	2.3	1.5	1.1	0.6	0.5	2.6	6.4	9.8	12.4	14.1	15.4	16	16.9	16.6	15.4	14.1	11.7	8.8	7.5	6.8	6.6	6.8	8.4
26	7	7	7.3	7.4	7.2	7	7.1	8	10.7	13.2	15.5	18.2	20.2	21.4	22.3	23.1	23.1	22.7	20.9	18	15.8	14.4	13.6	13	14.3
27	12.2	11.1	10.4	9.9	9.4	9	8.9	10.6	13.7	16.9	19.7	21.5	23	23.9	24.5	25.2	25.4	24.8	22.5	19.7	17.8	16.6	15.8	15.4	17
28	15.2	15	14.9	14.8	14.6	14.4	14.3	15.6	18.4	21	23.2	24.8	26	26.9	27.6	27.9	28.4	27.5	25.6	23.6	22.6	21.7	19	16.1	20.8
29	13.9	12.4	11.7	11.1	10.4	10.1	9.5	9.3	9.2	9.1	9	8.9	8.6	9	9.2	8.9	8.6	8	7.6	7.1	7	7	7.1	7.2	9.2
30	7.3	7.4	7.6	7.7	7.8	7.8	7.9	8	7.9	7.5	7.3	7.7	8.3	8.2	8.2	8.3	8.1	8.1	8.1	8.3	8.8	9.2	9.6	9.4	8.1
31	9	9.1	9.6	10.2	10.6	11	11.5	12.4	14.2	16.4	18.4	19.4	19.8	20.4	20.7	20.3	20.2	19.5	18.7	17.5	16.7	16.3	16.2	16.2	15.6
Avg	9.6	9.3	8.9	8.5	8.2	8	7.9	8.7	10.9	13.4	15.4	16.9	18	18.6	18.8	18.9	18.7	17.7	15.6	13.4	12	11.3	10.7	10.2	12.9
S D	5	5.1	5.2	5.4	5.4	5.4	5.4	5	4.4	4.2	4.3	4.4	4.6	4.9	4.9	4.9	5	5	4.8	4.8	4.9	5	5	5	4.1
S/A	0.53	0.55	0.59	0.63	0.66	0.67	0.68	0.57	0.4	0.32	0.28	0.26	0.26	0.26	0.26	0.26	0.27	0.28	0.31	0.36	0.4	0.44	0.47	0.49	0.32
Min	1.6	0.7	0.1	-0.7	-0.1	-0.4	-0.5	0	2.4	4.9	7.3	7.7	8.3	8.2	8.2	8.3	8.1	8	7.6	6.9	5.4	4.3	3.2	2.3	6.1
Max	20.2	19.8	19.6	20	19.8	19.1	19.3	19.2	19.6	21	23.2	24.8	26	26.9	27.6	27.9	28.4	27.5	25.6	23.6	22.6	21.7	20.1	20.1	20.8
n	372	372	372	372	372	372	372	372	365	365	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8914

Data Recovery: 0.2% missing; 0.0% untested; 0.0% failed QC -- 8928 total measurements.

Instrument: CSI Serial Number: Internal Temp Calibration Factor: N/A Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

**Elizabeth City State University**  
**36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5**

**March 2008**

**Wind Speed**  
**Hourly and Daily Averages**  
**Instrument: NRG MAX-40**  
**Meters per Second**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	4.1	4.4	3.4	3.9	4	3.8	4.3	5	5.8	6.7	6	7.7	6.2	6.3	7.1	6.1	4.9	3.3	1.4	0.3	0.9	1.3	1	0.8	4.1
2	0.8	2	1.8	1.8	1.5	1.3	0.8	1.3	1.7	2.2	1.8	1.5	1.2	1.2	1.4	3.5	3.3	2.8	2.4	1.9	1.8	1.7	1	0.3	1.7
3	0.5	0.8	0.3	1.3	1.7	1.6	1.6	2.3	3.2	3.1	4.3	4.2	4.9	5	4.5	5	5.2	4.9	4.8	4	3.6	4.1	3.6	4.4	3.3
4	4.1	2.8	2.4	2.4	2.8	3.9	3.4	3.7	4.4	4.6	5	5.2	5.7	5.7	6.1	6.2	5.5	6.5	7	5.9	6.4	6.9	8.2	8.6	5.1
5	9	9.5	6.5	3.5	3.8	4.8	6	5.3	5.7	5.6	5.8	4.9	4.1	4.7	4.3	3.9	3.6	2	0.7	0.3	0.1	0	0.6	0.2	4
6	2.5	3.4	4.5	4.3	3.8	3.6	3	3.6	3.8	3.2	3.3	2.8	2.9	3.1	3.2	3.9	3.9	3.4	3.6	3.1	2.4	3.2	2.9	2.7	3.3
7	2.1	2.5	2.6	3.4	2.8	2.6	2.4	2.5	2.1	1.7	1.3	3.7	5.6	6.8	5.6	5.2	4	4.9	4.6	5.2	6	4.5	4.5	3.9	3.8
8	3.6	3.6	3.5	2.9	4	4.7	4.6	5.1	6.7	7.2	7.6	6.3	6.8	8	9.2	12.7	11.7	9.8	8.2	8.2	8.1	7.2	7.6	6	6.8
9	5	5.2	3.3	3.9	3.6	3.2	2.5	2.9	3.9	2.9	3.1	2.9	2.9	2.8	2.8	3.3	3.7	2.5	1.1	1	0.5	0.5	0.4	0.7	2.7
10	0.5	0.4	0	1	1.8	1.6	2	2.4	3.7	3.4	3	3	2.9	2.3	2.2	3.2	4.1	3.8	2.7	1.5	1.4	1.6	1.1	0.9	2.1
11	1.1	1.1	1.7	1.4	0.9	0.7	1.1	1.2	1.6*	2.8*	2.3	1.3	1.2	2	3.4	3.6	3.3	3.2	2.9	1.8	1.4	1.2	1.1	1.7	1.8
12	1.8	1.9	2.4	2.5	3.1	3	3	3.2	3.7	4.1	3.2	3.7	3.8	4	3.9	3.6	3.2	1.9	0.9	1.1	0.9	2.1	2.7	1.7	2.7
13	1.7	1.6	1.8	1.9	2.1	2.1	2.2	2.4	3.9	3.6	3.6	3.5	3	3.1	2.8	2.2	2.7	3.9	3.1	3.2	3.1	3.6	3.7	3.6	2.8
14	2.8	2	2	1.7	1.9	1.8	1.9	2.4	2.7	2.9	2.7	2.8	3	3.6	4.2	4.7	4	4.2	3.5	3.5	3.1	3.4	4.2	3.4	3
15	3.2	3.4	3.5	3.9	4.4	4.3	3.5	2.3	2.5	3.2	1.8	1.7	2.1	3.1	4.3	3.5	4.6	4.6	4.4	4.6	4.1	5.4	5.6	5.7	3.7
16	3.6	4.2	3	3.8	4.8	4.1	3.7	3.6	3.8	3.7	4.3	4.4	4.2	3.6	4.3	3.8	2.8	1.8	2.5	2	1.3	2.5	3.2	2.5	3.4
17	2.4	1.5	1.3	0.6	0.8	1.6	3.2	3.8	4.8	5.1	4.3	4.4	4.2	3.9	3.7	3.5	2.3	2.6	2	1.8	0.8	0.3	0	0	2.5
18	0.7	0	0.1	0.3	0.2	0.2	0.2	0.6	3.4	3.7	3.6	3.3	3.7	4.2	4.7	3.8	3.5	3.3	2.6	2.8	2.6	2.1	2.2	2.3	2.2
19	2.5	2.6	2.6	2.7	3.1	3	3.4	5.3	4.9	5	6.9	6	5.9	6.2	5.1	5.8	6.2	5.9	5.5	5.9	6.1	5.9	6.5	6.3	5
20	6.2	6.4	6.5	6.6	5.9	4.2	4.8	5.2	6.1	5.5	6.2	6.1	5.6	5.2	5.7	4.6	5	5	3.1	2.5	2.2	2.5	2.3	2.1	4.8
21	2.7	2.1	1.8	1.2	1.1	1.3	1.5	1.7	1.5	2.3	3.2	2.8	2.6	3.2	3.3	3.4	3.1	2.4	0.8	1.4	2.6	2.7	2.7	2.7	2.2
22	3.5	3.4	2.5	2.7	2.4	2.7	3.5	5.1	6.2	5.3	5.5	5.3	5	5.5	5.3	5	4.8	3.6	5.1	5.7	5	4.2	3.8	2.3	4.3
23	2.2	1.2	0.9	1.7	2.5	2.2	2	3.3	4.4	5.2	4.9	4.5	4	4.1	4.1	3.5	3.7	3.3	2.5	2	1.6	1.7	1.9	1.8	2.9
24	2.5	2.1	1.8	1.5	2.2	1.9	2.5	2.6	3.5	5.2	5.2	5.7	5.7	5.2	5	5.4	5.6	4.7	3.3	3.7	3	2.5	2.1	2.1	3.5
25	1.8	1.2	1.2	1.6	1	1.5	1.5	1.8	3.2	2.7	3.2	2.9	2.4	1.5	2.1	3.6	3.6	2.7	2.8	2.9	3.7	3.6	3.6	3.6	2.5
26	3.6	3.5	4.6	4.2	3.6	3.5	3.5	4.2	5.5	5.5	4.6	4.6	4.7	5.2	5	6	5.9	4.5	2.9	3.2	3.3	3	3.1	2.5	4.2
27	1.8	1.5	1.7	1.7	1.6	1.9	2.3	3	4.4	4.1	5.2	4.6	5.5	6.6	5.6	5.3	5.5	3.5	4.2	3.6	3.7	3.3	3.2	3.7	3.6
28	3.9	4.1	4.2	4.2	3.9	3.9	3.6	4.4	6.2	7.1	7.8	7.3	6.9	6.5	5.9	5.1	4.8	3.4	2	2	1.6	3.6	4.7	4.7	4.7
29	5.1	4.5	4.1	4.3	4	5	5.2	5.3	5.7	5.2	5	4.6	4.8	4.5	4.3	3.6	3.8	2.9	3	2.8	2.7	2.9	3.2	3.3	4.2
30	3.6	4	4.3	4.3	4.1	4.3	4.6	4.4	4.1	4.9	4.8	4.9	5.2	4.8	4.8	4.9	4.4	3.7	3.4	3	3.9	3.8	3.4	2.6	4.2
31	2.6	2.5	3.1	2.4	1.9	1.9	2.2	2.5	4.2	5.2	5.8	5.1	6.1	6	5.5	4.3	4.8	4.7	4.1	4	3.8	3.3	3.2	2.6	3.8
Avg	2.9	2.9	2.7	2.7	2.8	2.8	2.9	3.3	4.1	4.3	4.4	4.2	4.3	4.4	4.5	4.6	4.4	3.9	3.3	3.1	3	3.1	3.1	2.9	3.5
SD	1.8	1.9	1.6	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.7	1.6	1.6	1.7	1.6	1.8	1.7	1.6	1.7	1.8	1.9	1.7	2	1.9	1.1
S/A	0.6	0.66	0.6	0.53	0.49	0.47	0.46	0.41	0.35	0.34	0.38	0.37	0.37	0.37	0.35	0.39	0.38	0.41	0.52	0.58	0.64	0.57	0.62	0.67	0.32
Min	0.5	0	0	0.3	0.2	0.2	0.2	0.6	1.5	1.7	1.3	1.3	1.2	1.2	1.4	2.2	2.3	1.8	0.7	0.3	0.1	0	0	0	1.7
Max	9	9.5	6.5	6.6	5.9	5	6	5.3	6.7	7.2	7.8	7.7	6.9	8	9.2	12.7	11.7	9.8	8.2	8.2	8.1	7.2	8.2	8.6	6.8
n	372	372	372	372	372	372	372	372	365	365	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8914

Data Recovery: 0.2% missing; 0.0% untested; 0.0% failed QC -- 8928 total measurements.

Instrument: NRG MAX-40    Serial Number: 0    Calibration Factor: 0.76171 m/s/mV    Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

**Elizabeth City State University**  
**36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5**

**March 2008**

**Wind Direction**  
**Hourly and Daily Averages**  
**Instrument: NRG Vane**  
**Degrees from North**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	279	270	246	249	251	268	277	281	290	304	310	318	323	330	323	324	327	334	358	18	141	132	112	93	301
2	69	72	75	85	66	49	64	77	68	78	93	100	88	3	257	201	190	158	155	160	179	178	191	200	124
3	190	201	212	178	179	196	189	174	177	185	204	215	222	230	236	219	219	219	218	226	230	220	217	226	214
4	228	224	216	216	219	221	218	216	223	222	224	227	231	226	223	222	218	212	211	215	214	213	213	211	219
5	213	230	275	267	276	282	279	287	287	296	304	309	288	301	303	307	304	309	325	334	331	330	2	107	280
6	49	85	93	94	96	102	106	111	109	113	108	110	88	98	86	108	111	103	100	102	102	98	98	93	99
7	85	90	91	92	95	98	105	112	112	113	132	152	169	174	187	210	207	194	204	216	220	225	233	240	177
8	236	235	232	222	220	230	213	207	208	223	227	232	228	230	261	270	237	236	239	236	236	260	264	267	238
9	267	267	267	269	277	278	285	289	293	292	288	298	271	281	266	256	250	241	237	249	256	247	273	268	272
10	226	222	0	329	355	26	32	42	56	65	97	94	114	147	138	124	117	117	126	140	141	142	169	176	102
11	175	189	218	251	253	256	257	274	300 *	352 *	23	360	28	89	97	88	88	91	106	111	127	128	125	153	96
12	177	188	204	214	228	238	261	269	282	290	292	299	284	289	278	282	276	292	290	70	92	61	58	66	272
13	60	64	54	55	68	68	71	71	89	100	105	111	96	85	106	168	167	166	173	186	190	194	202	208	125
14	209	199	200	196	189	191	195	193	195	201	190	185	190	193	187	195	185	185	184	188	182	193	206	206	193
15	204	208	220	239	258	265	275	288	322	331	329	285	222	128	88	85	98	91	98	88	72	78	77	70	98
16	49	43	31	27	359	347	351	333	327	332	332	333	325	321	323	324	336	339	32	35	23	11	351	330	351
17	318	306	292	283	281	310	333	336	345	349	6	356	7	21	29	33	54	57	53	66	69	88	102	300	3
18	21	45	313	93	90	6	49	87	100	115	114	141	140	110	114	113	127	123	124	124	148	168	173	123	
19	182	174	184	183	188	187	195	199	199	202	204	207	200	194	192	200	199	197	193	186	188	195	182	188	194
20	194	205	228	234	249	287	292	317	313	308	291	293	297	296	297	294	280	278	284	277	269	266	272	287	276
21	293	299	299	266	281	273	268	274	288	288	294	291	277	257	254	240	254	249	192	171	174	181	185	191	255
22	203	215	210	207	201	207	211	223	230	235	237	231	237	238	236	237	251	262	23	32	40	26	11	355	241
23	352	340	314	322	332	327	334	1	29	35	34	40	45	45	43	57	55	53	55	53	51	56	55	59	32
24	67	50	49	33	37	2	354	354	21	38	35	35	32	43	31	24	29	21	13	358	352	348	351	333	23
25	314	299	301	299	296	299	299	319	344	347	4	8	15	25	195	159	150	152	133	152	167	171	187	198	194
26	203	211	219	219	218	217	219	228	239	236	228	219	226	223	213	223	223	223	203	191	194	201	204	203	218
27	188	203	196	200	204	204	202	210	216	220	226	224	219	220	217	216	225	188	190	185	188	190	196	201	209
28	199	202	204	200	202	201	198	206	224	226	226	228	223	222	223	225	228	231	220	216	203	10	39	40	218
29	36	34	29	30	18	29	31	38	28	31	35	41	44	52	48	46	54	55	53	47	42	40	50	53	39
30	55	56	54	54	55	49	48	45	43	46	43	46	44	50	56	57	61	64	67	68	72	71	66	58	54
31	54	66	71	68	71	84	101	109	124	129	135	131	140	136	138	146	150	146	147	150	155	146	147	146	129
Avg	216	216	224	225	247	263	268	268	276	286	266	264	238	222	230	226	208	190	165	169	177	177	184	196	213
n	372	372	372	372	372	372	372	372	365	365	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8914

Data Recovery: 0.2% missing; 0.0% untested; 0.0% failed QC -- 8928 total measurements.

Instrument: NRG Vane    Serial Number: 0    Calibration Factor: 0.1408 deg/mV    Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.



**Elizabeth City State University**  
**36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5**

**March 2008**

**Peak Wind Speed (1-Minute Gust)**  
**Hourly and Daily Averages**  
**Instrument: NRG MAX-40**  
**Meters per Second**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	6.3	7	5.8	6.8	6.6	6.1	6.6	8	9.1	10.3	10.1	13.5	11.6	12.2	13.1	11	9.6	6.6	2.9	0.9	1.8	2.4	1.8	1.2	7.1
2	1.3	3.8	3.2	3	2.7	2.1	1.7	2.4	3.3	4	3.4	3.2	2.9	2.9	2.8	5.5	5.3	4.1	3.8	3	2.8	2.8	1.9	0.7	3
3	1	1.5	0.5	1.9	2.7	2.5	2.7	3.7	4.7	5.3	6.7	6.9	8.2	8.6	7.5	8.3	8.3	8.1	7.8	6.8	5.9	6.7	6.3	7.1	5.4
4	6.9	4.8	3.9	3.8	4.7	6.2	5.5	5.9	7.6	7.1	8.6	8.7	9.6	9.6	10.9	10.6	8.9	10.5	11	10	10.8	11.9	13.6	14.8	8.6
5	14.5	15.9	10.5	5.6	6	7.4	9.4	8.9	9	8.9	8.9	8.6	6.7	7.7	6.8	6.5	5.7	3.4	1.4	1	0.4	0.1	1.3	0.5	6.5
6	4.3	5.5	7.3	6.8	6.2	5.7	5.1	5.9	6.1	5.2	5.2	4.9	4.6	5	5.4	5.7	6.2	5.6	5.8	5.2	4.1	5.1	4.6	4.3	5.4
7	3.5	4.1	4.3	5	4.4	4.2	3.9	3.8	3.4	2.9	2.5	6	8.9	10.9	8.9	8.6	6.7	8.3	7.7	8.6	9.9	7.9	7.6	6.6	6.2
8	5.9	6.1	5.7	5.3	6.7	8	7.8	8.4	11.4	11.9	13	10.1	11.3	13.4	14.7	20.7	19.8	15.3	12.9	13.1	12.5	12.1	12.3	10.4	11.2
9	8.2	8.5	5.9	6.7	7	5.8	5.4	6.2	7.8	6	6.1	6.1	5.7	5.3	5.4	5.5	5.7	3.9	1.8	1.5	1.1	1	0.9	1	4.9
10	1	0.8	0	2	2.9	2.9	3.3	3.9	6.2	5.5	4.9	5.3	5	4.7	4	5.3	6.4	6	4.3	2.6	2.5	2.6	2.1	1.9	3.6
11	2.2	2.1	2.7	2.3	1.9	1.2	1.6	2.4	3.6*	4.7*	3.9	3.3	2.7	3.6	5.5	5.7	5.4	5.1	4.7	3.3	2.5	2	1.9	2.7	3.2
12	3	3.3	4.1	3.9	4.8	4.6	4.5	5.8	7.3	7.8	7	7.6	7.6	7.7	7.6	6.8	6.1	3.8	1.9	2.2	1.6	3.2	4.2	2.6	5
13	2.5	2.3	2.8	3	3.7	3.6	3.7	4	6	5.7	5.8	5.6	5	4.8	4.5	3.7	4.1	6.7	5.5	5.4	5.4	6	6.2	6	4.7
14	5	3.6	3.4	3	3.2	3.3	3.6	4.4	4.5	4.9	5.1	4.9	5.1	6.3	7.2	8	6.7	7.1	6	6.1	5.2	5.9	7.2	6	5.2
15	5.1	5.5	5.8	5.9	7.2	6.6	6.1	4.7	5.1	6.1	3.9	3.7	4	5.5	6.8	5.9	7.5	7.7	7.1	7.6	6.9	8.8	9.4	8.9	6.3
16	5.9	6.7	5.8	6.4	7.9	7	6.4	6.4	7.1	7	7.8	7.7	7.4	6.6	8	7.8	5.4	3.5	4.3	3.4	2.4	4.4	5.4	4.8	6.1
17	5.1	3.1	2.7	1.6	1.7	3.1	5.7	6.8	8.4	8.6	7.3	7.4	7.1	6.9	6.5	5.6	4.2	4.3	3.6	3.1	1.7	0.6	0.2	0.1	4.4
18	1.1	0.2	0.3	0.6	0.5	0.4	0.5	1.2	5.3	5.7	5.7	5.3	6.1	6.9	7.2	6.3	5.8	5.2	4.2	4.4	4.1	3.4	3.9	4	3.7
19	4.2	4.2	4.6	4.5	5.4	5.3	6	8.7	7.9	8.8	11.6	9.7	10	10.4	8.6	10.2	10.3	9.6	9.2	9.8	10.1	9.6	10.3	10.2	8.3
20	10.5	10.3	10	10.4	9.6	8.4	10	9.8	11.6	10.7	11.8	11.1	11.1	10.4	10.9	9.5	9.6	8.7	6.4	4.6	3.7	3.7	4	4	8.8
21	5	4.2	3.6	1.9	1.7	2	2.2	2.9	3	4.7	6.3	6	5.5	5.9	5.9	5.9	5.6	4	1.7	2.7	4.3	4.6	4.4	4.5	4.1
22	5.7	5.8	4.4	4.7	4.3	4.6	5.9	8.6	10.3	8.4	8.8	8.6	8.2	8.3	8.6	8.3	8	6	8.8	9.5	8.3	7.3	6.2	4.1	7.1
23	3.9	2.5	2.2	3.4	4.5	3.8	3.6	5.4	7.7	8.4	8.2	7.5	7	7	6.5	5.8	6	5.6	4.6	3.4	2.9	3	3.3	3.2	5
24	4.5	3.5	2.7	2.7	4	3.5	4	4.3	5.7	8.5	8.5	9.1	9.1	8.3	8.3	9.2	8.9	7.9	6	6.3	5.1	4.3	3.9	3.6	5.9
25	3.6	2.6	2.3	3.1	2.3	3	3.1	4.1	6.2	5.2	5.9	5.1	4.6	3.5	4	6	5.6	4.5	4.4	4.9	6.4	6	6	6.3	4.5
26	6.1	6.1	7.9	7.1	6.1	5.6	5.8	7	9	8.5	7.7	8.2	7.8	8.3	8.1	9.9	9.5	7.6	5.1	5.4	6.1	5.2	5.1	4.2	7
27	3.2	2.6	2.8	2.8	2.7	3.1	3.7	5	6.9	6.8	8.3	7	8.7	10.6	9.2	8.7	8.9	5.7	7.1	6.3	6.3	5.7	5.1	6.2	6
28	6.6	6.8	7.1	6.4	6.6	6.3	5.8	7.3	10.3	11.6	12.5	12	11.6	10.8	9.6	8.4	7.5	5.3	3.1	3.1	2.8	7	8.2	7.8	7.7
29	8.7	7.5	7.3	7.8	6.8	8.7	8.4	8.8	9.6	8.4	8.1	7.6	8	7.7	7	6.4	6.3	5.1	5.4	4.7	4.6	5	5.6	5.9	7.1
30	6.2	6.9	7.5	7.3	7.2	7	7.6	7.4	7	8.3	8	8.4	8.6	8.4	8.9	8.8	7.7	6.7	6.2	5.7	6.5	6.2	5.9	4.5	7.2
31	4.5	4.6	5.3	4.3	3.6	3.6	3.8	4.4	6.6	8.4	10	8.4	9.9	10.1	8.4	7.4	8.1	8.3	6.6	6.8	6.1	5.7	5.5	4.1	6.4
Avg	5	4.9	4.6	4.5	4.7	4.7	4.9	5.7	7	7.2	7.5	7.3	7.4	7.7	7.6	7.8	7.4	6.5	5.5	5.2	5	5.2	5.3	4.9	6
S D	2.9	3.1	2.6	2.2	2.2	2.2	2.3	2.2	2.3	2.2	2.6	2.4	2.5	2.6	2.6	3	2.8	2.5	2.7	2.9	3	2.9	3.2	3.2	1.8
S/A	0.57	0.63	0.57	0.5	0.47	0.46	0.46	0.39	0.33	0.31	0.35	0.33	0.34	0.34	0.33	0.39	0.38	0.39	0.48	0.55	0.6	0.57	0.6	0.66	0.3
Min	1	0.2	0	0.6	0.5	0.4	0.5	1.2	3	2.9	2.5	3.2	2.7	2.9	2.8	3.7	4.1	3.4	1.4	0.9	0.4	0.1	0.2	0.1	3
Max	14.5	15.9	10.5	10.4	9.6	8.7	10	9.8	11.6	11.9	13	13.5	11.6	13.4	14.7	20.7	19.8	15.3	12.9	13.1	12.5	12.1	13.6	14.8	11.2
n	372	372	372	372	372	372	372	372	365	365	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8914

Data Recovery: 0.2% missing; 0.0% untested; 0.0% failed QC -- 8928 total measurements.

Instrument: NRG MAX-40    Serial Number: 0    Calibration Factor: 0.76171 m/s/mV    Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

**Elizabeth City State University**  
**36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5**

**March 2008**

**Station Pressure**  
**Hourly and Daily Averages**  
**Instrument: Viasala PTA-427**  
**Millibars**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	1022	1022	1020	1019	1018	1018	1017	1017	1017	1017	1016	1016	1015	1014	1014	1014	1015	1016	1016	1017	1017	1018	1019	1019	1017
2	1020	1020	1021	1021	1022	1023	1024	1024	1025	1026	1026	1026	1025	1024	1024	1024	1024	1024	1024	1024	1025	1025	1025	1026	1024
3	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1024	1022	1022	1021	1020	1020	1020	1020	1020	1019	1019	1018	1023
4	1018	1017	1017	1017	1016	1016	1016	1016	1016	1016	1015	1014	1013	1012	1011	1010	1010	1009	1008	1008	1007	1006	1004	1002	1012
5	1001	999	1001	1001	1001	1002	1002	1004	1005	1006	1006	1007	1007	1007	1008	1008	1009	1010	1011	1012	1013	1013	1014	1014	1007
6	1015	1015	1015	1016	1016	1016	1017	1017	1018	1019	1019	1019	1019	1018	1018	1018	1018	1018	1018	1019	1019	1019	1018	1018	1018
7	1018	1018	1017	1016	1016	1016	1016	1015	1014	1014	1014	1012	1011	1009	1008	1008	1007	1006	1006	1005	1005	1005	1005	1005	1011
8	1006	1005	1005	1004	1003	1003	1002	1001	1000	999	998	997	996	995	995	996	999	1001	1004	1006	1007	1010	1012	1014	1002
9	1015	1016	1017	1018	1019	1020	1021	1022	1023	1023	1024	1025	1024	1024	1023	1024	1024	1024	1025	1025	1026	1026	1027	1027	1022
10	1027	1027	1027	1027	1028	1028	1029	1029	1030	1030	1029	1028	1027	1026	1025	1024	1023	1023	1023	1023	1022	1022	1022	1021	1026
11	1021	1020	1020	1019	1019	1019	1019	1019	1019	1019*	1019*	1019	1018	1017	1016	1015	1014	1014	1013	1013	1012	1012	1011	1010	1016
12	1009	1008	1007	1006	1006	1006	1007	1007	1008	1008	1008	1008	1008	1007	1007	1007	1007	1007	1008	1009	1010	1011	1011	1012	1008
13	1013	1013	1013	1013	1013	1013	1014	1015	1015	1015	1015	1014	1013	1012	1011	1010	1010	1010	1010	1011	1011	1011	1011	1011	1012
14	1011	1010	1010	1009	1009	1009	1009	1009	1009	1009	1008	1007	1007	1005	1004	1003	1002	1002	1001	1001	1001	1001	1001	1001	1006
15	1001	1001	1001	1001	1002	1003	1004	1006	1006	1007	1007	1007	1007	1006	1005	1005	1004	1004	1004	1004	1003	1002	999	999	1004
16	999	1000	1000	1001	1002	1005	1006	1008	1010	1012	1013	1014	1015	1015	1015	1016	1017	1018	1019	1020	1021	1023	1024	1024	1012
17	1025	1026	1026	1026	1027	1028	1029	1030	1031	1031	1032	1032	1031	1030	1030	1030	1030	1030	1030	1031	1031	1031	1031	1030	1030
18	1030	1030	1030	1028	1028	1029	1029	1029	1029	1029	1029	1028	1027	1025	1024	1024	1022	1022	1021	1021	1020	1020	1019	1026	
19	1018	1017	1016	1015	1015	1014	1014	1014	1014	1013	1012	1011	1009	1007	1006	1005	1005	1005	1004	1004	1003	1003	1001	1000	1009
20	999	998	998	997	998	999	1001	1003	1005	1006	1007	1009	1009	1009	1010	1010	1011	1012	1014	1015	1016	1017	1018	1019	1007
21	1019	1020	1020	1020	1021	1021	1022	1022	1023	1023	1022	1022	1021	1020	1019	1018	1018	1018	1017	1018	1018	1017	1017	1016	1020
22	1015	1015	1014	1013	1012	1012	1012	1011	1011	1011	1010	1009	1008	1007	1006	1006	1006	1006	1008	1010	1011	1012	1014	1015	1011
23	1015	1015	1015	1015	1016	1017	1017	1018	1018	1019	1019	1019	1019	1018	1018	1018	1018	1019	1019	1019	1019	1019	1019	1019	1018
24	1018	1018	1018	1017	1017	1018	1018	1018	1019	1019	1019	1019	1018	1018	1017	1017	1017	1017	1018	1018	1019	1019	1020	1020	1018
25	1020	1021	1021	1021	1022	1023	1024	1025	1025	1026	1026	1026	1026	1025	1024	1024	1024	1023	1023	1023	1024	1024	1024	1023	1024
26	1023	1023	1022	1022	1022	1022	1022	1022	1022	1022	1021	1020	1019	1019	1018	1017	1017	1017	1017	1018	1018	1019	1019	1018	1020
27	1018	1018	1018	1017	1017	1017	1017	1017	1017	1017	1017	1016	1014	1014	1013	1012	1012	1012	1012	1013	1013	1013	1013	1013	1015
28	1012	1012	1012	1011	1012	1012	1012	1012	1012	1012	1011	1011	1010	1009	1009	1009	1009	1009	1010	1011	1012	1013	1015	1016	1011
29	1017	1018	1019	1019	1020	1022	1023	1024	1025	1026	1026	1027	1027	1027	1026	1026	1027	1027	1028	1028	1029	1029	1029	1029	1025
30	1029	1029	1029	1029	1029	1030	1031	1031	1032	1032	1032	1032	1032	1032	1031	1031	1032	1031	1031	1031	1032	1032	1031	1031	1031
31	1031	1030	1029	1029	1028	1028	1028	1028	1028	1028	1028	1028	1027	1027	1026	1026	1025	1025	1025	1025	1025	1024	1024	1023	1027
Avg	1016	1016	1016	1016	1016	1017	1017	1017	1018	1018	1018	1017	1016	1016	1015	1015	1015	1015	1016	1016	1016	1017	1017	1017	1017
S D	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	9	9	8	
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Min	999	998	998	997	998	999	1001	1001	1000	999	998	997	996	995	995	996	999	1001	1001	1001	1001	1001	999	999	1002
Max	1031	1030	1030	1029	1029	1030	1031	1031	1032	1032	1032	1032	1032	1032	1031	1031	1032	1031	1031	1031	1032	1032	1031	1031	1031
n	372	372	372	372	372	372	372	372	365	365	372	372	372	372	372	372	372	372	372	372	372	372	372	8914	

Data Recovery: 0.2% missing; 0.0% untested; 0.0% failed QC -- 8928 total measurements.

Instrument: Viasala PTA-427    Serial Number: 493926    Calibration Factor: 0.104 mBar/mV + 800 mBar    Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

**Elizabeth City State University**  
**36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5**

**March 2008**

**Battery Voltage (CR10)**  
**Hourly and Daily Averages**  
**Instrument: CSI**  
**Volts DC**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	12.6	12.6	12.6	12.6	12.6	12.5	12.5	13.5	13.7	13.7	13.6	13.5	13.5	13.5	13.5	13.4	12.9	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13
2	12.6	12.6	12.5	12.5	12.5	12.5	12.5	13.8	13.8	13.7	13.7	13.6	13.5	13.5	13.5	13.6	13.6	13	12.7	12.7	12.6	12.6	12.6	12.6	13
3	12.6	12.5	12.5	12.5	12.5	12.5	12.5	13.7	13.7	13.6	13.5	13.5	13.4	13.4	13.4	13.4	13.4	12.9	12.7	12.7	12.7	12.7	12.7	12.6	13
4	12.6	12.6	12.6	12.6	12.6	12.6	12.5	13.2	13.5	13.4	13.4	13.3	13.3	13.3	13.3	13.4	13.3	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.9
5	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13.5	13.5	13.5	13.5	13.4	13.4	13.4	13.4	13.4	13.4	12.9	12.7	12.7	12.6	12.6	12.6	12.6	13
6	12.6	12.6	12.6	12.5	12.5	12.5	12.5	13.7	13.7	13.6	13.5	13.5	13.4	13.4	13.4	13.5	13.5	13.1	12.7	12.7	12.7	12.6	12.6	12.6	13
7	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.6	13.2	13.3	13	13.3	13.2	13.1	13.1	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.8
8	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.9	13	12.9	13	13.3	13.3	13.2	13.4	13.5	12.9	12.7	12.7	12.6	12.6	12.6	12.6	12.8
9	12.5	12.5	12.5	12.5	12.5	12.4	12.7	14	13.9	13.8	13.8	13.7	13.7	13.7	13.6	13.6	13.7	13	12.7	12.7	12.7	12.6	12.6	12.6	13.1
10	12.6	12.5	12.5	12.5	12.5	12.4	12.6	13.9	13.8	13.7	13.6	13.6	13.6	13.6	13.5	13.5	13.6	13	12.7	12.7	12.7	12.6	12.6	12.6	13
11	12.6	12.6	12.6	12.6	12.5	12.5	12.6	13.7	13.7 *	13.4 *	13.4	13.3	13.3	13.3	13.4	13.4	13.1	12.4	11.9	11.7	11.6	11.5	11.4	11.3	12.7
12	11.3	11.3	11.2	11.2	11.1	11.1	11.5	13.5	13.5	13.5	13.4	13.4	13.4	13.4	13.4	13.3	13.3	12.7	12.5	12.4	12.1	11.6	11.4	11.4	12.4
13	11.2	11.2	11.2	11.2	11.1	11.1	11.5	13.6	13.6	13.5	13.4	13.4	13.3	13.3	13.3	13.3	13.2	12.8	12.6	12.5	12.3	12.1	11.9	11.8	12.4
14	11.5	11.3	11.4	11.3	11.2	11.2	11.2	12.3	13.2	13.4	13.4	13.4	13.3	13.3	13.3	13.3	13.2	12.8	12.6	12.5	12.4	12.1	11.9	11.8	12.4
15	11.7	11.6	11.5	11.4	11.3	11.3	11.4	13	13.4	13.4	13.3	13.2	13.2	13.2	13.3	13.4	13.4	12.9	12.7	12.6	12.5	12.3	12.1	11.9	12.5
16	11.7	11.5	11.4	11.3	11.3	11.2	11.1	11	12	13.1	13.6	13.5	13.4	13.2	13.6	13.5	13.5	12.9	12.7	12.6	12.3	12	11.7	11.4	12.3
17	11.2	11.1	11	10.9	10.8	10.7	11.5	13.8	13.7	13.7	13.6	13.6	13.6	13.6	13.5	13.5	13.5	12.9	12.7	12.6	12.4	12.1	11.9	11.5	12.5
18	11.1	11.2	11.2	11.1	11	10.9	11.1	13.8	13.7	13.6	13.5	13.5	13.5	13.5	13.5	13.4	13.2	12.7	12.6	12.5	12.2	12	11.8	11.7	12.4
19	11.7	11.5	11.5	11.3	11.2	11.2	11.2	12.5	13.2	13.3	13.3	13.2	13.2	13.2	13.2	13.2	12.8	12	11.6	11.5	11.4	11.3	11.2	11.1	12.1
20	11	11	11	11	11	10.9	11.1	11.3	12.6	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.3	12.4	11.7	11.5	11.5	11.4	11.4	11.3	12.1
21	11.3	11.1	11	10.9	10.9	10.9	12	13.8	13.6	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.4	12.8	12.7	12.5	12.2	11.9	11.8	11.7	12.4
22	11.6	11.4	11.4	11.3	11.2	11.2	11.3	13.2	13.5	13.4	13.4	13.3	13.3	13.3	13.2	13.2	13.2	12.9	12.7	12.6	12.5	12.3	12.1	12	12.5
23	11.8	11.7	11.3	11.1	10.9	10.9	11.3	13.6	13.7	13.6	13.6	13.5	13.5	13.5	13.5	13.5	13.6	13	12.8	12.7	12.6	12.5	12.4	12.1	12.6
24	12	11.8	11.7	11.6	11.4	11.2	11.3	12.8	13.5	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.5	13	12.8	12.7	12.6	12.5	12.4	12.2	12.7
25	12	11.8	11.6	11.4	11.3	11.2	12	13.8	13.7	13.6	13.5	13.5	13.5	13.5	13.4	13.5	13.5	12.9	12.7	12.6	12	11.6	11.4	11.2	12.6
26	11	10.9	10.9	10.8	10.8	10.8	10.9	12.9	13.6	13.5	13.4	13.3	13.3	13.3	13.3	13.3	13.3	12.7	12.3	12.1	11.9	11.8	11.7	11.6	12.2
27	11.5	11.5	11.4	11.4	11.3	11.3	11.8	13.5	13.5	13.4	13.3	13.3	13.3	13.3	13.2	13.2	13.2	12	11.2	11.1	11	11	11	11	12.2
28	10.9	10.9	10.9	10.9	10.8	10.8	11.1	12.6	13.3	13.3	13.2	13.2	13.1	13.1	13.1	13.1	12.9	12.3	12	11.8	11.8	11.7	11.6	11.6	12.1
29	11.5	11.4	11.4	11.3	11.3	11.3	11.3	11.6	12.2	12.9	13.5	13.5	13.4	13.7	13.7	13.2	12.5	12.2	12	11.8	11.7	11.6	11.5	11.4	12.2
30	11.4	11.3	11.2	11.2	11.2	11.2	11.2	11.3	11.9	12.3	12.7	13.1	12.5	12.6	12.8	12.4	12.6	12.2	11.8	11.7	11.6	11.4	11.4	11.3	11.8
31	11.3	11.2	11.2	11.2	11.2	11.2	11.3	12.4	13.4	13.4	13	13.3	13.4	13.3	13.4	13.3	13.2	12.9	12.8	12.7	12.6	12.4	12.2	12.1	12.4
Avg	11.8	11.8	11.7	11.7	11.6	11.6	11.8	13	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.3	13.3	12.7	12.5	12.4	12.2	12.1	12	11.9	12.6
S D	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.8	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.3
S/A	0.05	0.05	0.06	0.06	0.06	0.06	0.05	0.06	0.04	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.03	0.04	0.04	0.04	0.04	0.05	0.03
Min	10.9	10.9	10.9	10.8	10.8	10.7	10.9	11	11.9	12.3	12.7	13	12.5	12.6	12.8	12.4	12.5	12	11.2	11.1	11	11	11	11	11.8
Max	12.6	12.6	12.6	12.6	12.6	12.6	12.7	14	13.9	13.8	13.8	13.7	13.7	13.7	13.7	13.6	13.7	13.1	12.8	12.7	12.7	12.7	12.7	12.7	13.1
n	372	372	372	372	372	372	372	372	365	365	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8914

Data Recovery: 0.2% missing; 0.0% untested; 0.0% failed QC -- 8928 total measurements.

Instrument: CSI    Serial Number: Battery    Calibration Factor: N/A    Calibration Date: 06/1995

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (\*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL