

December 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	0	1	48	172	332	440	445	497	425	301	151	32	0	0	0	0	0	0	0	2844
2	0	0	0	0	0	0	0	50	207	277	440	441	274	212	189	168	34	0	0	0	0	0	0	0	2293
3	0	0	0	0	0	0	0	42	183	146	302	395	507	405	336	176	28	0	0	0	0	0	0	0	2521
4	0	0	0	0	0	0	0	41	166	336	426	469	496	389	304	148	22	0	0	0	0	0	0	0	2796
5	0	0	0	0	0	0	0	40	180	193	132	181	120	70	72	28	5	0	0	0	0	0	0	0	1022
6	0	0	0	0	0	0	0	46	196	351	471	505	448	422	322	130	37	0	0	0	0	0	0	0	2927
7	0	0	0	0	0	0	0	13	40	86	240	300	255	214	104	65	16	0	0	0	0	0	0	0	1334
8	0	0	0	0	0	0	0	11	73	112	138	144	206	324	257	120	34	0	0	0	0	0	0	0	1420
9	0	0	0	0	0	0	0	36	94	135	139	216	279	366	252	120	24	0	0	0	0	0	0	0	1661
10	0	0	0	0	0	0	0	9	30	58	152	124	140	214	161	89	17	0	0	0	0	0	0	0	993
11	0	0	0	0	0	0	0	26	125	257	134	134	82	86	91	28	6	0	0	0	0	0	0	0	969
12	0	0	0	0	0	0	0	5	18 ?	55 ?	71	59 ?	51	38 ?	46 ?	34	6	0	0	0	0	0	0	0	383 ?
13	0	0	0	0	0	0	0	3	44 ?	91	154	207	298	255	292	133	37	0	0	0	0	0	0	0	1514
14	0	0	0	0	0	0	0	55	178 ?	340	436	505	505	450	331	172	37	0	0	0	0	0	0	0	3008
15	0	0	0	0	0	0	0	18	90	166	246	324	258	239	267	139	31	0	0	0	0	0	0	0	1776
16	0	0	0	0	0	0	0	8	36	87	208	304	144	104	67	21	3	0	0	0	0	0	0	0	983
17	0	0	0	0	0	0	0	5	36	44 ?	229	451	367	330	177	61	11	0	0	0	0	0	0	0	1713
18	0	0	0	0	0	0	0	42	175	303	266	406	164	286	168	135	45	0	0	0	0	0	0	0	1990
19	0	0	0	0	0	0	0	33	163	312	432	494	495	438	324	158	18	0	0	0	0	0	0	0	2866
20	0	0	0	0	0	0	0	39	98	163	229	332	320	326	172	59	12	0	0	0	0	0	0	0	1750
21	0	0	0	0	0	0	0	12	79	227	395	217	124	96	138	114	18	0	0	0	0	0	0	0	1420
22	0	0	0	0	0	0	0	36	163	317	433	506	509	452	339	183	44	0	0	0	0	0	0	0	2983
23	0	0	0	0	0	0	0	37	164	319	436	500	510	449	290	146	26	0	0	0	0	0	0	0	2876
24	0	0	0	0	0	0	0	16	141	221	405	336	269	196	114	44	6	0	0	0	0	0	0	0	1749
25	0	0	0	0	0	0	0	26	73	275	406	478	482	391	279	124	27	0	0	0	0	0	0	0	2561
26	0	0	0	0	0	0	0	2	6 ?	?	?	?	72 ?	39 ?	?	23 ?	17 ?	0	0	0	0	0	0	0	158 ?
27	0	0	0	0	0	0	0	33	157	311	430	473	490	449	341	191	41	0	0	0	0	0	0	0	2916
28	0	0	0	0	0	0	0	47	164	273	360	342	398	257	180	105	26	0	0	0	0	0	0	0	2152
29	0	0	0	0	0	0	0	2	4 ?	45 ?	96	100	129	201	228	160	30	0	0	0	0	0	0	0	995 ?
30	0	0	0	0	0	0	0	31	153	310	433	518	488	441	351	196	50	0	0	0	0	0	0	0	2970
31	0	0	0	0	0	0	0	27	128	193	284	472	238	158	71	44	16	0	0	0	0	0	0	0	1630
Avg	0	0	0	0	0	0	0	27	114	211	299	346	310	281	219	112	24	0	0	0	0	0	0	0	1909
S D	0	0	0	0	0	0	0	17	64	104	131	146	160	138	99	56	13	0	0	0	0	0	0	0	834
S/A	0	0	0	0	0	0	5.57	0.61	0.56	0.49	0.44	0.42	0.52	0.49	0.45	0.5	0.53	0	0	0	0	0	0	0	0.44
Min	0	0	0	0	0	0	0	2	4	44	71	59	51	38	46	21	3	0	0	0	0	0	0	0	158
Max	0	0	0	0	0	0	1	55	207	351	471	518	510	452	351	196	50	0	0	0	0	0	0	0	3008
n	0	0	0	0	0	0	1	321	342	344	357	357	367	356	356	367	298	0	0	0	0	0	0	0	3467

Daylight Data Recovery: 0.0% missing; 0.0% untested; 3.7% exceed the 15% QC threshold -- 3599 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.

December 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	0	0	0	0	0	*	
2	0	0	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	*	
4	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
5	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
6	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
7	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
8	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
9	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
10	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
11	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
12	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	0	0	0	0	0	*	
14	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
15	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	*	
17	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
18	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
19	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	*	
21	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	*	
23	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	*	
25	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	0	0	0	0	*	
27	0	0	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	*	
29	0	0	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	0	0	*	
31	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	0	*	
Avg	0	0	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	0	0	0	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	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	0
Min	0	0	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	0	0	0	0	0	0	0	0	N/A	
Max	0	0	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	0	0	0	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	0

Daylight Data Recovery: 100.0% missing; 0.0% untested; 0.0% exceed the 15% QC threshold -- 3599 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

December 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	0	?	48	162	321 ?	390 ?	411 ?	?	384 ?	288 ?	151	31	0	0	0	0	0	0	0	2186 ?
2	0	0	0	0	0	0	0	46	207 ?	266	382 ?	421	270	210	181	131 ?	32	0	0	0	0	0	0	0	2147 ?
3	0	0	0	0	0	0	0	41	162	144	273	297 ?	408 ?	340 ?	261 ?	141 ?	26	0	0	0	0	0	0	0	2094 ?
4	0	0	0	0	0	0	0	42	164	329 ?	399 ?	148	84	92	64	41	15	0	0	0	0	0	0	0	1379 ?
5	0	0	0	0	0	0	0	35	94	173	131	180	120	64	72	28	5	0	0	0	0	0	0	0	901
6	0	0	0	0	0	0	0	17	37	55	86	105	150	169	97	52	13	0	0	0	0	0	0	0	780
7	0	0	0	0	0	0	0	14	40	86	203	186	245	213	104	65	16	0	0	0	0	0	0	0	1173
8	0	0	0	0	0	0	0	11	73	112	138	144	190	186	136	78	28	0	0	0	0	0	0	0	1098
9	0	0	0	0	0	0	0	38	91	132	135	195	218	139	72	65	19	0	0	0	0	0	0	0	1104
10	0	0	0	0	0	0	0	9	30	58	152	124	140	198	157	85	17	0	0	0	0	0	0	0	970
11	0	0	0	0	0	0	0	18	84	134	127	134	82	86	91	28	6	0	0	0	0	0	0	0	790
12	0	0	0	0	0	0	0	6	15	45	67	53	51	35	39	34	6	0	0	0	0	0	0	0	350
13	0	0	0	0	0	0	0	3	35	91	154	200	248	208	129	57	20	0	0	0	0	0	0	0	1145
14	0	0	0	0	0	0	0	16	33	39	39	39	39	35	31	22	7	0	0	0	0	0	0	0	300
15	0	0	0	0	0	0	0	18	90	162	228	281	244	239	148	49	23	0	0	0	0	0	0	0	1481
16	0	0	0	0	0	0	0	8	36	87	202	252	144	104	67	19	3	0	0	0	0	0	0	0	924
17	0	0	0	0	0	0	0	5	36	32	209	201	247	247	161	61	11	0	0	0	0	0	0	0	1209
18	0	0	0	0	0	0	0	17	38	55	143	208	128	142	116	78	22	0	0	0	0	0	0	0	947
19	0	0	0	0	0	0	0	19	39	52	54	55	55	52	47	33	9	0	0	0	0	0	0	0	414
20	0	0	0	0	0	0	0	35	91	155	192	224	206	176	153	59	12	0	0	0	0	0	0	0	1302
21	0	0	0	0	0	0	0	14	79	130	133	179	124	96	125	88	18	0	0	0	0	0	0	0	986
22	0	0	0	0	0	0	0	17	33	45	50	65	52	50	43	32	13	0	0	0	0	0	0	0	400
23	0	0	0	0	0	0	0	14	32	41	44	47	51	109	93	65	24	0	0	0	0	0	0	0	521
24	0	0	0	0	0	0	0	15	98	160	95	222	213	192	114	44	6	0	0	0	0	0	0	0	1160
25	0	0	0	0	0	0	0	24	73	96	65	68	86	134	83	82	26	0	0	0	0	0	0	0	737
26	0	0	0	0	0	0	0	2	8 ?	15 ?	?	26 ?	67 ?	31 ?	20 ?	21	12 ?	0	0	0	0	0	0	0	201 ?
27	0	0	0	0	0	0	0	14	31	42	46	58	60	48	42	34	13	0	0	0	0	0	0	0	388
28	0	0	0	0	0	0	0	36	91	119	184	238	268	224	166	96	25	0	0	0	0	0	0	0	1446
29	0	0	0	0	0	0	0	2	5 ?	42 ?	91	100	129	189	156	98	18	0	0	0	0	0	0	0	829
30	0	0	0	0	0	0	0	16	39	50	57	79	113	76	50	37	15	0	0	0	0	0	0	0	530
31	0	0	0	0	0	0	0	14	79	107	194	98	213	158	71	44	16	0	0	0	0	0	0	0	994
Avg	0	0	0	0	0	0	0	20	69	109	155	163	155	149	109	62	16	0	0	0	0	0	0	0	996
S D	0	0	0	0	0	0	0	14	50	80	101	102	89	88	63	35	8	0	0	0	0	0	0	0	517
S/A	0	0	0	0	0	0	0	0.69	0.73	0.73	0.65	0.63	0.58	0.59	0.58	0.56	0.48	0	0	0	0	0	0	0	0.52
Min	0	0	0	0	0	0	0	2	5	15	39	26	39	31	20	19	3	0	0	0	0	0	0	0	201
Max	0	0	0	0	0	0	0	48	207	329	399	421	408	384	288	151	32	0	0	0	0	0	0	0	2186
n	0	0	0	0	0	0	0	303	351	350	336	352	349	351	352	363	297	0	0	0	0	0	0	0	3404

Daylight Data Recovery: 0.0% missing; 0.0% untested; 5.4% exceed the 15% QC threshold -- 3599 total daylight measurements.

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

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

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

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

December 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	5.7	4.9	4.8	4.4	4.3	4.1	4	4.4	7.5	10.2	13.7	15.4	15.7	16.2	16.3	15.7	14.2	12.4	11	10	9	7.7	7.5	7	9.4
2	6.3	5.8	5.3	5.1	5.2	5.3	4.6	5.4	8.6	11.8	15	16.9	17.1	16.6	16.7	17.4	16.1	14.2	13.3	12.6	11.9	11.8	11.7	11.8	11.1
3	11.9	12.3	12.6	12.8	12.7	13	13.5	13.8	15.2	16.4	17.5	19.2	21.2	21.6	21.9	21.9	20.2	18.2	16.1	15.9	14.5	14	13.6	13.2	16
4	13.1	12.6	12.1	12	11.8	11.6	11.4	11.8	12.9	16.2	19.4	21.2	22.3	22.5	22.7	22.4	20.5	18.9	17.5	16.3	15.7	15.4	15.4	15.2	16.3
5	15.2	15.1	14.6	14.2	14.5	14.4	14.3	14.7	16	17.4	17.8	18.1	17.7	16.6	12.8	11.8	11.4	11.3	11.3	11.2	10.4	9.2	7.9	7.6	13.5
6	7.6	7.1	6.9	6.1	5.7	5.1	4.5	4	4.7	6.4	7.9	8.4	8.5	8.6	8.3	7.5	7.1	6	5.4	4.8	4.3	4	4	3.8	6.1
7	3.9	3.8	4	4.5	5.7	6.1	6.8	7.6	8.9	10.3	12.3	14.6	15.7	16.2	16.5	16.5	16.4	15.4	15.6	14.7	14.7	15	16	16.3	11.6
8	16.1	16.1	16.3	16.4	16.3	16.2	16	15.7	14.4	14.1	14.1	14.5	15	16	16.9	17	16.1	15.1	14.4	13.8	13.4	13.1	12.7	12.6	15.1
9	12.1	12.1	11.9	11.7	11.3	11.2	11.2	11.4	12.3	13.5	14.6	15.6	16.7	18.6	20.2	19.2	17.6	17.2	16.8	16.4	15.9	15.3	15.7	16.3	14.8
10	16	16.2	16.6	16.7	17.2	17.9	17.9	18	18.6	18.2	18.7	19.2	19.9	20.9	21.3	21.2	20.7	19.8	19.3	18.2	17.8	17.5	17.2	17.4	18.4
11	17.5	17.7	17.6	17.8	17	16.6	15.7	15.6	16.8	18.3	14.4	12.5	11.6	10.8	10.5	10.3	10	9.8	9.8	10	10.1	10	9.5	9.5	13.3
12	9.5	9.7	9.4	8.4	8.4	8.4	7.8	6.8	7.1	7.2	7.5	7.5	7.5	8.1	8.3	8.3	8.1	7.9	8	8	8.1	7.9	7.4	7.6	8
13	7.3	7.1	6.1	5.8	5.7	5.6	5.7	5.7	6.1	7	8.3	10	10.7	10.9	10.7	10.2	9.4	8.3	7.2	6.6	6.1	5.8	5.4	5.1	7.4
14	4.7	4.2	4.5	4.9	4.5	4.2	4.1	4.3	5.9	7.6	9.4	11	12.4	13.1	13.6	13.6	12.9	9.9	8.1	7.1	6.6	5.8	4.6	4	7.5
15	3.2	2.6	2.3	1.8	1.7	1.8	2.1	3	3.1	4.8	7.4	10.1	11.2	12	12.5	12.9	12.1	10.7	9.6	8.9	8.8	9.6	10.5	11	7.2
16	11.6	11.7	11.5	10.3	10.2	10.5	10.5	10.5	10.7	11	12	13	13.6	13.5	13.4	12.9	12.5	12.5	12.7	13.1	13.5	13.5	13.7	13.8	12.2
17	13.9	13.9	14.1	13.9	13.9	13.8	13.7	13.7	13.8	13.9	14.4	15.8	17.5	17.8	17.2	16.2	15.9	15.4	15.3	15.1	14.9	14.8	14.7	14.6	14.9
18	14.1	14	14	14.1	13.7	13.2	13.2	13.4	14.2	15.5	15.9	16.6	16.2	16	16.5	15.9	14.6	13.2	12.7	11.9	11.2	10.3	9.6	8.6	13.7
19	7.7	7.1	6.5	5.9	5.3	5.2	5.3	5.5	7.7	9.9	12.4	14.5	15.7	16.1	16.2	16.1	14.7	12.7	11.6	10	9.5	9.2	8.7	8.6	10.1
20	7.9	7.5	7.2	6.9	6.2	5.6	5.4	5.7	7.1	8.8	9.9	10.9	11.7	11.9	12.4	12.1	11.6	11.7	12.6	13.5	15	16.3	17.1	17	10.5
21	16.9	16.9	17.1	16.8	13.9	11.5	10.1	8.7	7.8	7.7	8.3	8.3	7.8	7.7	7.8	7.7	7.2	6.6	5.9	5.1	4.5	3.9	3.3	2.9	8.9
22	2.6	2.3	2	1.8	1.7	1.7	1.6	1.5	2.7	4.5	6.1	7.2	7.9	8.5	9	9.2	8.4	6.8	5.9	5.6	5	4.6	4.1	3.5	4.8
23	2.6	2.5	2.7	2.3	1.3	0.8	0.3	0.3	1.7	3.9	5.4	7.2	8.5	9.6	10.7	10.2	8.8	8.1	8	8	7.8	7.8	7.6	7.3	5.6
24	7.2	7.2	7.4	7.3	7.2	7.2	7.3	7.1	7.9	9.6	11.3	12.5	12.9	12.9	12.7	12.5	12	11.8	11.7	11.6	11.3	12	12	11.8	10.2
25	10.5	10.3	10	9.7	9	8.4	8.1	7.9	8.4	9.4	11.5	12.9	12.5	11.8	11.1	10.4	9.4	8.4	7.6	7.3	6.6	6.3	6.5	7	9.2
26	8	8.4	8.1	8.2	8.5	8.8	9.7	10	10	9.7	10.1	11.4	13.7	15.3	15.6	17.2	17.4	17.5	17.2	16.6	15.6	12.7	10.9	9.7	12.1
27	7.7	6.3	6.3	6.7	6.5	5.8	5.3	5.1	5.5	6.4	7.5	8.5	9.2	9.4	9.9	9.8	9	7.6	6.6	6	5.1	4.4	3.6	3	6.7
28	2.4	2.2	1.7	1.4	1.2	0.7	-0.2	-0.6	0.7	3	4.7	6	6.8	6.1	6.1	6.1	5.8	5	4.6	4.9	5	5.3	5.2	5.2	3.7
29	5.1	5.4	5.8	5.6	5.7	5.4	5.6	6.3	7.2	8.1	9.4	10	7.5	6.9	8.2	8.4	7.7	7.3	7.1	7	6.9	6.4	5.5	4.8	6.8
30	4.3	3.9	3.5	2.9	2.7	2.4	2.1	1.9	2.6	3.9	5.3	6.1	6.7	7.1	7.3	7.4	6.6	5.1	4.1	3.1	2.6	2.3	2.4	2.1	4.1
31	1.4	0.4	-0.3	-0.9	-1.2	-1.5	-1.7	-1.6	-0.4	1.1	2.3	4.2	5.9	6.6	6.3	6.4	6.6	6.7	7.2	8	8.2	8.4	8.5	8.3	3.7
Avg	8.8	8.6	8.5	8.2	8	7.8	7.6	7.7	8.6	9.9	11.1	12.2	12.8	13.1	13.2	13.1	12.3	11.3	10.8	10.4	10	9.7	9.4	9.2	10.1
S D	4.8	5	5.1	5.2	5.1	5.1	5.2	5.2	4.9	4.7	4.4	4.4	4.5	4.7	4.7	4.4	4.3	4.3	4.2	4.2	4.3	4.3	4.5	4.6	4.1
S/A	0.54	0.58	0.6	0.63	0.64	0.66	0.68	0.67	0.58	0.48	0.4	0.36	0.35	0.36	0.35	0.36	0.36	0.38	0.4	0.41	0.42	0.44	0.47	0.5	0.4
Min	1.4	0.4	-0.3	-0.9	-1.2	-1.5	-1.7	-1.6	-0.4	1.1	2.3	4.2	5.9	6.1	6.1	6.1	5.8	5	4.1	3.1	2.6	2.3	2.4	2.1	3.7
Max	17.5	17.7	17.6	17.8	17.2	17.9	17.9	18	18.6	18.3	19.4	21.2	22.3	22.5	22.7	22.4	20.7	19.8	19.3	18.2	17.8	17.5	17.2	17.4	18.4
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

December 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	?	?	?	?	?	?	?	?	103.9 ?	98.3	78.4	71.1	62.9	62.7	63.6	65.3	71.5	75.2	82	93.3	97	101.3	100.3	103.2	83.1 ?	
2	104.8 ?	?	?	?	?	?	?	?	99.4 ?	88.8	81.3	75.6	75.2	77.5	78.6	77.5	83.5	91.4	96.1	96.5	97.9	97.8	99	99.5	89.4 ?	
3	99.5	99.6	100.7	101.9	103.1	104.5 ?	?	?	103.3 ?	100.7	97.4	88.8	80.9	77.8	76.6	77.3	86	94.3	100.9	100.5	104.6 ?	?	?	?	94.7 ?	
4	?	?	?	?	?	?	?	?	?	99.8 ?	89.5	80.7	74.7	73.6	71.6	73.1	81.2	86.3	93.1	101.2	104.6 ?	?	?	?	85.8 ?	
5	?	?	?	?	?	?	?	?	104.5 ?	102.1	100.4	98.3	97.5	92.8	98.8 ?	?	103.1 ?	100.6	99.4	96.9	100.3	104.3 ?	?	?	99.9 ?	
6	101.8 ?	99.4	94.5	94.9	94.8	94.4	92.1	90.9	87.3	85.8	85	84.2	83.9	83.4	83.8	87	90.2	97	98.9	100.5	101.8	103.7	105 ?	?	93	
7	?	?	?	?	?	?	?	?	?	?	103.7 ?	99.9	97.5	97.6	98	97.5	97.7	100.3	102.8	?	?	?	?	?	99.4 ?	
8	?	?	?	?	?	?	?	?	?	?	?	?	102.4	98.2	94.4	93.2	96.1	98.7	100.5	102.5	104	?	?	?	98.9 ?	
9	?	?	?	?	?	?	?	?	?	?	?	?	103.2 ?	95.6	85.7	92.1	95.5	96.7	98.1	96.9	97.2	99.9	102.4	104.5 ?	97.3 ?	
10	?	?	?	?	?	?	?	?	?	?	?	?	103	98.7	96.2	94.1	89.2	90.4	93.8	100.5	101.9	101.6	101.1	98.7	97.4 ?	
11	96.8	92.8	88.8	87.1	93	97.5	101.6	104.5 ?	104.3	100.6	96.5	96.2	97.5	96.9	97.2	97.6	98.1	98.8	99.3	99.5	99.4	97.3	95.6	94.6	97.1	
12	95.3	97.1	97.6	104.8 ?	104.6	102.5	101.6	?	?	?	104.4 ?	103.5	103.6	97	96	94.9	92.9	91.4	95.9	98.9	99.7	100	99.8	99.9	99.1 ?	
13	103.2	104.3	?	?	104.4	104.6 ?	?	104.1 ?	103.3	101.5	100	98.2	95.9	94.1	93.4	91.7	92.9	97.8	101.1	102.3	103.4	104.3	?	?	100 ?	
14	?	?	?	?	?	?	?	?	102.1	97.7	89	76.7	63	50.4	52.6	51.4	55.3	73	90.6	101.7	104.6 ?	?	?	?	77.6 ?	
15	?	?	?	?	?	?	?	?	?	?	95.9	88.6	90.3	85.8	83.2	82.6	87.3	94.9	99.3	103.1	104.6 ?	?	103.6	103.6	94.1 ?	
16	104.3	105 ?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
17	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
18	104.7	?	105 ?	104.6	104.8 ?	?	?	104.8 ?	102.7	97.2	96.9	92.7	91.4	94.1	78.2	75.8	78.7	86.3	84.4	80.8	77.1	79.8	80.5	83.4	90.7 ?	
19	86.3	89.4	92.3	95.2	97.7	95.9	93.3	92.2	83.1	76.6	69.2	62.5	57.9	54.9	55	56.9	64.2	75	80.4	90.1	97.9	100.3	101.9	97.7	81.9	
20	98.8	99.1	94.8	93.9	97.7	99.7	104.4 ?	103.1 ?	100.3	96.1	94.6	92.8	91.2	90.7	90.9	95.5	98.3	102.2	102.4	103.2	100.8	100	100.9	101.6	98	
21	102.2	103.5 ?	104.8 ?	95.3 ?	85.5	86.7	89.7	73	75.2	73.3	69	67.6	69.2	70.3	69	65.3	65.8	67.1	65.1	68.6	69.2	69.8	72.7	74.9	77.2	
22	77.7	79.1	80	81	82	80.8	81.4	83.1	79.2	70.2	63	59.1	55.8	54.5	51.2	49.9	53.7	63.6	66.9	66.3	68.2	69.4	70.9	72.9	69.2	
23	80.7	81.7	74.6	74.8	79.2	83.4	86.4	85.5	78.1	68.7	61.7	58.1	49.8	48.6	45	50.2	63.6	76.3	78.3	73.8	72.2	71.8	73.1	73.2	70.4	
24	75.5	76.9	76.4	78.2	81	82.2	85.6	96.5	94.4	86.1	76.8	67.5	65.8	72.4	76	79.3	82.1	84	83.5	86.7	89.5	82.3	84.2	84.6	81.2	
25	91.7	94.5	94.7	96.3	99.8	103 ?	?	?	?	102.5 ?	95.4	83.4	79.9	84	87.3	91.4	93.9	99	102.9	104.8 ?	?	?	?	?	94.4 ?	
26	100.1 ?	98.3	100.5	104	104.9 ?	?	104.1	103.7	103.8 ?	?	?	?	?	?	?	103.8	103.7	102.2	102.1	102.2	96.1	96.6	100.2	98.1	101.4 ?	
27	99.2	100.7	101.1	99.1	96.5	96.4	96.5	95.5	93.3	88.2	82	74.9	68.1	65.1	64.4	65.8	70.1	77.7	83	84.8	88.9	91.7	91.6	91.9	86.1	
28	93.6	91.3	93.1	94.7	94.4	96.5	100.7	102.4	98.7	89.7	83.5	80	78.3	82.4	83	82.1	84.5	90.9	95.3	93.5	93.3	94.5	96.9	99.3	91.4	
29	100.4	101.1	99.1	98.2	98.6	103.1 ?	?	?	?	?	?	?	?	?	?	103.6 ?	100.6	101.1	101	99.4	97.7	94.8	90.7	89.6	87.9	97.9 ?
30	87.7	88.2	90	92.5	90.6	90.7	87.4	87.7	84.8	80.3	72.2	63.8	58.2	53.9	53.2	53.7	55.7	62	66.5	74.7	78	79	78.7	79.3	75.4	
31	81.3	84.8	87.6	91.7	93.6	96.3	97.8	97.6	91.8	86.2	79.9	70.6	65.7	62.6	66	75.8	81.5	82.3	80.3	73.8	71.4	69.6	70.1	75	80.6	
Avg	94.6	94	93.1	93.8	95.1	95.2	94.5	95	94.7	90	86.1	80.6	80.8	79	79	80.1	84	88.7	91.6	92.7	93.3	91.7	91.9	91.8	90.1 ?	
SD	9.4	8.6	9	8.7	8.2	7.9	7.6	9.5	9.9	11	12.9	13.8	17	16.9	17	16.8	15.1	12.3	11.7	11.7	12.1	12.5	12.1	11.2	9.7	
S/A	0.1	0.09	0.1	0.09	0.09	0.08	0.08	0.1	0.11	0.12	0.15	0.17	0.21	0.21	0.21	0.21	0.18	0.14	0.13	0.13	0.13	0.14	0.13	0.12	0.11	
Min	75.5	76.9	74.6	74.8	79.2	80.8	81.4	73	75.2	68.7	61.7	58.1	49.8	48.6	45	49.9	53.7	62	65.1	66.3	68.2	69.4	70.1	72.9	69.2	
Max	104.8	105	105	104.8	104.9	104.6	104.4	104.8	104.5	102.5	104.4	103.5	103.6	98.7	103.6	103.8	103.7	103.4	104.3	104.8	104.6	104.3	105	104.5	101.6	
n	234	214	198	201	217	185	161	158	206	244	275	288	330	336	338	348	352	360	359	326	295	263	254	243	6376	

Data Recovery: 0.0% missing; 0.0% untested; 28.4% 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

December 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	3.8	3.3	2.7	2.3	2	1.9	1.7	1.9	5.6	11.3	16.8	20.7	22	22.2	21.8	20.8	18.6	14.8	11.8	9.8	8.5	7.3	6	5.2	10.1
2	4.6	4.1	3.7	3.4	3.3	3.3	3.3	3.2	6.1	11.2	15.6	20.3	21.7	20.5	19.4	19.5	19.2	16.5	14.2	12.9	11.9	11.2	10.9	10.9	11.3
3	11.5	12	12.4	12.8	13	13.1	13.2	13.3	15.1	17.7	18.5	21.2	24.6	27.1	27.9	27.6	25.4	21.3	17.8	15.9	14.9	14	13.3	12.9	17.4
4	12.6	12.3	11.7	11.2	11	10.8	10.7	10.9	12.6	16.5	21.6	25.2	27.1	27.3	26.8	26.2	24.4	21	18.4	16.7	15.6	15	14.8	14.6	17.3
5	14.5	14.5	14.4	14.1	13.8	13.8	13.7	14	15.2	17.7	18.9	19.4	19.7	19.3	17.6	14.5	12.7	11.9	11.5	11.3	10.7	8.9	7.3	6.2	14
6	6.1	5.8	5.4	5.2	4.8	4.4	3.9	3.6	5.2	8.1	11.3	13.4	13.9	13.7	13.4	12.3	10.9	7.7	5.2	4.1	3.5	2.9	2.6	2.6	7.1
7	2.7	2.8	2.8	3.1	4.2	5.4	6.2	7.1	8.1	9.5	11.4	15.1	17.1	18	18.3	18	17.5	16.9	16.1	15.7	15.1	15	15.2	15.9	11.6
8	16.3	16.4	16.5	16.6	16.7	16.7	16.6	16.5	16	15.6	15.5	15.9	16.3	17.5	18.9	19.5	18.4	16.4	14.7	13.6	12.9	12.4	12.1	11.9	15.8
9	11.8	11.6	11.4	11.2	11.1	10.9	11	11.2	11.9	13.2	14.5	15.8	17.2	19.4	22	22.7	21	18.5	17.2	16.5	16.1	15.5	15.2	15.4	15.1
10	15.6	15.6	15.9	16.2	16.5	17	17.6	17.7	18.1	18.4	18.8	19.5	20.4	21.3	22.4	22.5	21.9	20.9	20	19	18	17.5	17.3	17.2	18.6
11	17.4	17.5	17.6	17.6	17.3	16.6	15.8	15	16.1	18.7	20.5	17.5	15.2	13.7	12.8	12.2	11.5	10.9	10.5	10.4	10.4	10.4	10.3	10.1	14.4
12	9.9	9.9	9.9	9	8.4	8.2	8	7.5	7.2	7.2	7.4	7.5	7.5	7.7	8.1	8.5	8.7	8.5	8.4	8.3	8.2	7.9	7.2	6.8	8.2
13	6.8	6.8	6.7	6.1	5.8	5.6	5.6	5.6	5.7	6.3	7.5	9.4	11.3	13.1	13.4	13.3	12.2	9.9	7.9	6.6	5.7	5.1	4.6	4.2	7.7
14	3.8	3.4	3.2	3.4	3.5	3.4	3.2	3	5	9.2	13.2	16.8	18.9	19.5	18.9	18.3	16.8	12.6	8.2	6.1	4.7	4	3	2	8.5
15	1.7	1	0.2	0.2	0.9	0.9	1	1.5	2.3	3.8	6.2	9.5	12.5	13.6	14.4	15.7	14.8	12.3	9.8	8.2	7.6	8.2	9.4	10.4	6.9
16	11.1	11.6	11.8	11.5	10.9	10.8	10.9	10.9	11	11.3	12.3	14.4	16.3	16.1	15.4	14.8	14	13.4	13.1	13.2	13.4	13.7	13.8	13.9	12.9
17	14	14	14.2	14.2	14.2	14.2	14.1	14.1	14.1	14.2	14.7	17	21.3	22.9	22.3	20.4	18.1	16.6	15.7	15.3	15.1	14.8	14.5	14.3	16
18	14.2	13.9	13.8	14	13.7	13.1	12.8	12.7	13.9	16.6	18.8	19.1	20	17.8	18	18.1	17.4	15.1	13	11.9	10.9	10.1	9.3	8.4	14.4
19	7.3	6.3	5.6	4.8	4.2	3.7	3.7	4	6.1	10.1	13.6	16.6	18.6	19.5	19.4	19.2	17.7	14.1	10.9	9	8.3	8	7.6	7.2	10.2
20	6.9	6.5	5.9	5.4	4.8	3.9	3.6	3.7	5.1	7.3	9.5	11.4	13.6	14	14.6	14.2	13.2	12.4	12.3	12.8	13.6	14.9	15.7	16.3	10.1
21	16.1	16.2	16.4	16.7	15.8	13.6	11.7	10.5	9.3	9	10.2	11.1	10.1	9.3	8.8	9	8.5	7.6	6.8	5.6	4.6	3.9	3.2	2.6	9.9
22	2.1	1.7	1.4	1.1	0.9	0.7	0.7	0.7	2.3	5.2	8.1	10.3	11.6	12.1	12.1	11.9	11.3	8.8	6.1	5	4.1	3.4	3	2.4	5.3
23	1.5	0.9	0.8	0.9	0.1	-0.4	-0.9	-1.1	1.1	5.3	9.1	12.2	13.9	14.4	14.3	13.7	11.9	9.4	7.6	7.2	7.1	7	7.2	7	6.3
24	7	7.1	7.1	7.1	6.8	6.8	7	7.2	7.8	10.5	13.6	17.1	17.3	16.2	15.4	14.4	13.3	12.3	11.8	11.5	11.3	11.3	11.7	12	11
25	11.3	10.6	10.1	9.1	8.4	7.5	6.9	6.8	7.4	9.2	13.9	17.5	18.4	17.8	16.4	14.7	12.4	9.9	8.3	7.4	6.8	6.3	6.3	6.7	10.4
26	7.3	8.1	8.4	8.5	8.4	8.6	9	9.5	9.8	9.7	9.9	10.4	11.7	13.6	14.9	15.7	16.4	16.8	16.6	16.3	15.9	15.1	13	11.6	11.9
27	10.3	8.4	6.8	6.2	6.3	6	5.3	4.9	6	8.2	10.3	12.3	13.2	13.6	13.3	13.1	12.2	9.6	7.3	5.9	4.8	3.9	3.2	2.5	8.1
28	1.7	1	0.6	0.2	-0.1	-0.5	-1.2	-1.7	-0.1	3.6	7.4	10.6	11.9	12.3	10.7	9.2	8	5.7	4.1	4.1	4.5	4.8	5	5	4.5
29	5	5.1	5.5	5.9	5.9	5.8	5.6	5.8	6.5	7.3	8.4	9.9	10.1	8.9	9.2	9.9	9.6	8	6.8	6.3	6	5.9	5.3	4.6	7
30	3.8	3.2	2.7	2.1	1.7	1.5	1.2	1	2.3	5.1	8	10	11	11	10.9	10.5	9.8	7.1	4.3	2.5	1.3	0.7	0.5	0.5	4.7
31	0.4	-0.4	-1.4	-2.3	-3	-3.4	-3.5	-3.3	-1.3	1.8	3.5	6.2	8.5	8.6	8.2	7.6	7.1	6.8	6.7	7.1	7.7	8	8.3	8.4	3.6
Avg	8.3	8.1	7.9	7.7	7.5	7.2	7	7	8.1	10.3	12.5	14.6	15.9	16.2	16.1	15.7	14.7	12.7	11.1	10.2	9.7	9.3	8.9	8.7	10.6
S D	5.1	5.3	5.6	5.7	5.7	5.7	5.7	5.6	5.2	4.7	4.6	4.6	4.8	5	5.1	5.1	4.8	4.4	4.5	4.5	4.5	4.6	4.7	4.9	4.1
S/A	0.62	0.66	0.7	0.74	0.76	0.79	0.8	0.8	0.64	0.46	0.37	0.32	0.3	0.31	0.32	0.32	0.33	0.35	0.4	0.44	0.47	0.5	0.53	0.56	0.39
Min	0.4	-0.4	-1.4	-2.3	-3	-3.4	-3.5	-3.3	-1.3	1.8	3.5	6.2	7.5	7.7	8.1	7.6	7.1	5.7	4.1	2.5	1.3	0.7	0.5	0.5	3.6
Max	17.4	17.5	17.6	17.6	17.3	17	17.6	17.7	18.1	18.7	21.6	25.2	27.1	27.3	27.9	27.6	25.4	21.3	20	19	18	17.5	17.3	17.2	18.6
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.

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

December 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	0	0	0	0	0	0	0	0	0	0.2	0.4	0.8	1.6	1.3	1.4	2	1.5	1	0.4	0.6	0.3	0.1	0	0	0.5
2	0.1	0	0.1	0	0	0	0	0.3	0.2	0.9	1.5	2	2.1	1.8	1.7	2.2	1.8	1.8	2.1	2.3	1.8	1.9	2.3	2.4	1.2
3	2	1.7	1.7	1.2	0.7	1.4	1.8	1.5	2.4	2.1	2.1	1.7	1	1.1	1.1	1.3	1.3	0.3	0.5	0.8	0.9	0.6	1.2	1	1.3
4	1.2	0.1	0.1	0	0	0.1	0.3	0.2	0.7	0.8	1.6	2.1	2.7	3.1	3.2	2.7	1	1	1.3	1.7	2.2	2.8	2.6	2.7	1.4
5	2.7	2.7	2.5	2.3	2	1.7	2.2	2.4	3.2	3.7	3.3	3.1	2.4	3.7	3.7	2	0.6	0.2	0.3	0.3	0.3	0.3	0.1	0.9	1.9
6	2.6	2	2.3	2.4	2.5	2.5	2.9	2.9	3.1	2.7	3.5	3.5	3.6	3.5	3.1	2.4	1.7	0.6	0.9	1	0.9	0.8	0.9	1.3	2.2
7	1.6	0.7	0.7	1.6	1	0.8	1	1.1	0.8	1.7	2	2.7	3.1	3.7	2.8	2.5	2.3	1.2	2.3	1	1.3	1.7	3	2.6	1.8
8	1.6	1.4	1.4	0.7	0.3	1	0.6	1.7	2.3	2.3	1.9	2.2	2.5	2.6	2.3	2.1	1.6	1.6	1.3	1.1	0.8	1.2	0.8	1	1.5
9	1.1	0.8	0.7	0.7	0.4	0.4	0	0.1	0.4	0.9	0.7	0.8	0.8	1.4	2	1.3	1.1	1.5	1.2	1.5	1.5	1.5	2.1	1.9	1
10	2	2.1	2.1	2.1	1.9	2.8	2.3	2.2	3	1.5	1.9	2.7	2.9	3.2	3.4	3	3.3	2.7	2.4	2.9	3.6	2.6	3.2	4	2.7
11	4.2	3.5	3.3	2.7	1.6	1	0.9	0.9	1.3	1.7	3.8	3.9	3.3	3.7	3.4	2.8	2.2	2.5	2.4	2.1	2.9	2.7	2.4	2.2	2.6
12	2.1	2.3	2.6	2.4	2.7	3.2	3.1	3.2	3.3	3.4	3.4	4	3.7	4	4.3	4.7	4.5	4.3	4	3.7	4.5	4.7	4.2	3.9	3.6
13	4.3	3.8	3.8	3.5	3.7	4.2	3.8	4.3	4.4	3.4	3.8	3.7	4.5	4.9	5	5.1	4.3	2.8	2.9	2.9	2.7	2.2	1.8	1.8	3.7
14	1.4	1.5	1.6	2.2	2.2	2.1	1.7	1.4	1.5	1.9	1.3	1.1	1.1	1.2	1.1	1.1	0.3	0	0.6	0.2	0.5	0	0	0	1.1
15	0	0	0	0.6	0.1	0	0.2	0	0	0.9	0.9	1.2	2	2	1.9	1.8	0.9	0.8	0.6	0.6	0.8	1.7	1.6	1.4	0.8
16	1.2	0.3	0.4	0.6	0.2	0.5	0.2	0.2	0.6	0.5	0.5	0.8	1.1	1.4	1.5	2.1	1.4	0.6	0.8	1.8	2.1	1.3	1.2	1.1	0.9
17	0.5	0.5	0.3	0.2	1.1	1.1	2.3	1.1	2.4	1.9	0.9	0.8	0.7	1.1	1.3	1.7	1.6	1.3	1.8	2.4	3.6	4.8	5.4	2.6	1.7
18	2.1	2.5	2.7	2.6	2.6	2.5	2.9	2.7	3.4	4.1	4.4	4.3	3.7	2.3	3.1	3.7	4.1	2.7	3.5	2.5	3.6	3.6	3.2	2.2	3.1
19	2	1.7	1.2	1.5	1.2	1.9	2.2	2.4	3.1	4.1	4.4	4.9	4.3	4.5	3.4	2.6	1.4	0.1	0.2	1.1	1.6	1.7	1.1	1.8	2.3
20	1.1	0.9	1.1	0.9	0.1	0.6	0.6	0.8	0.8	1.7	2.8	3.7	3.7	4.5	3.3	3.2	3	4	4.9	4.7	4.8	4.2	5.5	6.2	2.8
21	6.8	7.7	6.7	6.1	6.2	5.5	5.7	7.6	5.7	7	8	6.9	6.7	6.3	5.9	6.9	6	6.1	6.3	5	5.9	5.3	5.1	4.6	6.2
22	4.9	5	4.7	4.2	4.6	4.9	4.5	4.3	4.6	5.2	5.2	5.5	5.1	4.9	4.9	3.9	3.1	2	2.7	1.9	1.6	2.3	1.8	1	3.9
23	1.2	1.5	2.3	0.8	1.4	1.4	1.7	1.9	1.6	2.1	1.7	1.8	2.4	2.7	2.5	2.6	1.6	1.5	2.3	2.7	2.3	2.4	1.5	1.2	1.9
24	1.2	0.6	0.8	0.6	0.9	0.5	0.4	0.5	1.3	1.6	1	1.5	2.6	1.7	1.8	1.1	1.5	1.5	1.2	0.9	0.6	1.8	2.4	1.2	1.2
25	0.3	0.1	0.8	1.3	0.7	0.6	0.9	1.7	1.7	1.8	1.6	3	3.6	3.9	3.3	2.3	1.6	1.2	2.2	2	2.2	2.4	2.2	2	1.8
26	3.2	4.1	4.2	4.6	4.3	3.8	4	4.7	5.2	4.4	3.1	3.3	4.1	3.1	4.4	3.5	5	4	4	4.2	5.9	6.3	4.8	6.4	4.4
27	6.4	5.7	5.4	5.7	6.1	4.9	4.5	5.1	5.3	5.2	4.6	4.5	4.1	4.9	4.3	4.1	3.4	2.8	2.5	2.2	1.7	2.3	2.5	2	4.2
28	1.5	1.6	1.2	1.1	1.1	0.6	0.5	0.9	1.8	1	0.7	0.4	0.6	1.3	1.1	1.1	0.6	0	0.2	0.4	0	0	0	0.1	0.7
29	0.2	0.9	1.2	1.1	1	1.2	0.9	2.8	2.2	2.9	1.5	1.7	4.4	3.3	3.8	5	3.4	2.9	3.1	2.8	4	3.7	3.6	2.9	2.5
30	3	2.9	2.5	2.7	3.1	3.4	3.5	3.1	3.6	3.5	4.3	5.1	4.7	4.8	4.6	3.6	3.1	1.8	1.3	0.9	1.2	1.5	1.6	1.7	3
31	1.3	0.9	0.6	0.3	0.3	0.6	1.2	1.4	1.3	1.2	1.4	3.4	2.6	2.7	2.5	1.8	1.5	1.3	1.5	2.9	1.8	2.1	2	1.4	1.6
Avg	2.1	1.9	1.9	1.8	1.7	1.8	1.8	2	2.3	2.5	2.5	2.8	3	3.1	3	2.8	2.3	1.8	2	2	2.2	2.3	2.3	2.1	2.2
SD	1.7	1.8	1.7	1.6	1.7	1.6	1.6	1.8	1.6	1.6	1.7	1.6	1.5	1.4	1.3	1.3	1.4	1.4	1.5	1.3	1.6	1.6	1.6	1.6	1.3
S/A	0.84	0.95	0.89	0.88	0.99	0.9	0.85	0.86	0.7	0.65	0.68	0.58	0.49	0.46	0.44	0.49	0.62	0.78	0.74	0.64	0.73	0.69	0.69	0.74	0.58
Min	0	0	0	0	0	0	0	0	0	0.2	0.4	0.4	0.6	1.1	1.1	1.1	0.3	0	0.2	0.2	0	0	0	0	0.5
Max	6.8	7.7	6.7	6.1	6.2	5.5	5.7	7.6	5.7	7	8	6.9	6.7	6.3	5.9	6.9	6	6.1	6.3	5	5.9	6.3	5.5	6.4	6.2
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.

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

December 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	0	0	0	0	0	0	0	196	358	310	0	156	144	142	142	174	177	174	149	153	161	228	157	166	159
2	319	0	322	156	0	0	200	210	211	253	245	235	236	238	221	224	208	221	219	219	235	243	250	247	232
3	256	256	272	283	253	254	264	278	300	314	325	327	301	73	117	194	217	197	174	186	170	184	186	191	262
4	203	203	225	355	229	262	262	264	269	264	259	275	286	277	248	241	232	229	230	234	240	249	249	249	252
5	251	253	255	254	262	261	282	276	284	295	319	345	5	48	50	40	63	61	28	19	14	34	23	44	311
6	62	71	71	70	77	70	70	65	71	72	94	89	90	103	101	101	77	64	53	44	53	87	69	46	78
7	53	83	67	78	70	66	87	99	110	128	140	162	167	176	180	182	181	170	181	159	169	168	184	201	157
8	215	221	251	278	293	313	301	329	321	315	285	285	304	303	291	285	277	256	273	265	266	272	259	264	284
9	277	278	262	268	260	262	254	229	265	208	252	244	230	222	216	154	173	198	205	208	189	197	198	213	216
10	219	217	219	215	218	226	219	222	214	220	243	269	278	273	255	251	249	252	244	235	246	238	244	245	240
11	249	251	252	253	249	262	239	243	248	268	71	57	49	58	70	71	64	72	87	95	88	74	69	65	67
12	62	85	87	84	79	85	70	66	64	70	73	79	62	70	77	78	69	71	71	79	89	77	75	75	75
13	81	61	50	59	52	66	57	52	57	47	49	64	74	63	67	61	66	56	46	46	47	43	31	28	58
14	25	19	34	52	47	44	33	41	57	77	77	47	11	324	326	298	321	218	127	130	176	186	0	27	37
15	38	0	0	296	307	0	92	26	48	87	83	103	121	137	148	149	156	130	116	130	140	157	159	165	137
16	174	177	346	52	37	40	18	314	199	271	270	293	264	250	233	217	234	215	220	226	237	247	244	241	237
17	261	294	292	210	219	233	230	238	243	18	135	169	214	128	202	244	251	246	236	229	228	231	218	286	232
18	251	245	253	259	254	253	257	278	283	306	316	313	320	311	352	343	322	317	326	327	338	334	337	345	306
19	317	304	302	298	285	286	287	285	307	319	321	325	330	325	333	338	333	236	318	112	113	101	92	89	322
20	84	97	95	96	73	71	85	103	132	149	147	158	168	170	164	144	148	154	165	174	182	195	195	200	165
21	208	214	227	285	302	295	283	316	311	312	319	317	312	309	317	317	317	316	321	320	322	322	324	320	303
22	320	320	322	321	320	325	325	324	323	331	348	355	347	344	337	336	327	311	317	313	294	294	308	278	328
23	276	296	318	333	317	314	314	316	310	338	324	263	267	272	252	241	242	242	246	253	249	252	260	277	277
24	281	259	255	254	250	273	250	219	231	232	203	227	214	232	210	189	217	228	225	228	206	242	268	256	233
25	242	261	294	306	337	347	7	40	49	55	85	109	106	108	114	112	107	112	105	90	70	62	77	93	86
26	103	96	98	103	106	108	111	118	120	116	120	126	150	179	193	223	220	234	238	249	314	321	309	314	150
27	316	318	311	303	317	318	317	322	325	328	338	341	340	341	342	332	333	322	320	329	336	331	339	351	326
28	357	359	359	14	14	341	330	315	316	332	5	46	312	274	280	279	305	0	181	199	197	208	126	111	331
29	142	151	135	105	99	103	106	122	130	136	126	347	354	350	339	331	331	324	321	313	322	328	333	338	348
30	339	346	347	331	334	332	332	332	333	336	348	349	1	359	352	348	347	345	326	298	290	302	312	319	340
31	326	325	311	312	308	305	316	312	311	295	276	285	272	259	253	253	251	250	255	253	260	274	283	279	276
Avg	287	288	299	320	329	328	320	336	324	337	351	345	341	337	324	305	291	274	269	252	277	286	273	285	312
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

December 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	0	0	0	0	0	0	0	0	0	0.7	1.2	2	2.9	2.7	2.4	3.1	2.3	1.8	1	1.1	0.9	0.4	0.1	0.1	0.9
2	0.2	0	0.1	0.1	0	0	0.1	0.8	0.6	1.8	2.8	3.5	3.6	3	2.9	4	2.8	3	3.4	3.5	3.3	3.2	3.8	3.7	2.1
3	3.3	3.1	3	2.3	1.5	2.5	3.1	2.8	4.3	3.8	4.1	3.2	2.7	2.3	2.4	2.5	2.3	0.9	0.9	1.6	1.7	1.3	2.1	1.8	2.5
4	2.1	0.6	0.3	0	0.1	0.4	0.6	0.6	1.6	1.9	3.1	3.7	5	5.4	5.4	4.5	2.1	1.9	2.4	3.2	3.8	4.3	4.3	4.4	2.6
5	4.6	4.1	3.9	3.8	3.8	3.3	4.3	4.7	5.9	6.6	5.6	6.3	5	6.4	6	4	1.8	1	1.2	1.3	0.9	0.6	0.5	2	3.7
6	5	4.1	4.3	4.6	4.7	4.7	5.3	5.1	5.6	4.9	5.9	5.8	6.3	5.8	5.3	4.2	3.2	1.7	1.7	2.1	2	1.6	2.2	2.3	4.1
7	2.9	1.8	1.9	3	2.4	1.8	2.1	2.3	1.9	2.9	3.6	4.7	5.1	6.2	4.7	4.1	3.8	2.2	3.8	2.1	2.6	3	4.9	4.3	3.3
8	2.8	2.7	2.6	1.6	1	2.1	1.6	3.4	4.1	4.3	3.6	4.1	4.2	4.3	3.8	3.6	2.7	2.4	2.1	1.6	1.5	2.1	1.5	1.6	2.7
9	2	1.8	1.4	1.4	1	1.2	0.5	0.5	1.1	1.9	1.7	1.7	1.9	2.7	3.5	2.5	2	2.6	2.3	2.7	2.5	2.5	3.4	3.4	2
10	3.5	3.4	3.5	3.5	3.4	4.7	4.2	4.1	5.1	2.7	3.4	5	5.8	6.4	5.8	5	5.5	4.3	3.8	4.9	6	4.5	5.4	6.7	4.6
11	6.9	5.8	5	4.4	2.8	1.9	1.5	1.7	2.2	3	6.8	6.7	6	6.7	6.4	4.9	4	4.9	4.5	3.9	5.1	5.4	4.4	4.3	4.5
12	4.1	4.6	5	4.2	5.1	5.9	5.6	6	5.9	6.4	6.4	6.6	6.7	7.3	8.2	8.8	7.7	7.9	7.2	6.6	8.3	7.9	7.3	7.2	6.5
13	7.3	6.7	6.7	6.3	6.3	7.4	7	7.6	7.6	6.3	7.1	6.8	8	8.6	8.7	9.1	7.1	4.9	4.8	5	4.4	3.6	3.4	3.6	6.4
14	2.9	3	3.2	3.8	3.8	3.4	3	2.8	2.8	3.3	2.5	2.7	2.6	3	2.8	2.3	0.9	0.3	1.4	0.4	0.9	0.1	0	0.2	2.2
15	0.1	0	0	1	0.2	0	0.4	0.1	0.3	1.9	2	2.6	3.5	3.6	3.2	3.2	1.7	1.3	1.1	1.2	1.6	2.9	2.8	2.3	1.5
16	2.2	0.9	1.4	1.8	0.8	1.6	0.8	0.8	1.5	1.3	1.5	1.9	2.1	2.4	2.5	3.4	2.6	1.4	1.6	3	3.5	2.4	2.2	2.1	1.9
17	1.3	1.6	1	0.8	2	2.2	3.9	2.4	4.3	4.2	2	1.9	1.9	2.2	2.4	3	2.8	2.5	3	4.1	6.1	8.3	9	4.8	3.2
18	3.6	4	4.7	4.8	4.3	4	5.2	5.1	5.9	7	7.7	7	6.1	4.3	6.8	7	6.4	4.3	5.7	4.6	6.7	6.4	6.2	4.2	5.5
19	3.4	2.8	2	2.3	2.1	2.7	3.2	3.8	5.3	7	7.8	8.8	8.5	7.9	6.7	5.1	2.9	0.4	0.6	2.1	2.9	3	2.1	3.1	4
20	2.2	1.9	2.2	1.8	0.4	0.9	1	1.4	1.7	3.3	4.8	6	6.1	7.1	5.4	5.6	5.1	6.3	7.9	7.7	7.8	6.3	8.7	9.6	4.6
21	11.1	13.2	11.9	10.9	10.9	9.6	9.7	13.2	9.4	12.4	13.6	11.6	10.8	10.9	9.9	11	10.6	10.7	10.6	8.6	10.3	9.4	8.8	7.8	10.7
22	8	8.5	7.8	7.4	7.9	8.3	7.5	7.2	8	9.9	10.5	11.2	9.9	9.9	9.2	7.9	5.9	3.2	4.4	3.2	2.8	3.4	2.8	1.7	6.9
23	2.1	2.3	3.8	1.7	2.2	2.2	2.7	2.9	2.8	4.2	3.3	3.3	4.5	4.8	4.2	4.3	2.8	2.7	3.8	4.2	3.7	3.6	2.5	2.2	3.2
24	2.3	1.5	1.7	1.3	1.7	1.1	1.1	1.2	2.5	2.6	2	2.7	4.2	3	2.9	2	2.7	2.7	2.3	2	1.3	3.1	4.3	2.4	2.3
25	1	0.5	1.5	2	1.6	1.6	1.9	3.1	3.4	3.1	3	5	6.1	6.5	5.4	4	3.4	2.4	3.9	3.4	4	4	4.2	3.7	3.3
26	6	6.7	7.3	8.3	7.2	6.6	7.1	8.6	9	7.9	6.7	5.6	6.4	5.2	7.4	6.2	8.1	6.7	7.2	7.3	9.6	10.4	8.3	10.8	7.5
27	11.1	9.9	9.3	9.8	10.8	8.3	7.9	9.1	9.3	9.4	9.5	8.9	8.8	9.1	8.6	8.1	6.3	4.8	4.9	4.1	3.7	4	5.2	4.4	7.7
28	3.4	3.8	2.9	3	2.7	1.6	1.2	1.6	3	2.5	2	1.5	1.7	2.6	2.6	2.1	1.2	0	0.4	1.2	0.2	0.3	0	0.7	1.8
29	0.8	2	2.3	2.7	2.5	2.5	2.2	5	4.5	5.3	3.1	3.8	9.1	6.6	7.4	9.1	6.5	5.2	5.5	5	6.8	6.6	6.7	5.8	4.9
30	5.7	5.8	5.2	4.9	5.8	6	6.3	5.5	6.8	6.9	9.2	10	9.2	9.2	9	7.1	6.2	3.7	2.5	1.9	2.1	2.6	2.8	2.8	5.7
31	2.6	1.9	1.1	1.1	0.8	1.4	2.1	2.4	2.3	2.6	2.7	5.6	4.9	5.2	4.2	3.2	2.6	2.2	2.7	4.7	3.3	4	3.4	2.9	2.9
Avg	3.7	3.5	3.5	3.4	3.2	3.2	3.3	3.7	4.2	4.6	4.8	5.2	5.5	5.5	5.4	5	4.1	3.2	3.5	3.5	3.9	3.9	4	3.8	4.1
SD	2.8	3	2.8	2.8	2.9	2.7	2.6	3	2.7	2.8	3.1	2.8	2.5	2.5	2.3	2.4	2.4	2.4	2.4	2.1	2.7	2.6	2.6	2.5	2.2
S/A	0.77	0.86	0.82	0.82	0.91	0.83	0.8	0.81	0.65	0.61	0.64	0.54	0.46	0.45	0.44	0.48	0.58	0.73	0.68	0.59	0.69	0.67	0.65	0.67	0.55
Min	0	0	0	0	0	0	0	0	0	0.7	1.2	1.5	1.7	2.2	2.4	2	0.9	0	0.4	0.4	0.2	0.1	0	0.1	0.9
Max	11.1	13.2	11.9	10.9	10.9	9.6	9.7	13.2	9.4	12.4	13.6	11.6	10.8	10.9	9.9	11	10.6	10.7	10.6	8.6	10.3	10.4	9	10.8	10.7
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: 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

December 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	1025	1025	1025	1025	1025	1026	1026	1027	1027	1028	1028	1027	1026	1026	1026	1026	1026	1026	1026	1027	1027	1027	1027	1027	1027	1026
2	1027	1027	1027	1027	1026	1026	1027	1027	1028	1028	1028	1027	1025	1024	1023	1023	1023	1023	1023	1023	1023	1023	1023	1023	1022	1025
3	1022	1022	1022	1022	1022	1022	1022	1022	1023	1023	1023	1023	1022	1022	1021	1021	1022	1022	1022	1023	1023	1023	1023	1023	1023	1022
4	1023	1023	1023	1023	1023	1023	1023	1024	1024	1025	1025	1024	1023	1022	1021	1021	1021	1021	1021	1021	1021	1020	1020	1020	1020	1022
5	1019	1019	1019	1018	1017	1017	1018	1018	1018	1018	1018	1018	1018	1018	1018	1018	1019	1019	1020	1020	1020	1020	1020	1021	1021	1019
6	1021	1021	1022	1022	1022	1023	1024	1024	1024	1025	1025	1024	1024	1023	1023	1023	1023	1023	1023	1023	1023	1022	1022	1022	1022	1023
7	1021	1021	1021	1020	1020	1020	1020	1020	1020	1020	1019	1018	1017	1016	1016	1016	1016	1016	1016	1016	1015	1015	1014	1014	1014	1018
8	1013	1012	1012	1012	1012	1012	1012	1013	1013	1014	1014	1013	1013	1012	1012	1013	1013	1013	1014	1014	1015	1015	1015	1015	1015	1013
9	1016	1016	1016	1016	1017	1017	1018	1018	1019	1019	1019	1019	1018	1017	1017	1017	1017	1017	1017	1017	1016	1016	1016	1016	1015	1017
10	1014	1013	1013	1012	1011	1011	1010	1009	1009	1009	1008	1007	1006	1005	1005	1004	1005	1005	1005	1005	1005	1005	1005	1005	1005	1008
11	1005	1005	1006	1006	1006	1007	1007	1008	1009	1010	1011	1011	1012	1013	1013	1014	1015	1016	1016	1017	1018	1018	1018	1018	1019	1012
12	1019	1019	1020	1020	1020	1021	1022	1022	1023	1023	1024	1024	1023	1023	1023	1023	1023	1023	1023	1024	1024	1023	1024	1023	1023	1022
13	1022	1022	1022	1023	1023	1022	1022	1023	1023	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1025	1025	1025	1025	1025	1024
14	1024	1024	1024	1024	1024	1024	1025	1025	1025	1026	1025	1025	1024	1023	1023	1022	1022	1022	1022	1023	1022	1023	1023	1023	1023	1024
15	1023	1022	1022	1022	1022	1022	1022	1023	1023	1024	1024	1023	1022	1021	1021	1020	1020	1020	1020	1020	1019	1019	1018	1018	1017	1021
16	1017	1016	1016	1016	1015	1015	1016	1016	1016	1016	1015	1014	1014	1013	1012	1012	1013	1013	1012	1012	1011	1011	1011	1010	1014	1014
17	1010	1010	1010	1010	1009	1008	1007	1007	1007	1009	1009	1008	1007	1006	1005	1006	1006	1006	1006	1005	1005	1003	1002	1003	1007	1007
18	1002	1002	1002	1002	1002	1002	1002	1003	1003	1003	1003	1002	1001	1001	1002	1003	1003	1004	1006	1007	1008	1009	1009	1009	1003	1003
19	1009	1010	1010	1011	1011	1011	1011	1012	1012	1013	1013	1013	1012	1012	1012	1013	1014	1014	1016	1017	1017	1018	1019	1019	1019	1013
20	1019	1019	1019	1020	1020	1020	1020	1020	1020	1020	1019	1018	1017	1015	1015	1013	1012	1011	1009	1008	1007	1006	1003	1001	1015	1015
21	998	995	993	993	994	995	995	997	998	998	998	998	998	998	998	998	999	1000	1001	1002	1002	1003	1003	1004	998	
22	1004	1004	1005	1005	1006	1006	1007	1008	1009	1010	1010	1010	1010	1010	1010	1011	1012	1013	1014	1015	1015	1015	1015	1015	1010	1010
23	1016	1016	1017	1017	1016	1017	1017	1018	1018	1019	1018	1017	1016	1015	1014	1014	1014	1014	1014	1015	1015	1014	1015	1015	1016	1016
24	1014	1014	1015	1014	1014	1015	1015	1015	1016	1016	1016	1016	1015	1014	1013	1012	1012	1011	1011	1012	1011	1011	1011	1011	1011	1013
25	1011	1011	1011	1012	1012	1013	1014	1015	1016	1017	1017	1017	1016	1016	1016	1017	1018	1018	1018	1018	1019	1019	1019	1019	1019	1016
26	1018	1018	1017	1017	1016	1015	1014	1013	1011	1010	1008	1006	1002	1000	998	996	995	994	993	993	994	995	996	997	1005	1005
27	997	998	998	999	1000	1001	1002	1004	1005	1006	1007	1007	1007	1007	1008	1009	1009	1011	1012	1013	1013	1014	1014	1015	1006	1006
28	1015	1015	1016	1016	1016	1017	1017	1018	1019	1019	1020	1019	1018	1017	1017	1017	1017	1017	1017	1016	1016	1017	1017	1016	1016	1017
29	1015	1014	1013	1012	1011	1010	1009	1006	1005	1002	1001	1000	999	999	999	1000	1001	1001	1003	1004	1004	1006	1007	1007	1005	1005
30	1008	1009	1010	1012	1013	1014	1015	1017	1018	1019	1020	1020	1020	1020	1021	1022	1023	1023	1024	1024	1025	1025	1026	1025	1019	1019
31	1025	1025	1026	1025	1025	1025	1025	1025	1025	1026	1025	1024	1023	1021	1020	1020	1020	1020	1020	1019	1019	1018	1018	1017	1022	1022
Avg	1015	1015	1015	1015	1015	1015	1016	1016	1016	1017	1017	1016	1015	1015	1014	1014	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015
S/D	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Min	997	995	993	993	994	995	995	997	998	998	998	998	998	998	998	996	995	994	993	993	994	995	996	997	998	
Max	1027	1027	1027	1027	1026	1026	1027	1027	1028	1028	1028	1027	1026	1026	1026	1026	1026	1026	1026	1026	1027	1027	1027	1027	1026	1026
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

December 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	12.7	12.7	12.7	12.6	12.6	12.6	13.5	13.8	13.6	13.4	13.3	13.3	13.3	13.4	13.2	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13		
2	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.2	13.7	13.6	13.5	13.4	13.4	13.4	13.4	13.2	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13	
3	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13.2	13.5	13.5	13.4	13.3	13.2	13.2	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13	
4	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.2	13.6	13.4	13.3	13.2	13.2	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13	
5	12.7	12.7	12.7	12.7	12.7	12.7	12.6	13	13.5	13.4	13.3	13.3	13.3	13	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.6	12.9	
6	12.6	12.6	12.6	12.6	12.6	12.5	12.5	13.5	13.8	13.7	13.6	13.6	13.6	13.6	13.6	13.6	13.3	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1	
7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.5	13.5	13.5	13.5	13.2	13	12.9	12.9	12.9	12.8	12.8	12.8	12.8	12.7	12.9	
8	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.8	13.1	13.3	13.3	13.5	13.4	13.4	13.4	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.9	
9	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.7	13.1	13.4	13.4	13.5	13.5	13.4	13.3	13.3	13	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.9	
10	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.7	13.1	13.2	13.2	13.3	13.3	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9	
11	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.4	13.4	13.3	13.3	13.1	13.2	13.2	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.6	12.9	
12	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.6	12.7	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
13	12.5	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.5	12.8	13.2	13.7	13.6	13.5	13.5	13.5	13.2	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.8	
14	12.7	12.6	12.6	12.6	12.6	12.6	12.6	13.4	13.8	13.6	13.5	13.4	13.4	13.4	13.4	13.3	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13	
15	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13.2	13.9	13.8	13.6	13.6	13.6	13.5	13.5	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13	
16	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.8	13.5	13.5	13.3	13.2	13	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.6	12.8	
17	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13.3	13.4	13.3	13.3	13.3	13	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.8	
18	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13.1	13.5	13.4	13.4	13.4	13.3	13.5	13.4	13.4	13.3	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13	
19	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.2	13.8	13.6	13.5	13.5	13.4	13.4	13.4	13.4	13	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13	
20	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.1	13.7	13.7	13.7	13.6	13.6	13.6	13.5	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13	
21	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.9	13.7	13.6	13.6	13.5	13.3	13.5	13.4	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.6	13	
22	12.6	12.6	12.5	12.5	12.5	12.5	12.5	13.4	13.9	13.8	13.7	13.6	13.6	13.6	13.6	13.6	13.5	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13.1	
23	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.4	13.9	13.8	13.7	13.6	13.5	13.5	13.6	13.6	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.7	13.1	
24	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.5	13.6	13.5	13.5	13.5	13.5	13.4	13	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13	
25	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.8	12.9	13.6	13.5	13.4	13.4	13.4	13.5	13.5	13	12.8	12.8	12.8	12.8	12.7	12.7	12.7	13	
26	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.5	12.6	
27	12.5	12.5	12.5	12.5	12.5	12.5	12.5	13.2	13.8	13.7	13.6	13.6	13.5	13.5	13.6	13.6	13.4	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13	
28	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.3	13.9	13.8	13.7	13.6	13.6	13.6	13.7	13.7	13	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13.1	
29	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.9	13.1	13.3	13.6	13.6	13.6	13.2	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.9	
30	12.6	12.6	12.6	12.6	12.5	12.5	12.5	13.2	13.9	13.8	13.7	13.6	13.6	13.6	13.7	13.7	13.5	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1	
31	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.2	14	13.8	13.9	13.8	13.7	13.6	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13	
Avg	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13	13.3	13.4	13.4	13.4	13.4	13.4	13.4	13.3	13	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9	
S D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
S/A	0.01	0.01	0.01	0.01	0	0	0	0.03	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Min	12.5	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.5	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
Max	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13.5	14	13.9	13.9	13.8	13.7	13.6	13.7	13.7	13.5	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13.1	
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 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.