

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

June 2009

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	5	44 ?	? 448	643	815	948 ?	1007 ?	1017 ?	947 ?	782 ?	552 ?	352 ?	314 ?	35 ?	6	0	0	0	0	0	7916 ?
2	0	0	0	0	2	47	286 ?	424	627	798	923	990	734 ?	819 ?	650 ?	624 ?	437 ?	277 ?	48 ?	4	0	0	0	0	7690 ?
3	0	0	0	0	3	46	279 ?	422	620	791	871	768 ?	693 ?	870 ?	371 ?	269	202	120	28	4	0	0	0	0	6358 ?
4	0	0	0	0	4	31	123 ?	304 ?	556 ?	773	561 ?	758 ?	694 ?	656 ?	631 ?	292 ?	212 ?	41 ?	15	4	0	0	0	0	5656 ?
5	0	0	0	0	0	6 ?	98	233	498 ?	387 ?	255	123 ?	526 ?	591 ?	247 ?	234 ?	173	87 ?	38	1	0	0	0	0	3497 ?
6	0	0	0	0	1	21	31	46	135	125	297	396	344	297	307	140	114	80	20	3	0	0	0	0	2358
7	0	0	0	0	5	52	93 ?	360 ?	480 ?	839	752 ?	609 ?	396	423 ?	592 ?	424 ?	358 ?	139	61 ?	7	0	0	0	0	5590 ?
8	0	0	0	0	4	22	128	354 ?	293 ?	799	561 ?	431 ?	1041 ?	983 ?	663 ?	637 ?	342 ?	123 ?	46 ?	6	0	0	0	0	6432 ?
9	0	0	0	0	5	50 ?	283 ?	359	595	752	895	818	187	346 ?	224	? ?	? ?	? ?	2 ?	0	0	0	0	0	4515 ?
10	0	0	0	0	3	53 ?	261 ?	437	637	802	929	996	988	888	653 ?	629 ?	229	113	43	4	0	0	0	0	7662 ?
11	0	0	0	0	3	30	98	159 ?	602	768	890	920	747 ?	898 ?	682	586 ?	457 ?	136 ?	53 ?	6	0	0	0	0	7035 ?
12	0	0	0	0	4	43 ?	? 436	633	788	914	996	985	909 ?	673 ?	280 ?	238 ?	136	63	8	0	0	0	0	0	7106 ?
13	0	0	0	0	7	63	123	357 ?	608	793	881	515 ?	702 ?	776 ?	134	172 ?	177 ?	134 ?	60 ?	14	0	0	0	0	5517 ?
14	0	0	0	0	4	50	157	267	389 ?	482 ?	881 ?	930	366	637 ?	684 ?	614	304	169	67	9	0	0	0	0	6011 ?
15	0	0	0	0	4	55	252	428	293	119	170	154	323	567	308	360	157	104	57	8	0	0	0	0	3358
16	0	0	0	0	1	22	97	217 ?	540 ?	318	505	463	553	468	432	226	189 ?	157 ?	67	9	0	0	0	0	4262
17	0	0	0	0	2	26	66	140	364	458	538	531	541	498	422	306	294	127	64	6	0	0	0	0	4383
18	0	0	0	0	2	32	83	190	331	254	232	325	497	508 ?	411 ?	445 ?	355 ?	127	56	11	0	0	0	0	3859 ?
19	0	0	0	0	5	53	172 ?	385 ?	461 ?	621 ?	817	814	701 ?	603	782 ?	479	291	166 ?	72	7	0	0	0	0	6428 ?
20	0	0	0	0	3	48	153 ?	472 ?	607	583	600 ?	750 ?	633 ?	589 ?	492 ?	615 ?	287 ?	? 53 ?	10	0	0	0	0	0	5896 ?
21	0	0	0	0	6	55 ?	208 ?	363 ?	575 ?	809	911	725	269 ?	276 ?	306 ?	264 ?	305 ?	260	59	7	0	0	0	0	5399 ?
22	0	0	0	0	3	39	131	333 ?	590	636	596 ?	652	483 ?	322	386 ?	586 ?	406 ?	258 ?	57	4	0	0	0	0	5479 ?
23	0	0	0	0	4	37	115 ?	170	337 ?	472 ?	762 ?	525 ?	944 ?	871	695	547	409	112	52	8	0	0	0	0	6061 ?
24	0	0	0	0	4	46	259 ?	426	621	792	937	875	194 ?	285 ?	135 ?	464 ?	394 ?	259	86	7	0	0	0	0	5783 ?
25	0	0	0	0	8	68	133 ?	323 ?	510 ?	730	837	885 ?	627 ?	273	551 ?	309 ?	180 ?	202 ?	85	5	0	0	0	0	5726 ?
26	0	0	0	0	5	45	109 ?	416 ?	559	706	875	829	903	540	323 ?	361 ?	129	36	89	18	0	0	0	0	5942 ?
27	0	0	0	0	2	38	80 ?	432 ?	602	754	903	945	720	714 ?	751	657	440	281	91	5	0	0	0	0	7415 ?
28	0	0	0	0	4	37	277 ?	412	644	513	610	546	393	311	214	385	236	202	38	3	0	0	0	0	4824 ?
29	0	0	0	0	4	42	266 ?	422	621	797	935	1008	818	617 ?	670 ?	566	347	202 ?	61	14	0	0	0	0	7390 ?
30	0	0	0	0	5	49	245 ?	416	616	786	922	1020	946 ?	655 ?	698 ?	600	231 ?	158 ?	58 ?	6	0	0	0	0	7410 ?
Avg	0	0	0	0	4	42	165	338	520	635	724	710	632	604	496	435	284	161	54	7	0	0	0	0	5765 ?
S D	0	0	0	0	2	14	80	111	134	215	240	259	254	226	204	162	100	73	21	4	0	0	0	0	1414
S/A	0	0	0	0	0.46	0.33	0.48	0.33	0.26	0.34	0.33	0.37	0.4	0.37	0.41	0.37	0.35	0.45	0.39	0.57	0	0	0	0	0.25
Min	0	0	0	0	0	6	31	46	135	119	170	123	187	273	134	140	114	36	2	0	0	0	0	0	2358
Max	0	0	0	0	8	68	286	472	644	839	948	1020	1041	983	782	657	457	314	91	18	0	0	0	0	7916
n	0	0	0	0	82	328	238	296	304	326	312	294	278	240	238	259	257	257	321	112	0	0	0	0	4145

Daylight Data Recovery: 0.0% missing; 0.0% untested; 20.8% exceed the 15% QC threshold -- 5234 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.

June 2009

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	0	0?
2	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0?
3	0	0	0	0	0	0	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	0	0?
4	0	0	0	0	0	0	0?	0?	?	?	?	?	?	?	?	0?	1?	2	2	2	0	0	0	0	7?
5	0	0	0	0	0	0	1	1	0?	0?	0?	0?	0?	0?	2?	1?	0	0?	0	0	0	0	0	0	6?
6	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7	0	0	0	0	0	0	0?	0?	0?	?	?	0?	0	0?	?	0?	0?	0	0?	0	0	0	0	0	0?
8	0	0	0	0	0	0	1	0?	?	?	?	0?	?	?	?	?	?	0?	0?	0	0	0	0	0	2?
9	0	0	0	0	0	0?	?	?	?	?	?	?	2?	0?	0?	1	0	0	1	2	0	0	0	0	5?
10	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	0?
11	0	0	0	0	0	0	2	0?	?	?	?	?	0?	?	?	?	?	0?	0?	0	0	0	0	0	2?
12	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	0?	0?	0	0	0	0	0	0	0	0?
13	0	0	0	0	0	0	0	0?	?	?	?	0?	0?	?	1?	1	0?	0?	0?	0	0	0	0	0	1?
14	0	0	0	0	0	0	0	0	0	0?	?	?	0	?	?	?	0?	0?	0	0	0	0	0	0	1?
15	0	0	0	0	0	0	?	?	0?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0?
16	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?
17	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
18	0	0	0	0	0	0	1	0	0	0	0	1	2	?	0?	0?	0?	0	0	0	0	0	0	0	4?
19	0	0	0	0	0	0	0?	?	?	?	?	?	?	0?	?	0?	0	0?	0	0	0	0	0	0	0?
20	0	0	0	0	0	0	0	?	?	0?	0?	?	0?	0?	0?	?	0?	0?	0?	0?	0	0	0	0	0?
21	0	0	0	0	0	0?	0?	?	?	?	?	?	0?	0?	0?	0?	0?	?	0?	0	0	0	0	0	0?
22	0	0	0	0	0	0	0	0?	?	?	?	0?	?	0?	0?	?	?	?	0?	0?	0	0	0	0	1?
23	0	0	0	0	0	0	0	0	0?	0?	0?	0?	?	?	?	?	?	0?	0	0	0	0	0	0	0?
24	0	0	0	0	0	0	?	?	?	?	?	?	0?	0	0	0?	0?	?	0?	0	0	0	0	0	1?
25	0	0	0	0	0	0	0?	?	0?	?	?	?	?	0	0?	0?	0?	0?	0?	0?	0	0	0	0	0?
26	0	0	0	0	0	0	0?	?	?	?	?	?	?	0?	0?	0?	0	1	1	0	0	0	0	0	2?
27	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0?
28	0	0	0	0	0	0	?	?	?	?	?	0?	0?	0	0	0	0	?	0?	0	0	0	0	0	0?
29	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0?
30	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0?

Avg	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?
SD	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	2
S/A	0	0	0	0	2.56	1.71	1.64	1.54	2.09	3	2.59	3.46	1.87	2.5	2.92	2.26	2.94	3.45	3.25	3.81	0	0	0	0	1.55
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	0
Max	0	0	0	0	0	0	2	1	1	0	1	1	2	0	2	1	1	2	2	2	0	0	0	0	7
n	0	0	0	0	82	334	172	111	70	75	76	84	127	113	119	133	177	180	282	110	0	0	0	0	2266

Daylight Data Recovery: 0.0% missing; 0.0% untested; 56.7% exceed the 15% QC threshold -- 5234 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

June 2009

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	5	27 ?	?	96	115	134	142 ?	144 ?	142 ?	159 ?	200 ?	207 ?	130 ?	110 ?	29 ?	6	0	0	0	0	1647 ?	
2	0	0	0	0	3 ?	41	94 ?	116	137	143	153	176	254 ?	212 ?	165 ?	138 ?	107 ?	81 ?	30 ?	4	0	0	0	0	1852 ?	
3	0	0	0	0	3	36	109 ?	122	149	170	217	282 ?	288 ?	249 ?	255 ?	243	197	115	28	4	0	0	0	0	2467 ?	
4	0	0	0	0	6 ?	31	95 ?	253 ?	255 ?	203	311 ?	391 ?	421 ?	364 ?	328 ?	258 ?	190 ?	35	15	4	0	0	0	0	3158 ?	
5	0	0	0	0	0	6	98	218	355 ?	340 ?	241	123 ?	460 ?	351 ?	195 ?	209 ?	160	85 ?	38	1	0	0	0	0	2879 ?	
6	0	0	0	0	1 ?	21	31	46	135	125	285	383	344	297	307	140	114	80	20	3	0	0	0	0	2332	
7	0	0	0	0	6 ?	44	75 ?	281 ?	333 ?	251	390 ?	514 ?	390	416 ?	307 ?	310 ?	228 ?	143	40 ?	7	0	0	0	0	3736 ?	
8	0	0	0	0	4 ?	22	126	245 ?	256 ?	263	286 ?	324 ?	291 ?	192 ?	192 ?	156 ?	135 ?	85 ?	32 ?	6	0	0	0	0	2615 ?	
9	0	0	0	0	6 ?	31 ?	101 ?	190	190	223	325	358	176	241 ?	158	34	?	?	1 ?	0	0	0	0	0	2033 ?	
10	0	0	0	0	2	25 ?	60 ?	70	83	93	105	139	152	231	296 ?	333 ?	218	113	43	4	0	0	0	0	1965 ?	
11	0	0	0	0	4 ?	30	98	154 ?	150	280	204	286	569 ?	476 ?	394	226 ?	163 ?	102 ?	42 ?	6	0	0	0	0	3185 ?	
12	0	0	0	0	5 ?	30 ?	?	101	103	138	121	139	195	239 ?	319 ?	214 ?	185 ?	126	62	8	0	0	0	0	1984 ?	
13	0	0	0	0	8 ?	56	119	136 ?	146	186	387	318 ?	339 ?	416 ?	133	153	176 ?	100 ?	47 ?	14	0	0	0	0	2735 ?	
14	0	0	0	0	6 ?	46	136	241	350	370 ?	427 ?	325	345	386 ?	355 ?	328	237	133	67	9	0	0	0	0	3759 ?	
15	0	0	0	0	5 ?	40	104	142	248	119	170	154	318	520	308	347	157	103	54	8	0	0	0	0	2797	
16	0	0	0	0	1	22	97	205	373 ?	315	480	451	531	465	398	225	181 ?	126 ?	63	9	0	0	0	0	3940	
17	0	0	0	0	2	26	66	140	345	432	519	511	521	470	420	306	268	116	57	6	0	0	0	0	4205	
18	0	0	0	0	2	31	83	190	316	253	232	302	472	360 ?	335 ?	356 ?	286 ?	114	56	11	0	0	0	0	3399 ?	
19	0	0	0	0	6 ?	48	112 ?	265 ?	314 ?	337 ?	341	439	406 ?	437	289 ?	312	254	143 ?	55	7	0	0	0	0	3764 ?	
20	0	0	0	0	3	44	115	241 ?	216	351	414 ?	458 ?	490 ?	346 ?	299 ?	165 ?	169 ?	161 ?	35 ?	10	0	0	0	0	3517 ?	
21	0	0	0	0	7 ?	36 ?	142 ?	228 ?	240 ?	220	249	364	271 ?	285 ?	261 ?	257 ?	207 ?	67	40	7	0	0	0	0	2882 ?	
22	0	0	0	0	4 ?	39	131	265 ?	215	258	298 ?	410	341 ?	267	347 ?	187 ?	168 ?	94 ?	48	3	0	0	0	0	3074 ?	
23	0	0	0	0	5 ?	29	87	170	284 ?	328 ?	425 ?	436	483 ?	213	296	201	157	97	48	8	0	0	0	0	3267 ?	
24	0	0	0	0	3	28	80 ?	107	116	153	220	247	152	211	113	339 ?	201 ?	101	43	7	0	0	0	0	2122	
25	0	0	0	0	10 ?	46	94 ?	200 ?	267 ?	252	279	348 ?	334 ?	261	273 ?	225 ?	154 ?	151 ?	58	5	0	0	0	0	2958 ?	
26	0	0	0	0	5	37	100 ?	170 ?	228	278	294	376	388	329	303 ?	323 ?	118	34	79	18	0	0	0	0	3080 ?	
27	0	0	0	0	2	38	69 ?	146 ?	160	184	277	326	407	287 ?	288	189	132	62	33	5	0	0	0	0	2604 ?	
28	0	0	0	0	3	23	96 ?	116	270	431	511	499	371	295	212	329	224	97	37	3	0	0	0	0	3518 ?	
29	0	0	0	0	5 ?	37	87 ?	98	116	122	116	124	207	221 ?	208 ?	219	216	137 ?	48	14	0	0	0	0	1977 ?	
30	0	0	0	0	6 ?	28	63 ?	84	105	122	116	152	238 ?	246 ?	206 ?	171	176 ?	103 ?	39 ?	6	0	0	0	0	1861 ?	
Avg	0	0	0	0	4	33	95	168	219	236	285	317	343	315	272	237	183	104	43	7	0	0	0	0	2844 ?	
S D	0	0	0	0	2	10	25	66	89	96	120	125	121	98	79	79	46	31	16	4	0	0	0	0	710	
S/A	0	0	0	0	0.52	0.31	0.26	0.39	0.41	0.41	0.42	0.39	0.35	0.31	0.29	0.33	0.25	0.3	0.38	0.58	0	0	0	0	0	0.25
Min	0	0	0	0	0	6	31	46	83	93	105	123	142	159	113	34	107	34	1	0	0	0	0	0	1647	
Max	0	0	0	0	10	56	142	281	373	432	519	514	569	520	420	356	286	161	79	18	0	0	0	0	4205	
n	0	0	0	0	64	332	241	298	306	328	312	297	284	244	242	272	259	263	322	112	0	0	0	0	4178	

Daylight Data Recovery: 0.0% missing; 0.0% untested; 20.2% exceed the 15% QC threshold -- 5234 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31393F3 Calibration Factor: 7.6820 $\mu\text{V}/\text{W}/\text{m}^2$ 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

June 2009

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	21.8	21.4	21.6	21.8	21.1	20.7	21	21.3	21.8	22.4	22.9	23.6	24	24.4	24.2	23.8	23.5	22.9	22.5	21.1	20.5	20.4	20	20	22
2	21.2	21.8	21.6	22.1	22.1	21.8	22.2	23.7	25.3	26.8	28.3	29.5	30.5	31.2	31.9	32.3	32.3	31.6	30.4	28.2	26.8	25.9	24.8	24	26.5
3	23.3	22.8	22.4	21.8	21.4	21.2	22.4	24	25.7	26.9	28.3	29.1	29.6	30.2	30.2	30.3	29.8	28.7	27.7	26.8	25.7	24.8	24.1	23.5	25.9
4	22.9	22.5	22.4	22.2	21.9	22.1	22.9	23.8	24.8	26.4	27.8	28.3	28.8	29	29.9	26.9	23.5	21.8	23	23.5	23.8	23.7	23.5	21.8	24.5
5	21.4	21.1	21.7	22.1	22.4	22.2	21.6	22.5	23.9	24.7	25	23.7	26.5	27.2	26.4	25.6	26.5	26.6	25.9	23.2	21	20.9	20.5	19.9	23.4
6	19	18.6	18.4	18.4	18.4	18	18.1	18.3	18.8	19.2	19.9	20.8	21.1	21.4	22	21.3	20.7	20.6	20.2	19.7	19.3	19.4	19.3	19.1	19.6
7	18.9	18.3	17.8	17.6	17.3	17.5	18.7	20.1	21.6	23.2	23.7	24.1	23.3	22.9	24.7	24.7	24.5	24.1	22.9	21.5	20.8	21	21	20.9	21.3
8	20.8	20.6	20.5	20.7	21.1	21.3	21.8	23.4	24.5	25.4	26.2	27.1	28	28.7	29.1	29.6	28.6	28.1	26.8	26.2	25.8	25	24.5	23.9	24.9
9	23.4	23.1	22.5	22.2	21.9	22	23	24.2	25.3	26.5	28.1	29.2	25.6	24.6	24.5	23.8	21.8	20.3	20.6	21.4	20.2	19.9	20.2	19.2	23.1
10	18.7	18.3	18.2	18.3	18	17.8	19.4	21.9	23.5	24.8	25.7	26.7	27.7	28.2	28.9	28.3	28	27.3	26.6	24.3	23.5	23	22.6	22.6	23.6
11	22.2	22	21.8	21.7	21.5	21.8	22.5	23.2	25	26.2	27.1	27.9	28.8	29.4	30	29.9	29.7	28.8	27.7	26.4	25.7	25.3	25.1	24.9	25.6
12	24.6	24.3	24.3	24.5	24.2	23.7	23.8	24.4	25.3	26.3	27.5	28.5	29.4	30.1	30.7	30.8	30.6	30	28	26.6	24.6	23.1	22	22.1	26.2
13	22.2	22.1	22	21.8	21.7	22	22.9	24.5	26.5	27.4	28.5	29	29.5	30.5	23.1	22.3	22.9	24.4	24.9	23.9	22.5	22.4	22.4	22.5	24.2
14	22.2	21.9	21.6	21.2	20.8	21.3	21.7	22.4	23.8	25.4	27	28.4	24.1	26.8	26.5	26.1	25	24.3	23.2	22.2	21.5	21.4	21.1	20.8	23.4
15	20.5	20.1	19.1	19.1	19.3	19.6	21.7	22.9	23.8	23.1	22.5	22.1	22.3	23.4	23	22.9	22.7	22.1	21.6	21.1	21.2	21.3	21.4	21.1	21.6
16	21	20.8	20.8	20.8	20.6	20.5	21	22	23.7	24	24	24.3	24.5	24.5	24.1	23	22.7	23.3	22.2	21.5	21.2	21	20.8	20.5	22.2
17	20.3	20.2	20.3	20.3	20.3	20.4	20.7	21	21.8	22.6	23.3	24.1	24.4	24.4	24.5	24.3	24.1	23.9	23.5	22.9	22.7	22.4	22.4	22.5	22.4
18	22.4	22.3	22	21.7	21.8	21.9	22.6	23.5	24.3	24.9	25.1	25.2	23.7	26.4	25.6	25.8	26.4	25.9	25.4	24.7	24.3	23.8	23.6	23.3	24
19	21.3	21.9	21.7	22.1	22.4	22.6	23.5	24.7	26.3	26.8	28.2	29.2	29.7	29.6	30.3	28	26.4	26.2	26.2	25.5	24.9	24.6	24.4	24.1	25.4
20	24.3	24	23.9	23.7	23.8	24	25	26.7	28.5	29.8	30.4	31.3	31.7	32.6	33	33.2	32.9	32.4	31.8	30.7	29.7	28.7	27.6	26.5	28.6
21	25.9	24.8	24.1	23.7	23.3	23.4	24.5	26.3	27.6	29.1	29.7	29.8	28.8	28	27	26.9	25.8	25.9	25.3	24.3	23.5	23	22	20.6	25.6
22	20	19.7	19.3	18.6	18.1	18.1	19.2	21.7	23.9	25	25.5	26.3	27	27.1	27.2	27.4	27.8	28	25.2	21.6	20.5	20.8	20.7	20.7	22.9
23	20.3	19.9	19.8	19.7	19.6	19.6	19.8	20.6	22.3	23.7	24.3	24.7	25.5	26	26.5	26.1	26	24.6	23.6	22.8	22.1	22	21.7	21.4	22.6
24	20.8	20.7	20.4	20.7	20.5	20.4	21.3	22.8	25.3	27.8	29.2	29.5	28	26	26.2	26.7	26.6	26.5	25.9	25	24.2	23.5	22.9	22.6	24.3
25	22.1	21.8	21.4	21.2	20.9	21.3	22.3	23.9	25.8	28.1	29.5	30.2	31	30.9	32	32	31.5	30.8	28.3	26.5	25.5	24.8	24.4	24.2	26.3
26	23.5	23	22.6	22.4	22.6	23	24.2	25.9	27.3	28.4	29.5	30.7	31.5	31.6	27.4	30.2	28.7	24.5	24.2	23.9	23.4	23.2	22.8	22.7	25.7
27	22.7	22.4	22.1	21.8	21.6	21.4	21.9	24.1	26.3	27.5	29.2	29.8	29.9	30.2	30.5	30.4	30.2	29.7	28.5	26.6	25.2	24	23	22.1	25.9
28	21.3	21	20.9	20.3	19	18.9	20.4	23	25.3	26.3	26.5	27.1	27	26.9	26.5	27.2	27.5	27.5	26.5	25.7	25.1	24.4	23.7	23	24.2
29	23	23	23	23.1	22.8	23.2	23.5	24.5	26.3	27.4	28.7	29.6	29.9	29.9	30.7	30.9	29.7	28.2	27	25.9	25.2	24.7	24.1	23.5	26.2
30	22.8	23	22.6	22	21.9	21.9	23.3	24.9	27.1	28.8	29.8	30.6	30.9	31.5	31.6	32.1	31.3	30.8	30.1	28	27	26.7	26.2	25.8	27.1
Avg	21.8	21.6	21.4	21.3	21.1	21.1	21.9	23.2	24.7	25.8	26.7	27.3	27.4	27.8	27.6	27.4	26.9	26.3	25.5	24.4	23.6	23.2	22.8	22.3	24.3
S D	1.7	1.6	1.7	1.7	1.7	1.8	1.7	1.8	2.1	2.3	2.6	2.8	2.9	2.9	3.1	3.3	3.3	3.2	2.9	2.6	2.4	2.1	1.9	1.9	2
S/A	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.1	0.1	0.11	0.11	0.11	0.12	0.12	0.12	0.11	0.11	0.1	0.09	0.09	0.08	0.08
Min	18.7	18.3	17.8	17.6	17.3	17.5	18.1	18.3	18.8	19.2	19.9	20.8	21.1	21.4	22	21.3	20.7	20.3	20.2	19.7	19.3	19.4	19.3	19.1	19.6
Max	25.9	24.8	24.3	24.5	24.2	24	25	26.7	28.5	29.8	30.4	31.3	31.7	32.6	33	33.2	32.9	32.4	31.8	30.7	29.7	28.7	27.6	26.5	28.6
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

June 2009

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	96.8	98.3	98.1	80	75.2	74.4	72.7	72.6	72.4	74.3	74.3	74.6	73.4	75.4	78.7	82.9	85.5	90.5	94.1	98.3	102.1	104.3 ?	?	?	84 ?
2	?	?	?	?	?	?	104.4 ?	100.6	93.8	86.4	83.1	78.3	72.8	64.2	60.2	56	55.5	60.5	67.8	84.3	91	92.1	93.2	93.2	79.9 ?
3	95.3	97.8	100	102.7	103.9	104.9 ?	104	99.5	93	86.7	82.3	78.5	75.9	70.8	65.1	59.3	64.8	76.6	77	73	78	87.3	90.7	93.9	85.9
4	98	101.2	102	103.3	104.7	104.9 ?	103.1	100.2	96.8	87.8	78.6	76.7	71.2	70.2	61.5	79.3	98.3	99.2	100.3	102.3	101.8	103.6	103.8	?	93.4
5	?	?	?	?	?	?	?	?	100.2	96	95.1	102.7	92.6	86.6	91.8	99.6	91.2	89.9	91.4	97.3 ?	?	?	?	?	94.6 ?
6	?	?	?	104.6 ?	104.3	105 ?	104.4	103.5	100.1	98.9	97.4	93.9	93.2	91.4	89.4	94.2	95.3	96.5	98.3	100.6	101.2	101.1	101.8	101.3	98.9 ?
7	101.6	103.8	105 ?	?	?	?	102.9 ?	98.1	91.5	84.5	83.6	82.4	87.7	89.2	83.3	83.4	85	87.2	94	101	104.4 ?	105 ?	104.9 ?	104.9 ?	94.4 ?
8	105 ?	?	?	?	?	?	?	100.9	97	94.3	89.8	86.4	82.6	78	73.1	70.5	80.5	83.2	94.7	97.3	97.3	99.9	100	100.9	90.6 ?
9	102.7	104.2	?	?	?	?	104.8 ?	102.9	99.6	95.6	89.3	85	89.8	94.7	93	100	99.9	103.9 ?	98.1 ?	96.4	100.8	101.5	100.4	103.5	98.3 ?
10	102.2	102.6	104.4	104.4	104.2	105 ?	101.8	93.9	86.4	82.5	81.2	79.2	76.2	73.6	73.6	78.5	76.3	80.8	84.9	90	97.2	99.2	100.2	101.4	90.8
11	102.1	100	98.8	99	100.8	101.6	101.8	101.5	97.1	88.5	81.4	78.5	72.7	71.6	70.7	72.7	74.7	83.2	87.5	92	96.3	99.2	98	99.8	90.4
12	103	104.8 ?	?	?	104.4 ?	104.1	101.5	98.1	92.4	87.4	82.7	79.6	76.3	74.3	72.9	73	75.9	81.3	86	93	99 ?	101.9 ?	103.2 ?	?	90.2 ?
13	?	?	?	?	?	?	?	101.6 ?	95.6	93.3	89.9	86.9	84	75.9	101.6	102	100.4	99.3	99.3	101.4	104.8	?	?	?	95.4 ?
14	?	?	?	?	?	?	?	104.7 ?	101.4	95.8	88.3	82.6	100.8	86.6	87.6	90	94.6	95.6	98.5	101.9	103.3	102.1	102.1	103.2	96.4 ?
15	103.9	104.7 ?	?	?	?	?	99.6	95.8	90.5	93.9	98.4	98.8	97.7	93.4	93.5	92.2	91.1	94.4	94.1	93.5	89.9	92.1	94	96.9	95.4 ?
16	97.4	98.9	97.2	96.4	98.4	101.5	103.2	100.9	96.2	94.9	95	91.7	87.5	86.8	87.4	93.3	92.1	87.4	94.3	95.8	97	98.8	101.1	102.3	95.6
17	103.1	103.5	103.9	104.1	103.5	103.6	102.6	101.5	98.3	96	93.2	89	86.9	86.3	86.5	87.7	89.8	89.5	91.7	94.7	92.3	95.1	94.6	93.3	95.4
18	93.4	94.5	97.2	99.4	100.2	100.9	99.9	97.5	95.1	93.9	95.2	94.9	103.1 ?	92.9	96.2	97.2	96.3	97.8	98.6	100.7	101.7	104.4 ?	?	102.6 ?	98 ?
19	?	?	?	?	?	?	?	102.8 ?	97	94.4	86.7	79.6	76.2	74.4	72.8	83.1	89	90.1	91.5	96.9	99.7	99.7	101.3	101.8	90.4 ?
20	104.2 ?	?	?	?	?	104.8 ?	102.9	98.7	93.5	90.2	87.6	84.8	83.4	78.8	71.5	70.6	71.1	75	75.7	79.5	82.1	87	90.8	92	86.2 ?
21	89.4	91.4	91	90.7	90.1	89.4	87.1	82	76.8	70.2	64.2	66.8	69.7	69.5	72.2	73.5	80.9	80.6	82.7	88.3	91.3	87.8	90.1	95.8	82.1
22	97.4	97.2	98.5	100.9	102.5	103.5	101.9	96.3	90.7	84.5	81.5	76.9	74.8	75.2	75.9	75.2	73.5	74.2	89.4	102.9 ?	?	?	?	?	88.6 ?
23	?	?	?	?	?	?	104.7 ?	103.1	96.9	89.1	84.1	81.4	79.4	77.7	76.8	78.5	79.1	84.4	87.3	91.2	94.9	95	96.4	97.8	88.8 ?
24	102.3	102.9	103.8	101.6	102.1	103.9	104.5	101.3	92.2	78.5	67.3	63.8	73.1	89.2	89	86.3	85.5	81.2	82.5	86.8	93.3	97.9	102.8	104.2 ?	91.5
25	?	?	?	?	?	?	101.9	95.4	86.5	73.2	66.5	65.2	60.3	58.7	51.8	52.2	53.6	66.5	84.2	83.5	88.2	97.4	101.9	104.5	77.3 ?
26	104.7 ?	103.9	103.8	104.8	?	?	103.5	100.2	96.1	91.4	85.1	78.4	74	70.3	89.1	81.1	84.6	99.4	97.8	97.4	98.6	99.1	99.7	101	93.8 ?
27	101.8	102.3	103.5	104.7 ?	?	?	104.4 ?	98.4	87.9	81.4	69.5	63.5	63.7	62.9	60.6	61	53.3	49.7	56	64.4	71.7	78	83.3	87.7	77.7 ?
28	91.6	93.2	93.3	96.5	100.5	99.2	95.4	87.6	80.8	77.6	78.2	75.5	76.6	76.8	80.6	72.6	70.1	72.4	77.8	81.9	81.7	87.1	93.1	98.4	84.9
29	102.5	104.7 ?	104.7 ?	100.8	99.3	97.9	96.1	91.5	84.3	78.2	65	60.1	58.3	55.8	52	51.9	63.5	67.1	66.3	71.3	76.1	80.6	87.7	92.4	79.5
30	95.9	99.1	103.6	104.9 ?	?	?	99.7 ?	88.1	74.6	57.6	52.6	49.5	53	48.7	45.7	45.2	54.2	60.4	66.9	76.2	76.9	80.6	95.2	100.1	74 ?
Avg	99.7	100.4	100.5	99.9	99.6	100.3	100.4	97.2	91.8	86.6	82.2	79.5	78.9	76.7	76.8	78.1	80.2	83.3	87	91.1	93.3	95.5	97.2	98.9	89.4 ?
S D	4.5	4	4.2	6.4	7.7	8	6.9	7.1	7.6	9.5	11.1	11.7	12.1	11.6	14.2	15.3	14.4	13.3	11.5	10.3	9.5	7.9	5.7	4.7	6.9
S/A	0.05	0.04	0.04	0.06	0.08	0.08	0.07	0.07	0.08	0.11	0.14	0.15	0.15	0.15	0.19	0.2	0.18	0.16	0.13	0.11	0.1	0.08	0.06	0.05	0.08
Min	89.4	91.4	91	80	75.2	74.4	72.7	72.6	72.4	57.6	52.6	49.5	53	48.7	45.7	45.2	53.3	49.7	56	64.4	71.7	78	83.3	87.7	74
Max	105	104.8	105	104.9	104.7	105	104.8	104.7	101.4	98.9	98.4	102.7	103.1	94.7	101.6	102	100.4	103.9	100.3	102.9	104.8	105	104.9	104.9	98.9
n	244	214	188	184	176	151	246	331	360	360	360	358	354	360	360	360	360	354	352	351	328	299	287	271	7213

Data Recovery: 0.0% missing; 0.0% untested; 16.5% failed QC -- 8640 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.

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

June 2009

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	21.2	20.2	20.4	20.8	20.7	20.4	21.6	23.6	25.4	27.1	28.3	29.2	29.4	29.4	30.1	30.3	30	29.4	27.7	24.5	21.8	20.4	19.7	19.3	24.6
2	19.7	20.6	21.2	21.5	21.9	22.1	23	26.1	29.5	32.1	34	35.5	35.9	35.8	36.4	37.1	37.6	37.3	35.8	32.4	29	27	25.8	24.7	29.3
3	23.7	23	22.5	22	21.3	20.7	22.5	25.8	28.8	31.6	33.4	34.6	34.7	34.6	35.1	34.3	33	31.8	30.1	28.4	26.9	25.7	24.7	24	28.1
4	23.3	22.8	22.5	22.4	22.2	22.1	22.9	25.5	27.5	30.8	33.5	34	34.4	34.5	35	35	29.4	25.5	22.7	22.4	22.8	23.2	23.3	23.1	26.7
5	22.3	21.7	21.3	21.4	21.9	22.1	22.1	22.5	24.7	27.6	29.2	27	27.8	30.1	31.6	28.8	28.3	28.7	28	26.5	23.6	22.1	21.5	21	25.1
6	20.3	19.6	19.1	18.9	18.7	18.6	18.5	18.6	19	19.9	21	23	24.5	25.3	25.6	25.6	24.1	23.1	22.3	21.2	20.4	20	19.8	19.6	21.1
7	19.5	19	18	17.4	17	16.9	17.9	21.4	24.8	29.1	31.5	32.1	31.6	29.1	29.4	31	30.7	30.2	27.8	25	22.3	21.3	21	20.7	24.4
8	20.7	20.2	20	20.1	20.6	21	21.7	24.2	28.4	30.8	33.6	34.1	34.1	34.5	34.9	35.3	35.5	33.7	31.8	29	27.1	25.9	24.8	24.2	27.8
9	23.5	23	22.5	22.2	21.9	21.9	23.5	26.5	29.3	32.1	35	36.9	35	27.3	27.4	26.5	24.5	22.1	20.9	20.3	20	19.7	19.5	19.3	25
10	18.8	18.4	18.2	18.1	17.9	17.6	20	24.6	28.4	31.5	33.8	34.5	34.2	33.8	34.5	35.1	34.2	31.7	29.3	27.3	25.6	24.3	23.2	22.5	26.6
11	21.9	21.6	21.4	21.4	21.4	21.5	22.1	23.4	26.5	30.3	32.3	33.5	34.1	34.9	36	36.2	36.1	35	32.4	29.6	27.2	26	25.4	25.1	28.1
12	24.9	24.7	24.4	24.3	24.2	24.1	25	26.8	28.9	30.8	32.2	33.2	33.8	34.2	35.2	35.8	35.7	34.5	32.4	29.6	27.4	24.9	23.1	22	28.8
13	21.8	21.7	21.7	21.7	21.6	21.8	22.9	24.9	30.2	34	35.9	37	35.7	36	33.3	26.1	24.1	24.8	26.7	26.3	24.2	22.6	22.1	22.1	26.6
14	22.1	21.9	21.6	21.3	21.2	21.3	22.2	23.9	26.3	29.2	32.3	35.2	32.9	30.3	32.1	32.3	31.7	29.8	27.4	24.8	22.8	22	21.5	20.8	26.1
15	20.2	19.7	19	18.4	18.4	18.6	20.5	24.3	27.7	27.2	25.6	24.8	24.5	26.2	27.9	27.4	26.9	25.5	24.2	22.9	21.9	21.6	21.5	21.4	23.2
16	21.2	20.9	20.5	20.6	20.6	20.4	20.7	21.8	25.3	27.9	27.9	28.5	28.9	29.4	29.4	28.2	26.3	26.4	25.9	23.7	22.2	21.4	20.9	20.4	24.1
17	20.1	19.9	20	20	20.2	20.3	20.7	21.2	22.3	24.5	26.2	27.8	28.4	29	28.7	28.3	27.7	27.2	25.9	24.6	23.4	22.9	22.6	22.4	23.9
18	22.3	22.1	22.1	21.7	21.5	21.6	21.9	23.3	25.1	27	27.7	27.9	27	28.1	29.9	30.6	31.1	30.5	28.4	26.6	25.3	24.5	23.9	23.6	25.6
19	22.8	22.1	21.9	21.9	22.2	22.5	23.6	27.1	30.7	33	34.5	36.2	37	36.7	36.6	37.2	33.5	30.7	29.9	28.2	26.1	25.1	24.7	24.4	28.7
20	24.2	24.1	23.9	23.7	23.6	23.7	24.8	27.4	31.3	34.6	35.2	35.9	36.4	36.5	36.6	36.9	37	36.2	35.5	33.5	31.2	29.6	28.3	27.1	30.7
21	26	25	24.1	23.4	23	23	25.1	27.9	30.5	33.1	35.1	35.6	34.7	32.7	31.3	31.1	30.1	30.4	29.7	27.2	24.5	23	22	20.9	27.9
22	19.9	19.4	19	18.4	17.9	17.6	18.5	21	26.1	29.8	31.1	32	32.4	32.5	32.2	32.3	33.1	33.1	32.1	27.1	22.8	21.3	20.8	20.6	25.5
23	20.4	20	19.7	19.5	19.2	19.3	19.9	21.1	23	27.3	29.6	31	31.6	32.4	33.2	33.3	33.5	31.5	27.8	25.4	23.4	22.4	21.7	21.3	25.3
24	21.1	20.6	20.3	20.3	20.5	20.4	22	25.1	29	33.4	37.2	38.9	36.5	32.5	30.5	29.7	31.4	31.4	30.7	28.2	25.5	24.1	23.1	22.6	27.3
25	22.2	21.9	21.5	21.1	20.9	20.9	22.2	24.9	28.1	32.2	35	36.3	36.6	36.2	36.1	37.3	36.8	35.7	34.3	30.7	27.4	25.5	24.4	23.7	28.8
26	23.5	23.1	22.6	22.2	22	22.2	24.1	27.1	31	33.7	35.6	37.3	37.8	37.6	34	32.9	33.6	29.6	25.9	25.4	24.2	23.4	22.9	22.7	28.1
27	22.6	22.6	22.5	22	21.6	21.4	21.7	24.4	29.3	32.2	34.3	36.2	36.5	36.1	36.6	36.9	36.8	35.6	33.8	30.4	26.7	24.4	22.9	21.7	28.7
28	20.6	19.9	19.7	19.5	18.9	18.5	20.3	24.6	29.2	32.2	32.3	33.1	32.7	32.3	31	30.9	31.9	32.2	31.4	28.5	26.6	25.3	24	23.2	26.6
29	22.6	22.4	22.5	22.6	22.7	22.7	24	26.9	30.1	32.5	34.1	35.8	36.3	35.6	35.3	36.4	36.6	34.6	32.1	29	26.3	24.9	24.2	23.3	28.9
30	22.2	21.6	21.8	21.3	21.1	21.3	23.5	27.6	31.8	35.2	37.2	38.1	37.7	36.9	36.8	37.3	36.8	35.6	34.3	31.4	27.9	26.4	26	25.7	29.8
Avg	21.9	21.5	21.2	21	20.9	20.9	22	24.5	27.6	30.4	32.2	33.2	33.1	32.7	32.8	32.5	31.9	30.8	29.2	27	24.9	23.7	23	22.4	26.7
S D	1.7	1.7	1.7	1.7	1.7	1.8	1.9	2.3	3	3.3	3.8	4.1	3.8	3.5	3.2	3.8	4.1	4	3.9	3.2	2.6	2.3	2.1	1.9	2.2
S/A	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.1	0.11	0.11	0.12	0.12	0.11	0.11	0.1	0.12	0.13	0.13	0.13	0.12	0.11	0.1	0.09	0.09	0.08
Min	18.8	18.4	18	17.4	17	16.9	17.9	18.6	19	19.9	21	23	24.5	25.3	25.6	25.6	24.1	22.1	20.9	20.3	20	19.7	19.5	19.3	21.1
Max	26	25	24.4	24.3	24.2	24.1	25.1	27.9	31.8	35.2	37.2	38.9	37.8	37.6	36.8	37.3	37.6	37.3	35.8	33.5	31.2	29.6	28.3	27.1	30.7
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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.

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

June 2009

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	0	1.8	2.4	3.4	2.6	3.3	4	4.9	4.3	4.1	3.7	3.2	3.2	3	3.1	2.9	2.1	2.4	1.8	1.5	0.9	0.8	0.4	0.5	2.5
2	1.3	1.7	1.6	2.4	2.5	1.8	1.6	2.1	2.3	2.5	2.3	2.8	2.4	3.4	3.4	3.4	3	2.4	1.7	2.2	2.6	3.3	3.6	2.3	2.4
3	1.9	2.5	2.3	0.8	0	0.1	1.7	3.3	2.6	3.3	2.8	3.3	4.2	4.1	3.8	3.7	3.1	3.2	2.9	2.9	3.3	3.1	3.8	3.4	2.8
4	2.4	2.3	2.8	2.3	2.2	2.9	3.3	3.6	2.4	2.4	2.3	2.9	3.1	3.1	3	5.5	3.5	2.7	1.1	1.7	1.2	0.9	0.5	0.5	2.4
5	0.4	0.2	0	0.4	1.4	1.7	1.4	2.4	4	3.5	3.6	2.5	3.6	4	4	2.2	3.5	4.7	5.5	3.5	0.5	0.5	0.8	1.5	2.3
6	1.9	1.8	1.7	2	2	1.7	1.7	2.3	2.1	2.2	1.7	2	2.3	2	1.8	2.2	2	1.9	1.9	1.6	1.9	2.1	1.7	1.9	1.9
7	1.8	1.5	1.4	1.2	1.1	0.9	1.3	1.5	1.1	2	1.9	2.4	2.7	2.5	2	2.2	2.4	1.9	2.6	2.3	2	1.3	1.2	1.5	1.8
8	0.4	0.6	0.1	0	0.1	0.3	1.1	1.4	1.4	1.7	1.7	1.6	2.4	2.8	2.9	2.7	3	2.4	2.8	1.6	1.4	1.4	2.3	1.6	1.6
9	2.1	1.3	1.6	2	1.9	2.1	2.7	2.5	2.1	1.8	1.7	1.7	3.3	3.2	3.3	1.8	2.4	0.8	2.5	3.1	3.3	1.6	1.3	1.2	2.1
10	1.9	1.5	1.2	1.8	0.4	0.7	0.7	1.1	1.4	1.1	1.3	1.8	1.8	2.2	1.7	3	2.1	1.4	1.2	1	1.5	1.4	1.2	1.1	1.4
11	1.1	0.9	0.6	0.9	1.8	1.2	0.2	1.1	2.7	3.4	2.8	3	3.2	3.2	3	3.1	3.1	3.2	3.2	2.5	2.2	2.3	2.1	1.9	2.2
12	1.7	1.8	1.4	2.8	3.3	3.2	3.9	4.3	4.1	4	3.7	3.6	3.8	3.7	3.2	2.2	2.4	2.1	2.6	2	3	2.5	0.9	0.2	2.8
13	0	0.2	0.6	0.4	0.5	0	0.2	0.3	1.1	2	1.9	2.3	2.4	2.9	4.5	3.1	2.8	1.2	0.6	1.4	0.7	1	0.8	0.8	1.3
14	0.1	0.1	0.1	0.1	0.2	0.2	0.4	1.1	1.6	1.6	2.2	1.9	2.8	3	3.9	3.5	3.4	2.8	2.6	2.3	2.5	2.4	2	1.3	1.8
15	1.2	0.2	0.1	0.2	0.1	0	1	2	2.2	2	2.1	1.6	2	2.4	2.6	2.4	1.9	2.5	2.2	1.9	1.7	1.3	1.7	2.1	1.6
16	1.6	1.6	1.8	1.9	2.5	2.3	2.7	2.3	3.1	3.3	3.7	3.6	3.8	3.5	3.7	4.2	3.9	3.6	3.2	3.3	1.8	2.2	2.9	2.7	2.9
17	2.8	2.4	2.3	2.3	3.1	3.1	3.3	3.6	3.8	4.4	3.9	4	3.9	4.6	4	4.3	5	4.4	3.5	3.2	2.8	2.4	2.7	2.5	3.4
18	2.3	1.6	1.9	1	0.8	1.6	1.6	2.4	3.1	3	2.9	3	1.9	3.8	3.9	3.7	3.5	3.3	2.4	2.5	2.9	3.4	2.7	3	2.6
19	3.2	1.4	1	0.6	0.1	0	0.4	0.9	1.5	2.5	2.1	1.8	2	2.2	1.4	4	2.7	2.1	2.1	1.2	1.6	1.5	1.8	1.8	1.7
20	2.3	2.3	2.1	1.6	1.4	1.6	2.4	2.7	2.7	2.8	3.7	4	4.6	4.9	5.7	5.8	4.9	4.2	2.8	2.9	2.4	1.3	1.7	1.5	3
21	1.3	1.2	1.4	1.7	1.9	1.9	2.4	2.7	3.2	3.8	4.9	4.4	4.9	4.7	5	4.5	3.4	2.7	1.5	1	0.8	1.5	0.9	1	2.6
22	1.4	1.5	1.2	1.2	1.3	1.4	1.3	2	2.4	2.8	2.7	2.9	2.3	2.1	3	3.1	2.3	1.4	2.4	0.9	0.5	0.1	0	0.6	1.7
23	0.1	0.2	0.5	0.3	0.3	0.6	0.7	0.7	1.3	2.1	2.4	2.5	2.6	1.8	2.1	2.2	2	2.2	1.4	1.5	1.2	1	0.6	1	1.3
24	1.2	0.5	0.7	0.7	1.6	1.9	2.3	2.5	1.3	1	1.1	1.4	1.3	1.6	0.7	2.7	3	2.6	2.1	0.8	1.1	0.8	0.5	1.3	1.4
25	0.4	0.5	0.3	0.5	1	1.5	1.5	1.3	1.8	2.5	2.4	2.6	2.2	1.4	1.7	1.8	1.7	1.7	2.3	1.7	1.3	0.5	0.2	0.3	1.4
26	0.7	1.3	1.1	0.8	1	1.1	1.3	1.8	2.4	2.1	2.4	2.1	2.9	3.4	2.2	1.9	3.5	2.7	2.8	2.1	1.5	1.5	1.7	1.9	1.9
27	2.2	2.5	2.6	2.2	0.4	0.3	1	1.6	2.7	3.3	2.1	3	2.4	2.3	2.5	2.7	3	2.8	2.3	0.9	0.6	0.5	0.4	0.3	1.9
28	0.3	0.7	0.7	0.5	1.1	1.7	1.8	1.2	2.1	2.6	2.2	2.3	2	1.9	1.4	1.5	0.8	0.8	0.7	1.1	1.3	0.9	1.3	1.4	1.3
29	1.1	1.2	1.4	1.9	2.3	2.4	2.5	2.6	2.6	3.4	2.7	2.3	2.2	2.4	2	2	2.7	2.6	2.8	1.4	1.3	1.7	0.7	0.1	2
30	0.4	1.4	0.2	0.1	0.2	0	0.5	1.1	1.1	1.5	1.6	2.3	3.2	2.8	3.1	2.9	2.8	1.7	0.7	0.1	0.5	1.1	1	0.4	1.3
Avg	1.3	1.3	1.2	1.3	1.3	1.4	1.7	2.1	2.4	2.6	2.6	2.6	2.8	3	3	3	2.9	2.5	2.3	1.9	1.7	1.5	1.4	1.4	2
SD	0.9	0.7	0.8	0.9	1	1	1.1	1.1	0.9	0.9	0.9	0.8	0.9	0.9	1.1	1.1	0.9	1	1	0.9	0.9	0.8	1	0.9	0.6
S/A	0.68	0.57	0.66	0.73	0.74	0.74	0.63	0.5	0.39	0.34	0.34	0.3	0.31	0.31	0.38	0.35	0.31	0.39	0.44	0.46	0.51	0.55	0.68	0.62	0.29
Min	0	0.1	0	0	0	0	0.2	0.3	1.1	1	1.1	1.4	1.3	1.4	0.7	1.5	0.8	0.8	0.6	0.1	0.5	0.1	0	0.1	1.3
Max	3.2	2.5	2.8	3.4	3.3	3.3	4	4.9	4.3	4.4	4.9	4.4	4.9	4.9	5.7	5.8	5	4.7	5.5	3.5	3.3	3.4	3.8	3.4	3.4
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

June 2009

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	13	357	20	34	35	45	49	57	60	61	60	65	61	54	60	61	71	80	54	57	79	90	134	173	55
2	185	205	212	219	240	238	228	240	227	213	202	194	202	207	195	203	196	173	159	163	180	193	200	205	203
3	204	201	214	252	247	207	208	227	228	221	219	202	199	177	180	182	182	166	170	183	188	189	196	201	196
4	220	203	210	204	207	216	226	234	242	212	220	182	172	189	174	141	142	141	131	139	138	176	204	1	189
5	1	50	160	129	134	156	176	192	207	200	196	211	209	188	188	186	177	187	191	227	264	270	293	301	196
6	306	324	329	337	335	339	340	17	17	28	31	31	5	352	13	50	52	45	54	66	69	69	77	69	21
7	70	78	81	68	77	101	76	67	35	23	79	76	100	110	81	81	115	116	97	110	102	107	121	120	89
8	138	142	148	143	274	224	191	208	235	214	189	206	184	164	197	188	143	132	112	132	160	168	196	194	175
9	205	198	207	213	207	206	222	234	231	208	213	169	26	104	120	191	313	221	146	196	338	328	333	257	208
10	260	228	241	345	35	272	290	353	349	337	238	217	225	217	195	165	191	212	156	156	165	165	156	175	212
11	206	209	232	212	205	207	216	190	196	186	188	183	188	181	181	174	167	165	159	158	172	181	185	183	182
12	161	157	171	199	210	217	225	219	224	229	242	233	222	224	230	243	219	192	193	133	40	162	245	257	213
13	53	300	273	257	323	238	87	99	76	83	115	140	129	182	358	64	99	143	298	3	360	0	10	56	78
14	283	307	337	331	329	353	331	352	348	6	20	38	68	30	52	48	61	60	65	66	73	87	76	70	50
15	73	62	293	5	20	24	42	54	54	41	38	36	84	78	65	90	75	73	81	86	79	90	76	69	68
16	73	67	71	70	67	70	72	73	83	75	81	72	72	66	69	66	70	70	63	70	58	67	68	64	70
17	69	67	67	69	69	69	69	71	76	80	89	92	92	89	96	99	110	119	119	117	123	126	121	131	93
18	140	147	137	141	145	131	147	151	157	162	166	177	161	174	183	167	165	168	176	157	167	195	205	47	163
19	140	201	150	144	171	238	256	279	2	354	23	24	4	355	27	120	142	128	126	130	150	175	193	198	116
20	200	211	210	208	215	228	224	236	250	231	226	226	223	226	241	242	252	235	244	251	263	260	274	278	235
21	273	275	267	269	266	275	276	268	280	296	301	321	337	331	329	341	4	12	9	348	307	300	282	268	312
22	266	284	286	282	281	283	291	313	339	334	335	343	327	328	338	335	319	337	84	246	161	128	208	330	322
23	29	331	9	65	56	352	352	12	42	45	34	22	41	38	54	58	71	73	96	128	127	121	125	190	57
24	220	210	227	208	209	225	247	265	272	347	340	292	42	168	248	80	91	101	114	120	124	144	188	210	178
25	218	236	238	246	256	267	269	272	267	261	259	239	289	312	299	301	313	41	66	73	77	88	90	129	283
26	208	215	216	209	194	203	196	197	204	214	215	218	217	223	154	120	156	186	211	221	215	206	204	207	200
27	199	208	220	249	23	269	276	299	324	347	339	345	319	316	314	316	325	324	315	305	308	287	281	285	306
28	271	307	308	292	252	262	281	287	288	288	292	292	299	323	314	340	339	28	85	97	103	109	131	147	298
29	148	158	197	209	225	239	271	296	318	319	320	322	281	258	252	231	98	73	94	104	117	125	123	115	258
30	128	133	148	149	257	267	230	240	230	222	213	227	194	188	204	203	187	167	178	182	160	154	174	198	195
Avg	183	197	210	225	216	226	240	250	265	273	239	214	180	182	170	133	131	129	127	137	126	154	169	163	181
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

June 2009

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	0	3.2	4.4	6	4.8	6.2	6.9	8.3	7.2	7.1	6.4	5.9	5.6	5.4	5.6	5.2	3.8	4.1	3.3	2.8	1.9	1.7	1.1	1.7	4.5
2	3	3	2.8	4.4	4.3	3.3	3	3.7	3.8	4.3	4	5.1	4.6	5.9	6.1	5.6	5.3	4.5	3.4	4.3	5	5.7	6.1	4.1	4.4
3	3.1	4.4	3.7	1.6	0.1	0.4	3	5	4.6	5.5	4.9	5.8	7.3	7.4	6.8	6.2	5.6	6.1	5.7	5.6	6.5	5.6	6.4	5.8	4.9
4	4.2	4	4.8	4	3.8	4.6	5.2	6.1	4.7	4.5	4.3	5.2	5.7	5.6	5.5	9.8	6.1	4.7	2.3	3.3	2.7	2.3	1.5	1.2	4.4
5	1.1	0.6	0.2	1	2.5	3.7	3.6	4.6	7	6.2	6.4	4.7	6	7.3	7.1	4.4	6.9	8.6	10.3	6.5	1.4	1.4	2.1	3.6	4.5
6	4.2	3.9	3.8	4	4.1	4	3.7	4.3	4.2	4.1	3.3	4	4.1	3.8	3.2	3.6	3.4	3.3	3.1	2.9	3.1	3.2	3.1	3	3.6
7	2.9	2.5	2.3	2.2	2.3	2	2.1	2.5	2.2	4.2	3.5	4.3	4.5	4.3	3.7	3.7	4	3.2	4.2	3.7	3	2.2	2.2	2.4	3.1
8	1.1	1.3	0.5	0.1	0.4	0.7	2.1	2.7	2.7	3.3	3.1	2.9	4.3	5.1	4.9	4.7	5	3.9	4.7	2.7	2.8	2.9	4.1	3	2.9
9	3.3	2.4	2.7	3	2.8	3.3	4.3	4.2	3.6	3.6	3.6	3.3	6.4	5.5	6	3.2	5.4	1.8	4	5.6	6.2	3.3	2.8	2.3	3.9
10	3.8	2.8	2.8	4.2	1.3	1.7	1.8	2.4	3	2.6	3	3.5	3.5	4.1	3.4	4.8	4	2.3	2.3	2.1	2.9	2.8	2.4	2.3	2.9
11	2	1.6	1.1	1.4	2.7	2	0.4	2.3	4.7	5.8	5.1	5.5	5.7	5.6	5.3	5.4	5.4	6.1	5.7	4.8	4.4	4.7	4.2	3.7	4
12	3.4	3.6	3.2	4.9	5.2	5.2	6.2	6.5	6.7	6.5	6.6	6.1	6.1	6.1	5.2	4	3.8	3.5	4.5	3.9	5.2	4.4	1.8	0.5	4.7
13	0.1	0.6	1.4	1.2	1.3	0.2	0.5	1.1	2.2	3.5	3.4	3.9	4.3	5.1	8	5.3	4.7	2.7	1.3	2.5	1.5	1.8	1.6	1.7	2.5
14	0.4	0.4	0.5	0.4	0.9	0.7	1.3	2.3	3.4	3.3	4	3.6	4.6	5.5	6.7	5.8	5.7	4.9	4.7	4.1	4.2	3.9	3.6	2.1	3.2
15	1.9	0.6	0.4	0.6	0.6	0	2	3.4	3.7	3.6	3.8	2.8	3.2	4.5	4.5	4.1	3.5	4.3	3.8	3.3	3.2	2.3	2.8	3.3	2.8
16	2.8	2.8	2.9	3.1	4	4.1	4.6	4	4.9	5.3	6.3	6.1	6.4	6	5.9	7.5	7	6.2	5.9	5.8	3.4	4.1	5.3	5.2	5
17	5	4.3	4.5	4.3	5.1	5.4	5.6	5.9	6.4	6.7	6.8	6.7	6.4	7.4	7	7.7	8.3	7.4	6.2	5.4	4.7	4.2	4.4	4.3	5.8
18	4.1	2.9	3.5	2.1	1.9	2.8	3.3	4.6	5.7	5.8	5.4	6	4	6.7	7	6.8	6.5	6	4.8	4.9	5.5	6.2	4.7	5.9	4.9
19	5.7	2.9	2.4	1.7	0.8	0.5	1	2.4	3.1	4.3	3.9	3.5	4	4.4	3	6.3	4.3	3.3	3	2	2.9	2.7	3.2	3.2	3.1
20	3.6	3.6	3.3	2.5	2.4	2.6	3.7	4.6	4.6	4.6	5.8	6.2	7.2	8	9.9	10.1	8.9	7.3	5.5	5	4.3	2.4	3.4	3.1	5.1
21	2.9	2.9	2.7	3.6	4	3.9	4.9	5.2	7.1	7.8	9.6	8.1	8.6	8.9	9.3	8.3	6	4.7	2.8	1.9	1.8	3.4	2.1	2	5.1
22	2.7	3.4	2.7	3	3	3	3.1	4.3	4.8	5.8	5.2	5.6	4.6	4.7	5.6	5.6	4.7	3.2	4.3	2.3	1.2	0.6	0.2	1.7	3.6
23	0.5	0.7	1.2	0.9	1.1	1.3	1.6	1.8	3.1	3.9	4.5	4.7	4.9	3.7	3.7	3.9	3.4	3.8	2.5	2.5	2.2	1.8	1.3	1.7	2.5
24	2	1	1.2	1.2	2.6	3.2	4.3	4.6	2.8	2.3	2.8	3	2.6	3	1.6	4.3	5.2	4.3	3.5	1.5	2.1	1.9	1.7	2.3	2.7
25	1	1.1	1.1	1.3	2	2.9	3	3.2	3.4	4.6	4.4	4.6	4.2	3	3.4	4.2	3.6	3.3	3.9	3	2.4	1.5	0.9	1	2.8
26	1.6	2.3	2	1.5	2.4	2.1	2.7	3.3	3.9	3.9	4.2	4	5.2	6.6	4.1	3	6	5	4.7	3.3	2.3	2.4	2.8	3	3.4
27	3.7	4	4.1	4.2	1.4	1	2.4	3.6	5.3	5.7	4.3	5.6	4.7	4.9	5.2	5.3	5.7	5.6	4.4	2.2	1.4	1.1	1.1	0.9	3.7
28	0.8	1.4	1.6	1.2	1.8	2.8	3.4	2.8	4.3	5	4.8	4.8	4.3	3.9	2.9	2.9	1.9	1.6	1.2	2	2	1.7	2.3	2.5	2.7
29	2.3	2.5	2.7	3	4	4.3	4.8	5.3	5.3	6.2	5.2	4.8	4.8	5.1	4.3	3.6	4.5	4.4	4.6	2.4	2.3	2.9	1.5	0.5	3.8
30	0.7	2.4	0.5	0.4	0.7	0.3	1.2	2.3	2.2	3	3.2	4.7	5.6	5.2	5.4	5.4	5	3.3	1.7	0.4	1.4	2	2.2	1.3	2.5
Avg	2.5	2.4	2.4	2.4	2.5	2.6	3.2	3.9	4.4	4.8	4.7	4.8	5.1	5.4	5.3	5.4	5.1	4.4	4.1	3.4	3.1	2.9	2.8	2.6	3.8
SD	1.5	1.2	1.3	1.6	1.5	1.7	1.7	1.6	1.5	1.4	1.5	1.3	1.3	1.4	1.9	1.9	1.5	1.7	1.8	1.5	1.5	1.4	1.5	1.4	1
S/A	0.61	0.5	0.57	0.64	0.6	0.65	0.52	0.4	0.34	0.29	0.31	0.26	0.26	0.27	0.35	0.35	0.29	0.37	0.44	0.44	0.48	0.48	0.56	0.54	0.25
Min	0	0.4	0.2	0.1	0.1	0	0.4	1.1	2.2	2.3	2.8	2.8	2.6	3	1.6	2.9	1.9	1.6	1.2	0.4	1.2	0.6	0.2	0.5	2.5
Max	5.7	4.4	4.8	6	5.2	6.2	6.9	8.3	7.2	7.8	9.6	8.1	8.6	8.9	9.9	10.1	8.9	8.6	10.3	6.5	6.5	6.2	6.4	5.9	5.8
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

June 2009

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	1012	1013	1013	1014	1015	1016	1017	1017	1018	1018	1019	1018	1018	1018	1018	1017	1017	1017	1017	1017	1017	1016	1016	1016	1016		
2	1016	1016	1015	1016	1016	1017	1017	1017	1017	1017	1017	1016	1016	1015	1015	1014	1014	1014	1014	1014	1015	1015	1015	1015	1016	1016	
3	1016	1015	1015	1015	1015	1016	1016	1016	1016	1016	1015	1015	1015	1014	1013	1012	1012	1011	1011	1011	1012	1012	1013	1013	1013	1014	
4	1013	1013	1012	1012	1012	1012	1013	1013	1013	1013	1012	1012	1011	1011	1010	1010	1009	1010	1010	1010	1010	1010	1010	1010	1010	1011	
5	1009	1008	1008	1007	1007	1007	1007	1007	1007	1007	1007	1006	1005	1005	1004	1004	1003	1003	1003	1003	1005	1006	1007	1008	1008	1006	
6	1008	1008	1008	1009	1010	1010	1011	1012	1013	1013	1013	1014	1014	1014	1014	1014	1014	1014	1015	1015	1015	1016	1016	1016	1015	1013	
7	1015	1015	1015	1015	1015	1016	1016	1017	1017	1017	1017	1017	1016	1016	1015	1015	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015	
8	1014	1014	1013	1013	1014	1014	1014	1014	1015	1014	1014	1013	1013	1012	1012	1012	1011	1011	1011	1011	1011	1012	1013	1012	1012	1013	
9	1011	1011	1011	1011	1012	1012	1012	1012	1012	1012	1012	1012	1011	1011	1010	1010	1011	1012	1011	1010	1010	1009	1013	1013	1012	1011	1011
10	1011	1010	1010	1011	1011	1012	1012	1012	1012	1012	1012	1012	1011	1011	1011	1010	1010	1010	1010	1010	1010	1010	1011	1011	1011	1011	
11	1010	1010	1010	1010	1010	1010	1010	1011	1011	1011	1010	1010	1010	1009	1009	1008	1008	1007	1007	1007	1008	1008	1008	1008	1008	1009	
12	1007	1006	1006	1006	1006	1007	1007	1007	1007	1007	1007	1007	1007	1007	1006	1006	1006	1006	1006	1007	1007	1008	1008	1008	1008	1007	
13	1008	1008	1007	1007	1008	1009	1009	1009	1009	1010	1010	1009	1009	1008	1008	1009	1009	1009	1009	1009	1009	1010	1010	1010	1009	1009	
14	1009	1009	1008	1009	1009	1010	1011	1011	1012	1012	1012	1012	1011	1012	1012	1012	1012	1012	1012	1012	1013	1013	1014	1014	1014	1011	
15	1013	1013	1013	1013	1013	1014	1014	1014	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1014	
16	1015	1015	1015	1015	1015	1015	1016	1017	1017	1017	1017	1017	1017	1018	1018	1018	1017	1017	1018	1018	1019	1019	1018	1018	1018	1017	
17	1018	1018	1018	1018	1018	1018	1018	1018	1018	1019	1019	1019	1019	1018	1018	1017	1017	1016	1016	1016	1015	1015	1015	1015	1014	1017	
18	1014	1013	1013	1013	1013	1012	1012	1013	1012	1012	1012	1012	1011	1010	1010	1010	1009	1009	1008	1008	1008	1009	1009	1009	1009	1011	
19	1008	1007	1007	1007	1007	1007	1008	1008	1008	1008	1009	1010	1009	1009	1008	1007	1007	1008	1008	1008	1008	1008	1009	1008	1008	1008	
20	1007	1007	1006	1005	1005	1006	1005	1006	1005	1005	1004	1004	1003	1002	1001	1000	1000	1000	1000	1000	1000	1001	1001	1001	1001	1003	
21	1001	1001	1001	1000	1001	1001	1001	1001	1001	1001	1001	1001	1001	1001	1001	1001	1002	1002	1002	1002	1002	1003	1003	1003	1002	1001	
22	1002	1002	1002	1001	1002	1002	1002	1003	1003	1003	1003	1003	1003	1003	1002	1002	1002	1002	1002	1002	1003	1003	1003	1003	1004	1002	
23	1003	1003	1003	1004	1004	1004	1005	1005	1006	1006	1006	1007	1007	1006	1006	1006	1006	1006	1006	1006	1007	1007	1007	1007	1007	1006	
24	1007	1007	1007	1007	1007	1007	1008	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007	1008	1008	1009	1009	1008	1007	
25	1008	1008	1008	1008	1008	1008	1009	1009	1009	1009	1009	1009	1009	1008	1008	1007	1007	1007	1007	1007	1007	1008	1008	1008	1008	1008	
26	1008	1008	1008	1007	1007	1007	1008	1007	1008	1008	1008	1008	1007	1007	1006	1005	1005	1005	1006	1006	1005	1006	1006	1006	1006	1007	
27	1006	1005	1005	1004	1005	1005	1006	1006	1006	1006	1006	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1006	1006	1006	1005	1005	
28	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1004	1003	1002	1002	1002	1002	1003	1003	1002	1002	1004	
29	1001	1000	1000	999	1000	1000	1000	1001	1001	1001	1001	1001	1001	1001	1000	1000	1000	999	999	1000	1000	1001	1002	1002	1001	1000	
30	1000	1000	1000	1000	1000	1001	1001	1001	1001	1001	1001	1001	1001	1001	1000	1000	1000	1000	1000	1000	1001	1001	1002	1002	1002	1001	

Avg	1009	1009	1009	1009	1009	1009	1010	1010	1010	1010	1010	1010	1009	1009	1009	1008	1008	1008	1008	1009	1009	1010	1009	1009	1009	1009
S D	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
S/A	0	0	0	0	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	0	0	0	
Min	1000	1000	1000	999	1000	1000	1000	1001	1001	1001	1001	1001	1001	1000	1000	1000	999	999	1000	1000	1001	1001	1001	1001	1000	
Max	1018	1018	1018	1018	1018	1018	1018	1018	1019	1019	1019	1019	1018	1018	1018	1018	1017	1017	1018	1018	1019	1019	1018	1018	1017	
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640	

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

June 2009

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	12.7	12.7	12.7	12.7	12.6	12.7	13.1	13.3	13.2	13.2	13.2	13.1	13.2	13.2	13.1	13.1	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13	
2	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.2	13.1	13.1	13	13	13	13	13	13	13	12.9	12.9	12.8	12.8	12.7	12.7	12.7	12.9	12.9	
3	12.7	12.7	12.7	12.6	12.6	12.7	13.1	13.2	13.1	13.1	13	13	13	13	13	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.7	12.7	12.9	12.9	
4	12.7	12.7	12.7	12.6	12.6	12.6	13.1	13.2	13.2	13.1	13	13.1	13	13	13	13.1	13.1	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.9	12.9	
5	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.3	13.2	13.2	13.1	13.2	13.2	13.1	13.1	13.2	13.1	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.9	
6	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.1	13.2	13.3	13.3	13.3	13.2	13.2	13.2	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.9	
7	12.8	12.7	12.7	12.7	12.7	12.7	13.2	13.3	13.2	13.1	13.1	13.1	13.1	13.2	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13	
8	12.7	12.7	12.7	12.7	12.7	12.7	13	13.2	13.2	13.1	13.1	13	13.1	13	13	13	13	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.9	12.9	
9	12.7	12.7	12.7	12.6	12.6	12.7	13.1	13.2	13.1	13.1	13	13	13.1	13.2	13.1	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.6	12.6	12.8	12.8	
10	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13.1	13	13	13	13.1	13	13	13.1	13	12.9	12.8	12.8	12.7	12.7	12.7	12.9	12.9	
11	12.7	12.7	12.7	12.6	12.6	12.6	12.8	13.2	13.2	13.1	13.1	13	13	13	13	13	13	13	12.9	12.8	12.8	12.8	12.7	12.7	12.9	12.9	
12	12.7	12.7	12.7	12.6	12.6	12.7	13.1	13.2	13.1	13.1	13.1	13	13.1	13	13	13	13	13	12.9	12.8	12.8	12.8	12.7	12.7	12.9	12.9	
13	12.7	12.7	12.7	12.6	12.6	12.7	13	13.2	13.1	13	13	13	13	13	13	13.1	13.3	13.1	12.9	12.8	12.8	12.8	12.7	12.7	12.9	12.9	
14	12.7	12.7	12.7	12.6	12.6	12.7	13.1	13.3	13.2	13.1	13.1	13	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.9	
15	12.7	12.7	12.7	12.7	12.6	12.7	13.2	13.2	13.2	13.2	13.3	13.2	13.3	13.2	13.2	13.2	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13	
16	12.8	12.8	12.8	12.7	12.7	12.7	12.8	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.3	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	13	
17	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13	
18	12.8	12.8	12.8	12.7	12.7	12.7	12.8	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13	
19	12.8	12.8	12.7	12.7	12.7	12.7	13.1	13.2	13.1	13.1	13	13	13	13	13	13	13.1	13.1	12.9	12.8	12.8	12.8	12.7	12.7	12.9	12.9	
20	12.7	12.7	12.7	12.7	12.7	12.7	13	13.2	13.1	13	13	13	13	13	13	13	13	13	12.8	12.8	12.8	12.7	12.7	12.7	12.9	12.9	
21	12.7	12.7	12.6	12.6	12.6	12.7	13.1	13.2	13.1	13	13	13	13	13.1	13.1	13.1	13.1	13	12.9	12.8	12.8	12.7	12.7	12.7	12.9	12.9	
22	12.7	12.7	12.6	12.6	12.6	12.6	13	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.9	12.8	12.8	12.8	12.7	12.7	12.9	12.9	
23	12.7	12.7	12.7	12.7	12.6	12.6	12.9	13.2	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.9	12.8	12.8	12.8	12.7	12.7	12.9	12.9	
24	12.7	12.7	12.7	12.6	12.6	12.6	13	13.2	13.1	13	13	12.9	13	13	13	13.1	13.1	13	12.9	12.8	12.8	12.7	12.7	12.7	12.9	12.9	
25	12.7	12.6	12.6	12.6	12.6	12.7	13.1	13.2	13.2	13.1	13	13	13	13	13	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.9	12.9	
26	12.7	12.7	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13.1	13.1	13	12.8	12.9	12.8	12.7	12.7	12.7	12.7	12.9	12.9	
27	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.2	13.1	13.1	13	13	13	13	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.8	12.8	
28	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.9	12.8	12.8	12.8	12.7	12.7	12.9	12.9	
29	12.7	12.7	12.7	12.7	12.6	12.6	13	13.2	13.1	13.1	13	13	13	13	13	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.9	12.9	
30	12.7	12.7	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13	13	13	13	12.8	12.8	12.7	12.7	12.7	12.7	12.8	12.8	
Avg	12.7	12.7	12.7	12.7	12.6	12.7	13	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.9	12.9	
SD	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	
S/A	0	0	0	0	0	0	0.01	0.01	0	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0	0	0	0	0	0	0	
Min	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13.1	13	13	12.9	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.6	12.6	12.8	12.8	
Max	12.8	12.8	12.8	12.7	12.7	12.7	13.2	13.3	13.3	13.3	13.3	13.3	13.3	13.2	13.2	13.2	13.3	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	13	13
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640	8640	

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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.