

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

August 2012

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	21	61	120	230	94	90	107 ?	147 ?	216	472	444	304	195	38	0	0	0	0	0	2541
2	0	0	0	0	0	28	129	292	529	710	798	898	960	882	759	448	316	177	18	1	0	0	0	0	6944
3	0	0	0	0	0	35	181	279	493	666	834	931	951	714	684	495	412	154	21	1	0	0	0	0	6851
4	0	0	0	0	0	20	150	333	474	556	602	763	827	885	791	430	326	232	51	1	0	0	0	0	6439
5	0	0	0	0	0	25	154	314	554	757	805	523	860	872	777	620	365	77	48	0	0	0	0	0	6752
6	0	0	0	0	0	26	153	301	502	552	738	839	611	705	704	481	257	197	31	0	0	0	0	0	6097
7	0	0	0	0	0	9	66	110	177	255	281	561	404	331	219	77 ?	83	?	5	0	0	0	0	0	2577 ?
8	0	0	0	0	0	9	46	66	108	143	186	237	301	625	551	400	320	203	29	0	0	0	0	0	3225
9	0	0	0	0	0	25	95	343	548	706	774	846	811	461	674	387	347	173	24	0	0	0	0	0	6214
10	0	0	0	0	0	8	79	286	491	590	592	575	397	716	469	245	148	57	9	0	0	0	0	0	4660
11	0	0	0	0	0	24	101	134	370	529	186	122	194	715	562	182	90	72	10	0	0	0	0	0	3292
12	0	0	0	0	0	12	98	221	457	276	425	326	385	368	293	346	320	152	10	0	0	0	0	0	3690
13	0	0	0	0	0	19	98	164	357	703	688	863	471	864	266	227	213	156	32	0	0	0	0	0	5121
14	0	0	0	0	0	25	115	318	510	690	818	908	916	871	759	586	375	129	50	0	0	0	0	0	7071
15	0	0	0	0	0	20	128	314	508	682	778	846	758	518	409	332	70 ?	31 ?	20	0	0	0	0	0	5415
16	0	0	0	0	0	23	104	299	498	687	820	803	865	854	623	612	323	209	38	0	0	0	0	0	6759
17	0	0	0	0	0	22	120	314	511	657	837	830	789	788	624	455	317	148	23	0	0	0	0	0	6437
18	0	0	0	0	0	6	31	57	218	500	759	692	492	399	314	360	274	88	15	0	0	0	0	0	4204
19	0	0	0	0	0	18	92	292	277	308	548	202 ?	?	63 ?	?	131	108	60	19	0	0	0	0	0	2118 ?
20	0	0	0	0	0	3	25	67	86	171	133 ?	206	196	291	335	390	208	84	24	0	0	0	0	0	2217
21	0	0	0	0	0	6	53	118	212	225	267	313	290	199	206	250	148	68	11	0	0	0	0	0	2365
22	0	0	0	0	0	9	52	177	442	491	686	865	955	717	668	569	253	105	23	0	0	0	0	0	6013
23	0	0	0	0	0	14	50	145	210	454	520	613	747	782	668	373	150	52	16	0	0	0	0	0	4794
24	0	0	0	0	0	5	31	80	191	283	326	366	326	348	178	230	172	80	14	0	0	0	0	0	2630
25	0	0	0	0	0	4	21	182	432	694	745	797	720	502	750	568	383	159	24	0	0	0	0	0	5982
26	0	0	0	0	0	6	97	291	509	705	664	759	841	780	315	97 ?	46	83	19	0	0	0	0	0	5210
27	0	0	0	0	0	15	119	295	494	676	814	715	774	396	434	511	324	130	31	0	0	0	0	0	5727
28	0	0	0	0	0	19	109	209	355	452	554	772	566	418	329	305	273	106	17	0	0	0	0	0	4485
29	0	0	0	0	0	10	72	203	436	507	717	910	859	564	360	151	347	128	25	0	0	0	0	0	5287
30	0	0	0	0	0	12	95	236	375	564	729	850	860	806	680	510	310	117	18	0	0	0	0	0	6161
31	0	0	0	0	0	12	86	257	451	649	771	846	816	662	586	474	258	110	18	0	0	0	0	0	5995
Avg	0	0	0	0	0	16	91	220	387	514	596	641	636	591	515	377	253	124	24	0	0	0	0	0	4944
S D	0	0	0	0	0	8	41	92	141	197	237	268	262	237	196	155	104	54	12	0	0	0	0	0	1622
S/A	0	0	0	0	0	0.53	0.45	0.42	0.36	0.38	0.4	0.42	0.41	0.4	0.38	0.41	0.41	0.43	0.5	3.15	0	0	0	0	0.33
Min	0	0	0	0	0	3	21	57	86	94	90	107	147	63	178	77	46	31	5	0	0	0	0	0	2118
Max	0	0	0	0	0	35	181	343	554	757	837	931	960	885	791	620	412	232	51	1	0	0	0	0	7071
n	0	0	0	0	0	229	371	370	372	372	364	358	355	362	359	361	367	349	296	4	0	0	0	0	4890

Daylight Data Recovery: 0.0% missing; 0.0% untested; 2.1% exceed the 15% QC threshold -- 4996 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31392F3 Calibration Factor: 7.3961 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

August 2012

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	*	
2	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
3	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
4	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
5	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
6	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
7	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
8	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
9	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
10	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
12	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
14	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
16	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
24	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
25	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
26	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
31	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
Avg	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A	*
SD	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	0
S/A	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	0
Min	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A
Max	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A
n	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	0

Daylight Data Recovery: 100.0% missing; 0.0% untested; 0.0% exceed the 15% QC threshold -- 4996 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

August 2012

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	23	60	100	219	94	87	66	123	205	436	317	231	107	26	0	0	0	0	0	2095
2	0	0	0	0	0	23	69	108	146	206	265	288	336	231	199	220	174	105	18	0	0	0	0	0	2389
3	0	0	0	0	0	22	85	150	217	192	166	152	175	286	270	175	120	73	21	1	0	0	0	0	2104
4	0	0	0	0	0	17	83	142	164	243	389	446	438	388	143	124	131	75	27	1	0	0	0	0	2808
5	0	0	0	0	0	19	53	150	156	188	273	272	163	187	101	93	103	40	33	0	0	0	0	0	1830
6	0	0	0	0	0	20	92	187	320	418	373	525	549	517	225	303	198	126	30	0	0	0	0	0	3882
7	0	0	0	0	0	9	66	110	176	242	232	483	380	311	207	59 ?	82	?	5	0	0	0	0	0	2362 ?
8	0	0	0	0	0	11	46	66	108	143	186	237	296	440	404	300	211	145	27	0	0	0	0	0	2618
9	0	0	0	0	0	27	68	94	128	137	209	225	328	348	256	291	201	130	24	0	0	0	0	0	2466
10	0	0	0	0	0	8	78	175	166	229	306	327	366	400	309	244	135	49	8	0	0	0	0	0	2801
11	0	0	0	0	0	23	85	123	254	344	186	112	169	289	233	147	90	69	10	0	0	0	0	0	2135
12	0	0	0	0	0	12	75	176	260	257	372	321	350	360	276	269	175	86	10	0	0	0	0	0	2999
13	0	0	0	0	0	18	85	142	246	205	244	288	263	286	202	187	161	107	25	0	0	0	0	0	2458
14	0	0	0	0	0	24	101	157	141	172	196	230	209	154	154	128	102	75	39	0	0	0	0	0	1883
15	0	0	0	0	0	17	64	108	134	161	233	392	457	399	355	280	60	19	20	0	0	0	0	0	2699
16	0	0	0	0	0	17	62	101	142	170	165	202	230	191	189	214	171	106	28	0	0	0	0	0	1989
17	0	0	0	0	0	16	61	100	125	230	190	241	233	232	281	204	171	99	19	0	0	0	0	0	2202
18	0	0	0	0	0	5	31	57	199	352	318	346	257	297	277	290	182	80	15	0	0	0	0	0	2708
19	0	0	0	0	0	20	85	162	256	281	446	197 ?	?	52 ?	41	131	108	60	19	0	0	0	0	0	1859 ?
20	0	0	0	0	0	3	25	59	86	171	103	206	196	291	327	272	153	66	24	0	0	0	0	0	1980
21	0	0	0	0	0	7	53	118	212	225	267	313	290	199	206	240	148	68	11	0	0	0	0	0	2356
22	0	0	0	0	0	9	52	163	213	288	303	345	241	285	244	184	125	104	23	0	0	0	0	0	2580
23	0	0	0	0	0	14	50	143	206	374	440	433	335	286	248	260	148	52	16	0	0	0	0	0	3003
24	0	0	0	0	0	5	31	80	191	282	326	357	325	335	178	225	166	80	14	0	0	0	0	0	2595
25	0	0	0	0	0	4	20	147	176	105	229	274	260	285	112	88	86	44	15	0	0	0	0	0	1845
26	0	0	0	0	0	7	64	84	112	261	239	233	199	288	148	83	46	72	16	0	0	0	0	0	1853
27	0	0	0	0	0	13	46	108	168	90	193	231	317	286	235	177	99	46	25	0	0	0	0	0	2034
28	0	0	0	0	0	13	65	169	258	306	285	260	358	359	303	262	170	90	17	0	0	0	0	0	2914
29	0	0	0	0	0	10	69	166	297	341	220	195	225	257	224	128	170	88	21	0	0	0	0	0	2412
30	0	0	0	0	0	12	63	149	207	259	332	327	345	240	165	146	120	68	16	0	0	0	0	0	2451
31	0	0	0	0	0	12	53	102	142	163	190	205	290	317	269	200	140	74	15	0	0	0	0	0	2174
Avg	0	0	0	0	0	14	63	126	188	230	257	282	290	290	233	201	141	80	20	0	0	0	0	0	2403
S D	0	0	0	0	0	7	20	37	58	83	89	104	95	90	85	74	45	29	8	0	0	0	0	0	452
S/A	0	0	0	0	0	0.47	0.31	0.29	0.31	0.36	0.34	0.37	0.33	0.31	0.37	0.37	0.32	0.36	0.39	3.11	0	0	0	0	0.19
Min	0	0	0	0	0	3	20	57	86	90	87	66	123	52	41	59	46	19	5	0	0	0	0	0	1830
Max	0	0	0	0	0	27	101	187	320	418	446	525	549	517	436	317	231	145	39	1	0	0	0	0	3882
n	0	0	0	0	0	212	372	372	372	372	371	368	360	366	371	366	370	358	296	4	0	0	0	0	4931

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.3% exceed the 15% QC threshold -- 4996 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

August 2012

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	25.6	23.5	22.8	23.3	23.7	23.5	23.9	24.2	25.8	25	23	22.9	23	23.2	24.8	25.9	26.1	26	25.7	24.5	23.8	23.4	23.1	22.8	24.1
2	22.7	22.8	22.7	22.4	22.2	22.2	23.5	25.4	27.1	28.2	29	29.8	30.4	30.7	30.8	30.6	29.5	27.5	26.7	25.5	24.6	23.8	23.7	24.2	26.1
3	24.2	24.3	24.2	23.9	23.5	23.8	24.7	26.4	27.5	28.4	29.2	29.9	30.7	30.9	30.9	30.9	31	30.1	28.1	27.5	26.9	26.8	26.4	26	27.3
4	25.7	25.3	24.9	24.6	24.4	24.3	25.2	26.9	28.1	29	29.2	29.7	29.9	30.2	30.7	30.6	30.2	30.4	29.1	27.9	27.2	26.8	26.5	26.1	27.6
5	25.7	25.6	25.7	25.7	25.5	25.5	26.5	27.9	28.6	29.7	30.5	30.5	30.2	30	30.7	31.1	30.8	29.6	29.1	28.1	27.4	26.9	26.6	26.1	28.1
6	25.7	25.4	25.4	25.1	24.7	24.6	25.3	26.4	27.6	28	28.8	30	30.2	30.8	31.3	31.5	30	26.5	25.9	25	24.7	24	23.8	23.7	26.9
7	23.4	23.2	23.2	23.3	23.3	23.5	24	24.7	25.2	25.9	25.5	26.7	28.1	28	27.3	26.3	25.1	24.6	23	22.9	23.5	23.4	23.4	23.5	24.6
8	23.4	23.3	23.2	23.2	23.2	23.3	23.6	23.8	24	24.3	24.8	25.5	26.1	27.6	28.1	28.5	28.7	28.4	27.4	26.3	25.7	25.4	25.2	24.7	25.3
9	24.4	24.4	24.2	24	23.5	23.3	23.2	24.6	26.2	28	28.6	29.8	30.1	30.5	30.8	30.3	29.9	29	27.9	26.9	26.4	26	25.7	25.8	26.8
10	25.9	25.7	25.6	25.4	25.5	25.8	26.2	26.8	27.4	27.9	28.4	28.8	28.6	29.5	29.9	29.2	26.9	25.6	24.8	24.4	24.1	24.6	25.4	25.3	26.6
11	25.7	25.6	25.2	24.9	24.7	24.6	25.1	25.4	26.4	27.7	27.6	27	25.1	25.4	26.7	26.7	25.1	24.4	24.7	22.3	21.1	21.3	21.5	21.9	24.8
12	22.4	23.1	23.4	23.6	23.5	23.4	23.4	23.9	24.8	25.4	25.9	26.4	26.5	26.9	27.1	27.2	28	27.7	26.5	25.4	24.9	24.6	24.2	23.5	25.1
13	23.3	22.8	22.4	21.9	21.6	21.8	22.8	24.5	25.4	27.7	28.5	30.4	29.9	31	28.8	28.2	28.1	26.9	25.6	25.8	25.5	25.6	25.4	25.6	25.8
14	25.5	25.2	25	24.6	24.3	24	24.1	25	27.1	28.9	29.5	30.4	30.7	31.5	31.2	31.4	31.5	30.4	29.3	27.6	26.8	26.2	25.4	25.4	27.5
15	25.3	25	24.6	24.4	24.1	23.8	24.6	25.9	27.1	28.4	29.4	30.2	30.7	30.8	30.7	30.5	26.2	22.7	21.4	21.3	21.6	22	22.2	22.2	25.6
16	21.6	21.3	21.1	20.9	21	21	21.5	23.3	25.3	26.8	28.6	29.3	30	30.6	30.6	30.9	29.7	29.2	26.9	25.7	25.4	24.8	24.4	23.9	25.6
17	23.4	23.3	23	22.7	22.3	21.9	23.1	25.5	26.8	28	28.9	30	30.9	30.6	30.1	29.5	29.3	28.4	27.7	26.8	26.1	25.7	25.6	25.5	26.4
18	25.3	25.1	24.6	24.2	24	23.8	23.6	23.7	23.9	25.7	27.9	28.4	25.3	26.8	26.2	26.2	26.1	25.1	24.3	23.7	23.3	22.8	22.4	22.3	24.8
19	22.5	22.7	22.6	22.1	22.2	22.5	23	24.5	25.7	26.2	26.8	26.1	20.9	19.9	19.5	20	20.5	21.3	21.9	22	21.8	21.2	20.7	20.5	22.4
20	20.4	20.5	20.5	20.5	20.4	20.5	20.7	21.1	21.6	22.2	22	22.2	22.5	23.1	23.7	25.2	25	24.7	23.7	23.1	22.7	22.2	22.2	22.1	22.2
21	21.8	21.7	21.9	22	22.2	22.2	22.5	23.3	24	24.7	25.1	25.5	25.8	25.5	25.1	25.1	25	24.6	23.9	23.6	23.4	22.7	22	21.5	23.6
22	21.5	21.1	21	20.7	20.9	21.1	21.6	22.3	24.3	25.9	26.7	27	27.6	27.5	27.2	27	26	25	24.2	23.4	23.1	22.6	22.6	22.3	23.9
23	21.9	22	21.8	22.1	22.1	22.1	22.3	22.9	23.9	25.3	26.2	26.5	27.1	27.3	27.2	26.9	25.8	24.8	24.2	23.7	23.3	22.9	22.7	22.7	24.1
24	22.3	22.3	22.3	22.3	22	22	22.2	22.3	22.7	24.3	25.3	25.8	25.3	25.3	25.4	25.3	25.2	24.6	24	23.6	23.6	23.6	23.4	23	23.7
25	22.8	22.9	23.1	23.1	22.5	22.8	23.6	24.3	25.3	26.4	27.4	28.4	28.8	28.5	29.1	28.9	28.3	27.6	26.3	25.2	24	22.9	22.5	22.1	25.3
26	22.3	21.9	22.1	21.5	21.5	21.4	22.3	24	26.5	27.8	28.2	28.9	29.1	29.1	28.6	27.1	26.8	27.1	26.8	26.2	25.8	25.6	25.5	25.2	25.5
27	25.1	24.8	24.6	23.9	23.8	24	25.2	26.6	27.7	28.7	29.2	29.5	29.2	28.9	29.2	28.1	29.7	29.7	28.2	27	26.4	26	25.6	25.3	26.9
28	25.2	24.7	24.4	24.2	23.9	23.9	24.5	25.1	26.1	26.8	27.8	28.9	29.9	29.4	29.1	28.6	28.7	27.9	26.8	25.8	25.3	24.9	24.6	24.1	26.3
29	24	23.8	23.7	23.6	23.4	23.2	23.2	23.9	25.4	26.3	28	29.7	30.6	30.4	29.8	28.7	28.5	27.9	26.5	25.6	24.9	24.4	23.3	22.4	25.9
30	22.6	23.1	23	22.8	22.3	21.8	23	24.9	25.6	26.7	28	28.4	28.9	29.2	29.6	29.8	28.9	28.2	27	25.9	25.1	24.7	24.4	23.8	25.7
31	23.3	22.9	22.5	22.1	21.9	21.7	22.2	24	25.6	27	28.1	29.1	29.8	30.2	30.9	30.8	30.4	29.8	28.6	27.4	26.6	26.2	26.1	25.6	26.4
Avg	23.7	23.5	23.4	23.2	23	23	23.6	24.6	25.8	26.8	27.5	28.1	28.1	28.4	28.4	28.3	27.8	27	26	25.2	24.7	24.3	24.1	23.8	25.5
S D	1.6	1.5	1.4	1.4	1.3	1.3	1.4	1.5	1.6	1.7	2	2.2	2.7	2.8	2.7	2.5	2.4	2.4	2.1	1.8	1.7	1.6	1.6	1.6	1.5
S/A	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.08	0.1	0.1	0.1	0.09	0.09	0.09	0.08	0.07	0.07	0.07	0.07	0.07	0.06
Min	20.4	20.5	20.5	20.5	20.4	20.5	20.7	21.1	21.6	22.2	22	22.2	20.9	19.9	19.5	20	20.5	21.3	21.4	21.3	21.1	21.2	20.7	20.5	22.2
Max	25.9	25.7	25.7	25.7	25.5	25.8	26.5	27.9	28.6	29.7	30.5	30.5	30.9	31.5	31.3	31.5	31.5	30.4	29.3	28.1	27.4	26.9	26.6	26.1	28.1
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% 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.

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

August 2012

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	?	103.6	104.8 ?	104.9 ?	103.7	104.7 ?	101.6 ?	101.1	98.9	103.7	100.4 ?	?	?	104.6	98.3	91.2	91.8	95.4	98.6	102.9	104.6 ?	?	?	?	100.8 ?		
2	?	?	?	?	?	?	?	104.2 ?	100.7	96.6	93.5	90.4	87.3	85	84.6	82.9	82.9	87.1	85.4	87	94.1	96.8	99.9	101.2	100.7	92.2 ?	
3	103.5 ?	?	?	?	?	?	?	?	102.6	98.1	90.9	85.7	81.6	82.4	85.1	88.1	84.7	82.3	90.4	94.8	97.5	99.5	103.1	104.1	?	92.6 ?	
4	?	?	?	?	?	?	?	?	103	96.3	90.7	90.2	90.4	86.9	80.8	80.4	83	83.4	85.2	90.5	96.3	100.2	102.7	102.9	104.4	92.2 ?	
5	?	?	?	?	?	?	?	?	104.8 ?	102	96.2	90.9	86.2	86.2	89.1	84.5	82.7	84.6	86.4	88.6	94.7	97.9	99.9	102.7	100.6	103.2	93.4 ?
6	104.7 ?	?	?	?	?	?	?	?	103.1 ?	99.3	97.1	93.8	87.1	85.9	83	82.5	82.5	87.6	96.8	97.7	104.4	?	?	?	?	93.2 ?	
7	?	?	?	?	?	?	?	?	?	104.8 ?	103.2	104.3 ?	98.9	93.4	95.5	99.2	101	104.2 ?	?	?	?	?	?	?	?	100.5 ?	
8	?	?	?	?	?	?	?	?	?	104.9 ?	103.6	101.3	98.6	93	89.9	90.7	92	94.7	98.1	101.3	103.7	104.8 ?	?	?	?	98.2 ?	
9	?	?	?	?	?	?	?	?	101.3	98.1	89.2	89.5	86.2	86.7	84.7	83.9	88.5	93.1	96.3	98	100.8	101.6	103.8	104.8 ?	?	94.2 ?	
10	?	?	?	?	?	?	?	?	101.3	98.1	89.2	89.5	86.2	86.7	84.7	83.9	88.5	93.1	96.3	98	100.8	101.6	103.8	104.8 ?	?	94.2 ?	
11	104	103.3	102.9	102.6	103	103.5	102.2	101.7	98.3	94.8	96.8	99.5	102.1	97.5	96.3	97.1	103.7	104.5 ?	104.7 ?	102 ?	?	?	?	?	?	101 ?	
12	?	?	?	?	?	?	?	?	102.4	97.7	96.4	95.3	92.8	91.9	92.8	93.5	94.3	91.5	93.5	97.5	101.1	103.1	104.2	104.4	104.7	97.5 ?	
13	?	?	?	?	?	?	?	104.7 ?	100.8	98	91.6	88.1	81.2	83.2	77.3	93.8	94	91.9	93.6	97.6	100.9	101.1	101.2	104.4 ?	?	94.3 ?	
14	?	?	?	?	?	?	?	?	102.6 ?	94.8	86.2	82	70.4	65.9	62.8	65.1	64.4	64.9	72.1	78.1	87.6	91.2	94.5	100.3	102	81.5 ?	
15	102.7	102.7	102.7	103.8	104.8 ?	?	104.7 ?	102.2	98.7	94.5	90.3	87	85	84.9	86	87.2	94	?	?	?	?	?	?	?	?	95.7 ?	
16	?	?	?	?	?	?	?	104.5 ?	99.2	92	88.4	76.6	70.1	68	64.2	65.5	66.6	71.7	78.6	95.3	94.1	94	97	100.6	102.5	84.9 ?	
17	104.5 ?	105 ?	?	?	?	?	?	?	102.4	98.1	92	81	74.4	68	72	78.4	82	83.5	90.5	96.8	98.2	100.1	101.9	104.2	105 ?	91.5 ?	
18	104.9 ?	?	?	?	?	104.7 ?	?	?	?	100.6	91.2	87.9	97.3	97.2	99.3	99.4	97.7	100.4	102	102.8	102	100.5	102.2	104.7 ?	?	99.7 ?	
19	?	?	?	?	?	?	?	104.8 ?	101.5	95.6	93.4	92	93.3	?	?	?	104.6	104.6	103.9	104.6	105 ?	?	?	?	?	100.3 ?	
20	?	?	?	?	?	?	?	?	?	?	?	?	104.4 ?	103	99.9	98.6	93.8	93.2	94.2	97.8	99.9	101.4	103.4	104.4	104.7 ?	99.9 ?	
21	?	?	105 ?	104.8	104	103.7	103.8	102.6	100.4	98.6	96.2	94.3	93.3	94.5	96.4	95	94.9	96.9	100.1	100.7	100.5	103.1	104.9 ?	?	?	99.7 ?	
22	?	?	?	?	?	?	?	?	104.7 ?	100.7	93.5	90.6	91.2	87.7	85.5	86	87.8	90.3	94.4	98.1	100.1	102	104.4	104.9 ?	?	95.1 ?	
23	?	?	?	?	?	?	?	?	104.7 ?	103.7	97.8	92	89.1	87.9	85.2	86.6	84.1	90.7	97.2	99.2	101	103.5	104.8 ?	?	?	95.2 ?	
24	?	?	?	?	?	?	?	?	?	100.1	85.9	85.5	94.3	94.8	88.8	83.9	87	90.4	97.3	101	101.7	101.4	103.4 ?	?	?	94 ?	
25	?	?	?	?	104 ?	?	?	?	?	101.2 ?	95.8	93.9	88.5	85.3	85.9	82.5	81.9	86.3	88.3	93.7	97.9	102.6	104.8 ?	?	?	92.8 ?	
26	?	?	?	?	?	?	?	?	103.8 ?	99.3	93.6	92.9	90.6	89.3	87.6	92.5	100.4	102.7	102.3	102.6	104.6 ?	?	?	?	?	97.1 ?	
27	?	?	?	?	?	?	?	?	103.4 ?	97.8	88.6	88.9	91.2	90.7	94.2	91.7	95	94.1	91.7	97.5	102.6	104.7 ?	?	?	?	95.1 ?	
28	?	?	?	?	?	?	?	?	?	102.9	100.2	97.7	94.5	90	92.8	94.9	95.9	96.3	98.1	102.3	103.6	?	?	104.5 ?	?	98 ?	
29	?	?	?	?	?	?	?	?	103.6 ?	100.2	98.7	90.5	76.6	65.6	65.7	67.1	77.5	78.8	80.3	87.8	95.8	101.6	103.5	104.2 ?	?	87.3 ?	
30	?	?	?	?	?	?	?	?	102.6	98.4	92.3	84	80.9	80.3	77.4	73.3	74.5	77.1	80.1	85.3	88.6	93.3	98.2	100.9	104.1 ?	87.7 ?	
31	?	?	?	?	?	?	?	?	104.1 ?	101.3	94.5	89.1	85.3	86.1	86.7	86.3	87.3	89.4	93.1	97.3	101.6	104.4	?	?	?	93.3 ?	
Avg	104	103.7	103.9	104	103.9	104.3	103.9	102.3	98.6	94.9	91	87.9	86.7	86.1	86.7	87.5	90	92.5	96.2	99.4	100.8	102	103.2	103.7	94.7 ?		
S D	0.8	1	1.2	1.1	0.6	0.7	1.1	1.5	2.9	4.8	6.2	8.2	9.7	10.3	9.6	9	9.1	8	5.9	4.3	3.6	2.8	1.7	1.4	4.7		
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.05	0.07	0.09	0.11	0.12	0.11	0.1	0.1	0.09	0.06	0.04	0.04	0.03	0.02	0.01	0.05		
Min	102.7	102.7	102.7	102.6	103	103.5	101.6	98.4	92	86.2	76.6	70.1	65.6	62.8	65.1	64.4	64.9	72.1	78.1	87.6	91.2	94.5	100.3	100.7	81.5		
Max	104.9	105	105	104.9	104.8	105	104.8	104.7	104.8	104.9	104.3	104.4	103	104.6	99.3	101	104.6	104.6	104.7	104.6	105	104.8	104.9	105	101		
n	51	37	39	44	46	39	59	225	313	349	342	356	348	360	360	358	368	338	332	324	267	212	168	106	5449		

Data Recovery: 0.0% missing; 0.0% untested; 39.0% 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

August 2012

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	25.4	24.9	23.2	22.6	22.8	22.9	23.3	24	26	27.6	26.3	24.1	23.4	23.4	25	27.9	29.3	29.7	29.3	26.9	24.6	23.5	23	22.6	25.1
2	22.4	22.4	22.5	22.4	22.2	21.9	22.9	26.1	29.9	33	35	35.7	36.5	36.4	36.3	36.5	35.3	33.4	30.6	27.5	25.5	24.1	23	22.8	28.5
3	23.2	23.4	23.5	23.4	23	22.8	24	26.8	30.1	33.4	35.7	36.5	36.9	37	36.7	36.7	36.8	36.5	33	29.5	27.7	26.9	26.6	26	29.8
4	25.5	25.1	24.7	24.3	23.9	23.8	24.4	27.7	31.3	34.5	35.5	36.1	36.2	36.3	36.8	36.9	35.1	35.4	34.6	31.3	28.7	27.3	26.6	26	30.3
5	25.6	25.2	25.2	25.2	25.1	25	26.2	29.9	32.5	34.8	36.7	36.9	36	35.3	35.6	36.4	37	35.4	32.3	30.3	28.6	27.5	26.8	26.3	30.7
6	25.9	25.5	25.3	25.1	24.8	24.5	25.4	27.8	30.2	32.5	33.3	35	35.9	35.9	36.2	36.8	36.2	33.8	30.2	27.3	25.6	25	24.4	24	29.4
7	23.8	23.5	23.4	23.4	23.3	23.3	23.6	24.7	25.8	27.5	27.9	28.1	31.6	33.3	32.3	30.2	27.9	26.5	24.8	23.7	23.4	23.5	23.4	23.3	25.9
8	23.4	23.4	23.3	23.3	23.3	23.3	23.5	23.8	24.2	24.6	25.3	26.4	27.9	30	32.2	33.4	33.5	33.1	32.1	28.9	26.7	25.7	25.2	24.7	26.7
9	24.4	24.2	24	23.8	23.6	23.4	23.4	25.2	29.7	33.6	36	36.5	36.9	36.6	36.1	36.3	35.3	34.1	31.9	29	27.3	26.3	25.7	25.5	29.5
10	25.4	25.6	25.6	25.4	25.2	25.4	25.9	27.1	29.5	31.5	32.7	33.2	33	32.9	33.9	33.6	32	29	26.8	25.3	24.6	24.4	24.6	24.9	28.2
11	24.9	25.1	25.1	25	24.8	24.6	25.1	26	27.3	30.1	31.6	30.3	28.4	27.3	29	29.7	27.9	25.7	25	24.4	22.6	21.8	21.6	21.6	26
12	21.8	22.2	22.7	23.1	23.3	23.4	23.5	24.8	26.9	29.4	29.6	30.7	30.5	30.8	31.3	30.9	31.9	32.2	30.4	27.4	25.5	24.6	24.3	23.9	26.9
13	23.2	22.8	22.2	21.7	21.3	21.3	21.9	24.2	26.4	31.1	35.6	37.7	38.9	37.4	37.5	33.6	32	31.4	29.7	27.2	25.8	25.4	25.3	25.2	28.3
14	25.4	25.1	24.9	24.6	24.3	24	24.1	25.6	29.9	34.4	36.7	37.4	37.7	36.8	36.8	36.9	37.3	36.3	33.9	30.6	27.8	26.3	25.5	25.1	30.3
15	25	24.9	24.6	24.2	23.9	23.6	24.2	27	30.1	32.8	34.7	36	36.7	36.6	36.1	35.3	33.3	27.3	23.7	22.1	21.6	21.6	21.7	21.8	27.9
16	21.6	21.4	21.1	20.8	20.6	20.5	21.1	23.8	27.5	31	34.6	37.2	37.5	37.3	37.5	37.9	37.5	36	33.5	29.1	26.3	25	24.2	23.5	28.6
17	22.7	22.3	22	21.8	21.7	21.5	22.1	25.6	29.6	33	35.1	37.1	38.2	37.9	37	35.5	34.9	33.6	31.3	28.6	26.9	25.9	25.3	25	28.9
18	24.9	24.9	24.7	24.3	24.1	23.9	23.8	24	24.3	26.7	31.7	35.8	34.2	32.1	31.2	30.5	30.8	29.5	27.1	25.3	24	23	22.3	21.7	26.9
19	21.7	21.9	22.1	21.9	21.7	21.7	22.2	24.2	27.3	28.5	29.3	30.3	26.7	22.8	20.9	20.3	20.5	20.9	21.3	21.7	21.9	21.8	21.4	21	23.1
20	20.8	20.6	20.7	20.8	20.7	20.6	20.8	21.2	21.9	22.7	23.6	23.2	23.4	23.6	25	27.6	29	28.7	26.9	24.7	23.3	22.4	21.8	21.7	23.2
21	21.6	21.4	21.4	21.5	21.6	21.7	21.8	22.7	24.1	25.8	27.1	28.4	29.5	29.6	28.7	28.1	28	27.1	25.7	24.4	23.5	22.9	22.1	21.4	24.6
22	21	20.8	20.6	20.5	20.4	20.5	20.7	21.5	24.4	28.5	31	32.4	33.6	33.5	33	32.9	32.4	29.6	27	24.9	23.6	22.7	22.3	22.1	25.8
23	21.9	21.7	21.7	21.7	21.9	21.9	22	22.6	24	26.1	28.6	30.2	31.5	32	32.3	32.6	30.7	28.1	26.1	24.8	23.9	23.2	22.7	22.4	25.6
24	22.4	22.3	22.2	22.2	22.2	22	21.9	22.2	22.5	23.8	26.1	28	28.7	28.6	28.4	27.8	27.7	27.1	25.7	24.6	23.9	23.7	23.5	23	24.6
25	22.7	22.5	22.5	22.7	22.6	22.3	22.7	23.5	25.3	28.3	30.7	32	32.9	32.7	32.8	33.7	34.1	33.2	31.1	27.6	25.4	23.7	22.5	21.6	27
26	21.6	21.6	21.3	21.4	21.3	21.3	21.7	24.5	29.5	33.2	34.2	34.2	34	33.7	33.2	30.6	28.7	28	28.1	27.1	26.4	26	25.6	25.3	27.2
27	24.9	24.6	24.4	24.2	24	23.7	24.4	27.1	30.4	32.9	35.1	36	35.9	34.7	34.2	33.5	34.5	35.8	33.3	29.8	27.5	26.4	25.8	25.3	29.5
28	25.1	24.8	24.4	24.1	23.9	23.7	24.2	25.7	27.8	29.8	31.4	33.3	34.6	34.4	33.6	32.8	32	31.6	29.7	27.8	26.5	25.7	25.3	24.8	28.2
29	24.5	24.4	24.2	24.1	23.9	23.5	23.3	24.1	26.6	29.4	31.9	35.2	37.2	37.4	36.4	34.5	32.8	32.9	31	27.7	25.8	24.6	23.5	22.4	28.4
30	21.6	21.6	22	22	21.8	21.5	21.7	23.9	26.6	29.6	32.6	34.7	35.7	35.6	35.4	35.7	35.5	33.7	30.9	27.7	25.6	24.6	24	23.6	27.8
31	23.1	22.6	22.2	21.9	21.6	21.4	21.6	23.9	27.5	30.4	32.9	34	34.7	35	35.3	36	35.7	34.1	32.1	29.2	27.3	26.3	25.8	25.6	28.3
Avg	23.5	23.3	23.1	23	22.9	22.7	23.1	24.9	27.4	30	31.9	33	33.4	33.1	33.1	32.9	32.4	31.3	29.3	27	25.4	24.6	24.1	23.7	27.5
S D	1.6	1.6	1.5	1.4	1.4	1.4	1.5	2	2.7	3.3	3.7	4	4.2	4.3	4.1	3.9	3.8	3.3	2.5	1.9	1.7	1.6	1.6	2	
S/A	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.08	0.1	0.11	0.11	0.12	0.13	0.13	0.12	0.12	0.12	0.12	0.11	0.09	0.07	0.07	0.07	0.07	0.07
Min	20.8	20.6	20.6	20.5	20.4	20.5	20.7	21.2	21.9	22.7	23.6	23.2	23.4	22.8	20.9	20.3	20.5	20.9	21.3	21.7	21.6	21.6	21.4	21	23.1
Max	25.9	25.6	25.6	25.4	25.2	25.4	26.2	29.9	32.5	34.8	36.7	37.7	38.9	37.9	37.5	37.9	37.5	36.5	34.6	31.3	28.7	27.5	26.8	26.3	30.7
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% 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

August 2012

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	1.1	1.4	0.1	0.2	0.1	0.3	0.4	0.3	0.7	2.4	2.5	1.4	1.8	1.2	2.7	2.4	2.1	2.3	0.7	0.1	0.4	0.7	0.3	0.1	1.1
2	0.1	0.7	0.8	0.4	0.1	0.1	0.5	1.5	2.6	2.7	3.1	3	3.4	3.7	3.6	3.1	3.3	2.1	0.6	1.3	0.6	0.4	0.4	0.9	1.6
3	1.5	1.4	0.6	0	0	0.6	1	1.5	1.9	1.7	2.3	2.3	2.4	2.3	3.2	3	2.9	2.3	0.6	0.8	1	1.8	1.3	1.3	1.6
4	0.8	0.3	0.2	0	0	0	0.2	1.5	1.5	1.9	2.6	3	3.1	3.2	3.1	3.2	3.1	2.9	2.3	2	1.5	1.7	1.6	1.1	1.7
5	0.5	0.5	1.1	1.1	0.6	0.6	1	2.4	3	3.4	3.2	2.5	3.8	4.1	3.4	3.5	3.2	3	2.1	2.3	2	1.9	2.5	2.3	2.2
6	1.9	2.5	2.2	1.6	1.5	1.5	1.7	3	2.9	3.5	3.6	3.4	3.2	3.1	3.2	2.3	2.7	2.6	1	1.9	2.4	2.5	1.6	2.4	2.4
7	1.1	0.5	0.9	0.2	0	0	0.5	1.2	1	1.9	1.1	1.2	0.6	1.2	2.2	2.4	2.8	1.6	0.7	1.2	0.7	0.9	0.1	0.2	1
8	0.6	0.1	0.4	0.4	0.6	0.6	1	0.6	0.6	1.3	1.2	0.9	1.6	2.1	2.2	1.9	1.9	1.5	1.5	1.2	0.8	0.8	0.5	0.3	1
9	1.3	1.2	0.3	0.7	0.5	0.9	1.1	1.3	1.4	1.2	2.2	2	2.5	2.4	2.4	3	2.7	3.7	2.7	2	2.2	2	2.3	1.8	1.8
10	1.2	1	1.4	1.5	2.2	2.3	3.5	4	4.7	4.5	4.3	4.5	4.1	4.1	3.6	2.7	3.7	3.2	1.7	1.5	0.7	1.3	2.9	3	2.8
11	3.4	3.9	3.4	3.3	2.6	2.6	2.8	2.6	3.3	3.3	2.4	3.1	4.5	5.5	5.9	3.7	3.2	2	1.4	2.6	0.5	0.7	1.5	1	2.9
12	0.5	0.9	1.3	0.5	0.5	0.4	1.1	1.4	2	1.3	1.3	2.2	2.7	2	2.1	2.2	2	2.2	1	0.3	0.3	0.9	0.6	0.2	1.2
13	0	0	0	0	0	0	0	0	0.2	0.7	0.6	0.5	1	1.4	3.3	2.4	2.7	2.7	2	1.4	1.3	1.6	1.3	1.1	1
14	0.8	1.5	1.3	1.1	0.7	0.7	0.6	1.1	0.8	1.3	2.2	2.2	2.9	2.6	3.1	2.5	2.2	1.1	0.8	0.7	0.5	0.8	2	2.4	1.5
15	1.9	2.2	1.7	1.6	1.5	1.9	2.2	2.7	2.5	2.7	3.1	3.2	3	2.3	2.3	2.5	2.5	3	2.2	0.8	0.4	1.2	1.2	1.2	2.1
16	0.7	0.9	0.5	0.5	0.5	0.1	0.4	1.5	2.2	1.6	0.8	1.3	1.2	1.5	1	1.4	1.9	1.8	2.1	1.5	1.4	1.4	1	0.4	1.2
17	0.1	0.2	0.1	0	0	0	0.1	1.1	2	2.1	1.9	1.3	1.1	2.2	3.5	3.6	2.9	2.6	1.8	1.7	1.4	1.1	1.4	1.3	1.4
18	1.7	1.5	1.3	1.3	1.1	0.6	1.1	0.9	0.7	0.6	0.7	1.8	2.2	2.5	2.6	2.6	2.8	2.6	2.6	2	1.3	0.8	0.2	0.4	1.5
19	0.3	0.4	0.5	0.1	0.8	1	0.9	2.8	3.4	3.5	4.2	4.1	2.5	4	3.1	4	4	2.3	2.3	0.3	0.8	0.7	0.9	0.8	2
20	1.4	1.1	0.9	0.5	0.2	0.1	0.1	0.3	0.4	0.2	1.4	1.6	1.6	1.1	1.4	1.1	0.9	0.3	0.2	0.1	0	0	0	0	0.6
21	0	0.1	0.1	0.1	0.1	0	0.1	0.6	1.4	1.3	0.9	1.1	1.3	1.7	2.4	2.5	2.1	1.5	1.3	0.9	0.9	0.5	0	0	0.9
22	0.2	0	0.2	0.2	0.8	1.1	1.1	1	2.3	2.5	2.8	3.5	3.8	3.4	4.1	3.7	3.2	2.3	1.6	1.1	0.6	0.4	0.3	0.5	1.7
23	0.8	1.4	1.6	1.7	1.7	1.6	1.7	1.8	2.1	3.5	3.3	3.8	3.8	4	3.8	3	2.7	2.3	2	1.8	1.2	1.1	0.5	0.6	2.2
24	1	1.2	1.2	1.6	1.4	1	1.5	1.9	0.5	0.8	2.5	2.9	3	3.1	2.5	2.3	2.7	2.4	2.3	2.1	2.2	2.1	1.7	2	1.9
25	2.4	2.3	2.4	3.2	2.7	3.2	3	3.8	4.9	5.4	5.5	5.5	5.3	4.4	4.5	4	4.3	3.3	2	1.4	0.9	0.4	0	0	3.1
26	0	0.1	0.6	0.4	0.5	0	0	0.1	1.1	2.9	3.8	4.6	5.4	5.4	4.5	4	2.5	2.2	1.9	1	1	1.5	1.7	0.5	1.9
27	0.1	0.1	0.1	0.2	0	0.3	1.2	2.2	3.3	2.9	3.4	3.1	3.6	1.9	2.8	2.6	1.8	1.9	1.6	1.1	1	1.4	1.5	1.7	1.7
28	1.9	1.5	1.3	1	0.4	0.9	1.3	2.4	2.8	3.1	2.7	3.2	3	3.5	3.4	3.7	3.5	3.8	3.6	2.2	1.9	1.9	2.7	1.2	2.4
29	0.7	1.6	1.4	1.2	0.5	0.7	0.9	1.2	2.2	2.3	2	2	2	1.7	1.7	1.4	2.5	1.4	1.4	1.5	1.4	0.7	0.3	0	1.4
30	0	0.3	0.5	0	0	0	0.4	1.9	2.5	2.4	2.6	2.7	2.6	2.9	2.7	2.6	3	2.6	1.3	0.9	0.9	1.2	1.5	1.1	1.5
31	1	1	0.9	0.6	0.7	0.6	0.6	1.9	2.9	2.9	3.6	3.9	3.8	3.7	2.8	3	2.7	2	1	0.5	0.5	1.1	1.9	2.1	1.9
Avg	0.9	1	0.9	0.8	0.7	0.8	1	1.6	2.1	2.3	2.5	2.6	2.8	2.8	3	2.8	2.7	2.3	1.6	1.3	1	1.1	1.1	1	1.7
SD	0.8	0.9	0.8	0.9	0.8	0.8	0.9	1	1.2	1.2	1.2	1.2	1.2	1.2	1	0.8	0.7	0.7	0.7	0.6	0.6	0.8	0.8	0.8	0.6
S/A	0.85	0.86	0.82	1.05	1.08	1.07	0.86	0.61	0.58	0.51	0.47	0.46	0.43	0.42	0.32	0.28	0.25	0.32	0.46	0.52	0.58	0.52	0.73	0.82	0.35
Min	0	0	0	0	0	0	0	0	0.2	0.2	0.6	0.5	0.6	1.1	1	1.1	0.9	0.3	0.2	0.1	0	0	0	0	0.6
Max	3.4	3.9	3.4	3.3	2.7	3.2	3.5	4	4.9	5.4	5.5	5.5	5.4	5.5	5.9	4	4.3	3.8	3.6	2.6	2.4	2.5	2.9	3	3.1
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% 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

August 2012

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	276	312	253	297	277	287	282	355	181	187	219	223	247	271	248	267	269	277	258	229	261	280	277	260	253
2	262	255	278	272	259	260	239	239	226	228	227	223	222	215	215	228	272	301	206	221	231	341	218	205	233
3	220	253	258	247	0	190	187	215	272	261	218	231	218	184	177	192	200	189	257	226	224	220	218	222	214
4	250	251	262	0	357	197	219	225	219	221	225	227	229	229	233	227	219	224	221	216	221	225	227	237	226
5	237	227	238	251	238	220	225	244	250	241	259	276	217	225	240	221	222	242	221	221	228	238	247	248	237
6	252	251	257	265	258	255	265	286	289	299	291	292	284	285	282	8	78	168	209	241	254	263	286	277	
7	291	300	265	289	297	271	289	295	324	328	313	336	282	146	157	170	152	214	228	252	261	254	274	270	243
8	283	290	251	285	281	289	288	303	290	290	293	298	269	245	269	265	244	239	225	218	220	234	208	258	260
9	245	253	256	258	290	279	303	337	320	298	282	287	249	240	231	203	186	215	219	219	220	220	215	225	238
10	227	228	251	245	246	240	248	250	250	255	266	265	262	271	251	250	248	243	255	255	235	223	241	246	252
11	244	250	251	255	257	252	251	250	250	258	245	236	229	218	221	227	238	241	293	4	350	187	205	204	242
12	229	255	260	267	307	242	282	290	300	317	292	250	251	260	272	257	250	243	246	252	232	270	292	355	266
13	0	356	239	235	214	304	337	230	39	111	134	277	133	165	127	146	184	111	121	162	148	162	179	189	147
14	212	239	255	253	253	252	276	278	286	277	267	284	288	271	293	271	254	255	201	201	211	247	255	253	264
15	255	251	267	251	254	254	255	271	275	283	282	285	280	277	280	288	38	175	197	237	280	281	287	337	269
16	338	326	341	357	14	1	356	24	39	47	46	20	32	359	7	350	332	56	134	156	182	198	223	224	26
17	231	214	217	266	0	205	257	234	234	257	272	289	249	206	168	185	193	182	208	222	230	223	245	248	216
18	249	255	255	252	274	311	268	293	317	338	25	295	56	76	105	110	98	98	99	106	110	95	77	88	93
19	87	112	91	85	109	106	106	125	136	135	129	127	32	102	116	125	127	128	123	87	339	341	299	315	117
20	337	318	328	337	344	329	8	309	317	335	16	55	48	70	82	99	104	79	117	178	207	0	147	53	34
21	90	133	114	149	188	174	181	148	152	144	128	121	116	107	121	128	125	115	115	130	140	95	13	340	126
22	48	59	56	41	50	57	68	63	70	86	90	95	115	106	106	100	106	103	96	98	89	50	36	32	93
23	42	48	49	52	55	54	50	59	74	93	91	93	96	102	103	93	99	95	92	88	73	65	79	55	83
24	55	45	58	51	48	46	68	129	104	86	96	93	113	106	97	92	88	88	93	93	92	96	98	97	90
25	103	120	120	124	122	128	134	149	156	170	185	193	193	205	217	223	208	211	216	214	275	311	4	27	176
26	340	156	132	331	36	358	358	3	151	172	170	168	172	174	171	183	167	143	151	133	142	152	168	164	166
27	170	154	86	57	89	133	154	153	177	210	197	156	211	220	211	183	194	227	216	228	224	220	218	231	198
28	248	251	250	256	272	257	269	284	308	296	312	289	272	269	251	272	260	250	255	298	300	328	306	300	277
29	271	278	301	327	350	354	18	29	55	67	87	94	108	124	122	174	164	136	127	121	114	127	287	0	99
30	115	112	160	42	303	0	137	157	183	166	138	163	192	167	195	213	188	201	220	242	230	254	253	258	189
31	262	267	279	263	259	263	260	258	282	265	272	278	269	271	285	292	281	286	283	257	256	254	247	249	272
Avg	253	258	259	267	270	245	248	242	238	230	227	227	221	207	202	206	199	195	188	199	211	228	239	247	219
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% 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

August 2012

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	2.2	2.8	0.5	0.7	0.8	1	1.2	0.8	1.3	3.6	4.6	2.9	3.3	2.5	4.7	4	3.7	4	1.5	0.4	1.2	1.6	1	0.5	2.1
2	0.4	1.6	1.6	1.2	0.4	0.4	1.3	2.8	4.4	4.3	5	5	5.6	6.6	5.9	5.5	5.7	3.9	1.3	2.1	1.3	1	0.8	1.6	2.9
3	2.6	2.4	1.6	0.3	0	1.2	2.1	2.7	3.5	3.1	4.2	4.3	4.2	4.4	5.2	4.9	4.7	4.1	1.6	1.6	2	3.2	2.4	2.5	2.9
4	1.7	1.2	0.6	0	0	0.1	0.9	2.7	2.8	3.5	4.4	5	5.1	5.3	4.8	5.6	5.3	5.1	4	3.6	2.8	3	3.1	2.3	3
5	1.4	1.4	2.2	2.2	1.4	1.6	2.1	4.3	5	5.2	5.3	4.4	6.3	6.9	5.4	6	5.5	5	4	3.9	3.8	3.6	4	3.8	3.9
6	3.1	4.2	4.1	3.1	2.8	2.5	3.5	5.3	5.5	6.2	6.4	6.5	5.6	5.8	5.4	4.2	5.3	4.8	2	3.2	4.1	4.3	3.1	4.1	4.4
7	2.2	1.5	1.9	0.6	0.1	0.3	1.4	2.5	2.7	3.6	2.7	3	2	2.4	3.5	4.4	5.1	3.9	1.7	2.4	1.9	2	0.6	0.6	2.2
8	1.8	0.5	1.1	1	1.5	1.6	2.1	1.9	1.5	2.5	2.4	2.2	2.9	3.8	3.9	3.2	3.4	2.7	2.5	2.2	1.7	1.7	1.2	0.6	2.1
9	2.3	2.3	1.1	1.6	1.4	2	2.3	2.9	2.9	2.5	4.2	3.9	4.3	4.2	4.2	4.7	4.6	6.1	5.1	3.4	3.8	3.5	4.1	3.5	3.4
10	2.4	2.2	2.7	3	3.9	4.3	6.4	7	7.6	7.7	7.7	7.8	7.2	7.2	6.2	4.6	6.3	5.2	3.5	3.2	1.9	2.9	5.5	5.3	5.1
11	6.1	6.5	5.8	5.5	4.8	4.6	5.1	4.4	5.6	5.7	4	5.2	8.3	9.3	9.7	6.6	6	3.3	3.2	5.5	1.7	1.5	2.4	2.1	5.1
12	1.5	2.3	2.3	1.6	1.6	1.3	2.4	2.8	3.8	2.7	2.8	3.8	4.4	3.5	4	3.8	3.5	3.5	2	1	1	1.9	1.7	0.7	2.5
13	0	0	0.1	0	0	0.3	0.1	0.3	1	2.1	1.9	1.8	2.2	3.1	5.7	4.1	4.6	5.4	3.8	2.6	2.3	2.8	2.7	2.3	2.1
14	1.8	2.8	2.4	1.8	1.5	1.7	1.7	2.6	2.1	2.8	4	4.3	5	4.5	5.5	4.4	4.1	2.1	1.6	1.4	1.2	1.8	3.3	4.1	2.9
15	3.2	3.7	3.4	2.9	2.6	3.3	3.9	5.1	4.4	4.7	5.5	5.9	5.3	4.1	4.1	4.4	5.2	5.1	4.1	1.8	1.2	2.2	2.3	2.6	3.8
16	1.9	2.1	1.5	1.6	1.8	1	1.5	3.4	4.3	3.3	2.4	3	3	3.6	2.4	3	4.1	3.7	3.7	2.7	2.4	2.5	2	1	2.6
17	0.8	0.8	0.4	0.2	0	0.1	0.2	2.5	3.3	3.8	3.4	3.1	2.6	4	5.6	5.6	4.5	4.1	3.1	3	2.5	2.1	2.7	2.6	2.6
18	3	2.6	2.3	2.3	2.2	1.6	2.2	1.9	1.8	1.6	2.1	3.7	4.3	4.9	5.1	4.6	5.1	4.8	4.7	4.1	2.9	2.1	0.8	1.3	3
19	1.4	1.5	1.7	1	2	2.7	2.6	5	5.8	6.3	7	7.6	4.8	7.8	5.7	7.2	7	4.6	4.2	1.3	1.8	1.8	2	2.2	4
20	2.9	2.3	2.1	1.7	1	0.4	0.6	1.1	1.3	1.1	3.3	3.2	3.3	2.8	3	2.7	2.2	1.1	0.8	0.4	0.2	0	0.1	0.2	1.6
21	0.4	0.4	0.4	0.5	0.7	0.3	0.5	1.4	2.7	2.5	2	2	2.5	3	4	4.6	3.3	2.9	2.5	1.9	2.1	1.3	0	0.1	1.8
22	0.5	0.2	0.7	0.8	2	2.6	2.6	2.7	4.3	4.4	5.5	6.3	6.6	6	7.1	6.8	5.8	4.4	3.1	2.2	1.6	1.4	1	1.5	3.3
23	2.2	2.9	2.9	3.1	3.2	3.1	3.2	3.5	4.2	5.9	5.9	6.7	7	7.3	6.6	5.7	4.9	4.3	3.9	3.6	2.8	2.7	1.7	1.9	4.1
24	2.4	2.5	2.9	3.2	3	2.4	3.3	3.8	1.7	2.4	4.5	5	5.1	5.8	4.5	4.3	5	4.4	4.3	3.7	4	4	3.5	3.8	3.7
25	4.4	4.4	4.7	5.8	4.5	5.3	5.3	6.5	8.4	8.5	9.1	9	8.7	7.1	7.9	7	7	5.8	3.5	2.4	1.9	1	0	0.1	5.3
26	0.1	0.3	1.4	1.2	1.6	0.3	0	0.9	2.5	4.9	6.2	7.3	8.7	8.3	7.2	6.1	4.7	3.9	3.5	2.4	2.2	2.9	3.2	1.5	3.4
27	0.9	0.4	0.6	0.9	0.3	1	2.4	3.8	5.1	4.7	5.8	4.9	5.9	3.4	5	4.3	3.3	3.2	2.6	2.1	1.9	2.3	2.8	3.2	3
28	3.1	2.6	2.5	2.1	1.4	1.7	2.5	4.2	4.9	5.4	5	5.4	5.2	5.9	5.4	6.5	6.3	6.5	6.2	4.2	3.4	3.6	4.8	2.7	4.2
29	1.6	2.8	3	2.7	1.8	2	2.6	2.9	4.3	4.3	3.9	3.9	3.9	3.2	3	2.6	4	2.8	2.4	2.6	2.6	1.5	0.7	0	2.7
30	0.2	0.9	1.2	0.1	0	0	1	3.4	4.2	3.9	4.5	4.4	4.6	4.8	4.5	4.4	5	4.3	2.2	1.9	1.9	2.1	2.4	1.9	2.7
31	1.9	1.9	1.7	1.4	1.3	1.3	1.5	3.4	5.1	4.7	6	7	6.5	6.3	5.1	5.4	4.6	3.3	1.9	1.2	1.3	1.8	3.1	3.4	3.4
Avg	1.9	2.1	2	1.7	1.6	1.7	2.2	3.2	3.8	4.1	4.6	4.8	5	5.1	5.2	4.9	4.8	4.1	3	2.5	2.2	2.3	2.2	2.1	3.2
SD	1.3	1.4	1.3	1.4	1.3	1.4	1.5	1.6	1.8	1.7	1.7	1.8	1.8	1.8	1.5	1.2	1.1	1.2	1.2	0.9	1	1.4	1.4	1	1
S/A	0.67	0.68	0.66	0.82	0.82	0.82	0.68	0.5	0.47	0.41	0.38	0.38	0.37	0.36	0.29	0.25	0.23	0.28	0.41	0.46	0.44	0.43	0.63	0.67	0.3
Min	0	0	0.1	0	0	0	0	0.3	1	1.1	1.9	1.8	2	2.4	2.4	2.6	2.2	1.1	0.8	0.4	0.2	0	0	0	1.6
Max	6.1	6.5	5.8	5.8	4.8	5.3	6.4	7	8.4	8.5	9.1	9	8.7	9.3	9.7	7.2	7	6.5	6.2	5.5	4.1	4.3	5.5	5.3	5.3
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% 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

August 2012

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	1011	1010	1010	1010	1010	1009	1010	1010	1011	1011	1011	1010	1010	1010	1010	1009	1009	1009	1009	1009	1010	1010	1010	1010	1010	1010
2	1010	1010	1010	1010	1010	1011	1011	1011	1012	1012	1012	1012	1012	1011	1011	1011	1011	1011	1012	1012	1012	1013	1013	1013	1013	1011
3	1013	1013	1013	1013	1014	1014	1014	1015	1015	1016	1016	1016	1016	1016	1015	1015	1015	1015	1015	1016	1017	1017	1017	1017	1017	1015
4	1017	1017	1017	1018	1019	1020	1020	1021	1021	1021	1021	1021	1021	1020	1020	1020	1019	1019	1020	1020	1021	1021	1021	1021	1021	1020
5	1021	1021	1021	1021	1021	1021	1021	1021	1022	1022	1022	1022	1021	1020	1020	1019	1018	1018	1018	1018	1019	1019	1019	1019	1018	1020
6	1018	1018	1018	1018	1018	1018	1018	1018	1018	1018	1017	1017	1017	1016	1015	1015	1015	1015	1015	1015	1016	1016	1016	1015	1015	1016
7	1015	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015	1015	1014	1013	1013	1013	1014	1014	1013	1014	1013	1014	1014	1014	1014
8	1014	1013	1013	1013	1013	1013	1013	1014	1014	1014	1014	1014	1014	1013	1013	1013	1013	1013	1012	1012	1013	1013	1013	1013	1013	1013
9	1012	1012	1012	1012	1013	1013	1014	1014	1014	1013	1013	1013	1013	1012	1012	1011	1011	1011	1010	1011	1011	1011	1011	1011	1011	1012
10	1010	1010	1009	1009	1009	1009	1009	1009	1010	1010	1010	1009	1009	1009	1008	1009	1009	1009	1010	1010	1010	1010	1010	1010	1010	1009
11	1010	1010	1010	1010	1010	1011	1011	1012	1012	1012	1012	1012	1012	1012	1011	1011	1011	1011	1012	1013	1013	1013	1013	1013	1012	1012
12	1012	1012	1012	1012	1012	1012	1013	1014	1013	1014	1014	1013	1013	1013	1013	1012	1012	1012	1013	1013	1014	1014	1014	1014	1014	1013
13	1014	1014	1013	1014	1014	1014	1015	1015	1015	1015	1015	1015	1014	1014	1013	1013	1013	1013	1013	1013	1014	1013	1013	1013	1013	1014
14	1012	1012	1012	1012	1012	1012	1012	1012	1012	1013	1012	1012	1011	1011	1010	1010	1010	1010	1010	1010	1010	1011	1011	1010	1010	1011
15	1010	1010	1010	1010	1010	1010	1010	1011	1011	1011	1011	1011	1010	1010	1009	1008	1009	1010	1011	1010	1010	1010	1011	1011	1010	1010
16	1011	1011	1011	1011	1012	1012	1013	1013	1014	1014	1014	1013	1013	1013	1012	1012	1012	1012	1012	1012	1012	1013	1013	1013	1013	1012
17	1013	1012	1012	1011	1011	1011	1012	1012	1012	1012	1012	1012	1011	1010	1010	1009	1009	1008	1008	1009	1009	1009	1009	1009	1009	1011
18	1008	1008	1008	1008	1008	1008	1009	1009	1009	1010	1010	1009	1009	1009	1009	1009	1009	1009	1010	1010	1010	1011	1011	1011	1011	1009
19	1011	1011	1010	1011	1011	1011	1011	1011	1011	1010	1010	1010	1010	1010	1010	1010	1009	1008	1008	1008	1008	1008	1009	1009	1009	1010
20	1008	1008	1008	1008	1008	1009	1009	1010	1010	1010	1010	1010	1010	1010	1009	1010	1010	1010	1010	1011	1012	1012	1013	1013	1010	1010
21	1013	1013	1013	1013	1013	1014	1014	1014	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1016	1016	1016	1017	1017	1017	1015
22	1016	1016	1015	1016	1016	1016	1017	1017	1017	1018	1018	1018	1018	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017
23	1017	1017	1017	1017	1017	1017	1018	1018	1018	1018	1018	1018	1018	1018	1018	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017
24	1017	1016	1016	1016	1016	1017	1017	1018	1018	1018	1018	1019	1018	1018	1018	1018	1018	1018	1017	1017	1017	1017	1017	1017	1017	1017
25	1016	1016	1016	1015	1015	1015	1015	1016	1016	1016	1015	1015	1015	1015	1015	1016	1016	1016	1016	1016	1017	1017	1018	1018	1018	1016
26	1018	1018	1018	1018	1018	1018	1019	1019	1020	1020	1020	1020	1019	1018	1018	1018	1018	1018	1018	1018	1019	1019	1019	1019	1018	1019
27	1018	1018	1018	1017	1018	1018	1018	1019	1019	1019	1019	1018	1017	1017	1016	1015	1015	1015	1015	1015	1016	1015	1015	1015	1015	1017
28	1015	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1013	1012	1012	1011	1011	1011	1011	1011	1012	1012	1012	1012	1011	1013	1013
29	1011	1010	1010	1010	1010	1011	1012	1012	1012	1013	1013	1013	1013	1013	1012	1012	1013	1013	1013	1014	1014	1014	1015	1015	1015	1012
30	1015	1015	1014	1015	1015	1016	1016	1017	1018	1018	1019	1019	1019	1018	1018	1018	1018	1018	1018	1018	1018	1019	1019	1019	1019	1017
31	1019	1019	1019	1019	1019	1019	1020	1020	1020	1020	1020	1019	1019	1018	1017	1017	1016	1016	1016	1016	1017	1017	1017	1017	1017	1018
Avg	1014	1013	1013	1013	1013	1014	1014	1015	1015	1015	1015	1015	1014	1014	1014	1013	1013	1013	1013	1014	1014	1014	1014	1014	1014	1014
SD	3	3	3	3	3	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	
StA	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	
Min	1008	1008	1008	1008	1008	1008	1009	1009	1009	1010	1010	1009	1009	1009	1008	1008	1009	1008	1008	1008	1008	1008	1009	1009	1009	1009
Max	1021	1021	1021	1021	1021	1021	1021	1021	1022	1022	1022	1022	1021	1020	1020	1020	1019	1019	1020	1020	1021	1021	1021	1021	1020	
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928	

Data Recovery: 0.0% 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

August 2012

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	12.6	12.6	12.6	12.6	12.6	12.7	12.9	13.2	13	12.9	12.9	13	13.1	13.2	13.2	13.2	13	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.8
2	12.7	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13	13	13	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
3	12.7	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13	13	13	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
4	12.6	12.6	12.6	12.6	12.6	12.6	13	13.1	13.1	13	13	13	13	13	13	13	13	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
5	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.1	13.1	13	13	13	13	13	13	13	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.8
6	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	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	13	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.8
8	12.6	12.6	12.6	12.6	12.5	12.5	12.6	12.6	12.9	13.1	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.8
9	12.7	12.7	12.7	12.6	12.6	12.6	12.9	13.2	13.1	13	13	13	13	13	13	13	13	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
10	12.7	12.6	12.6	12.6	12.6	12.6	12.7	13.2	13.1	13.1	13.1	13	13.1	13.1	13	13.1	13	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
11	12.7	12.7	12.6	12.6	12.6	12.6	12.9	13	13.2	13.1	13.1	13	13.1	13.2	13.1	13	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
12	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
13	12.7	12.7	12.7	12.6	12.6	12.6	12.9	13.2	13.2	13	13	12.9	13	13	13	13.1	13.1	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
14	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	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.6	12.8
15	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13	13	13	12.9	12.8	12.7	12.7	12.7	12.7	12.6	12.6	12.8
16	12.6	12.6	12.6	12.6	12.5	12.5	13	13.2	13.1	13.1	13	13	13	13	13	13	13	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
17	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13	13	13	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
18	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13.1	13.2	13	13	13.1	13.1	13.1	13.1	13.1	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
19	12.7	12.6	12.6	12.6	12.6	12.6	12.8	13.2	13.2	13.2	13.1	13	12.8	12.8	12.7	13.1	13.2	12.9	12.7	12.7	12.7	12.7	12.6	12.6	12.8	
20	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.6	12.9	13.2	13	13.2	13.2	13.3	13.2	13.2	13.1	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.8
21	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13	13.2	13.2	13.2	13.2	13.1	13.1	13.2	13.2	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
22	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.1	13.2	13.1	13.1	13.1	13	13.1	13.1	13.1	13.1	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
23	12.7	12.7	12.6	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	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
24	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.7	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
25	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.1	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
26	12.7	12.6	12.6	12.6	12.6	12.6	12.9	13.2	13.1	13	13	13	13	13.1	13	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.8
27	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13	13.1	13	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
28	12.7	12.6	12.6	12.6	12.6	12.6	13	13.1	13.2	13.1	13.1	13	13	13	13	13.1	13.1	13	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
29	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	13.1	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
30	12.7	12.6	12.6	12.6	12.6	12.6	12.9	13.3	13.2	13.1	13	13	13	13	13	13	13	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
31	12.7	12.6	12.6	12.6	12.6	12.6	13	13.3	13.2	13.1	13	13	13	13	13	13	13	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
Avg	12.7	12.6	12.6	12.6	12.6	12.6	12.8	13.1	13.1	13.1	13	13	13	13	13	13	13	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8
S D	0	0	0	0	0	0	0.2	0.2	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0	0	0	0	0	0
Min	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.6	12.9	13	12.9	12.9	12.8	12.8	12.7	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.6	12.6	12.8	
Max	12.7	12.7	12.7	12.7	12.7	12.6	13	13.3	13.3	13.3	13.2	13.2	13.2	13.3	13.2	13.2	13.2	13.2	13.1	12.8	12.8	12.8	12.7	12.7	12.7	12.9
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% 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.