

November 2011

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	10	60	280	397	433	368	344	262	365	247	70	3	0	0	0	0	0	0	2839
2	0	0	0	0	0	0	22	132	313	474	586	631	624	543	406	233	63	1	0	0	0	0	0	0	4027
3	0	0	0	0	0	0	26	106	271	374	586	631	626	558	418	236	62	1	0	0	0	0	0	0	3894
4	0	0	0	0	0	0	0	17	32 ?	62	161	238	155	168	147	32 ?	15	0	0	0	0	0	0	0	1026 ?
5	0	0	0	0	0	0	4	26	107	191	393	427	470	310	259	118	21	0	0	0	0	0	0	0	2327
6	0	0	0	0	0	0	13	103	233	400	409	583	591	525	393	219	54	0	0	0	0	0	0	0	3525
7	0	0	0	0	0	0	18	94	258	428	550	601	596	520	387	216	52	0	0	0	0	0	0	0	3719
8	0	0	0	0	0	0	18	91	267	451	461	609	597	520	384	223	50	0	0	0	0	0	0	0	3671
9	0	0	0	0	0	0	15	122	191	346	366	153	566	450	372	205	43	0	0	0	0	0	0	0	2829
10	0	0	0	0	0	0	9	68	128	414	449	276	267	285	135	164	49	0	0	0	0	0	0	0	2243
11	0	0	0	0	0	0	13	104	281	442	559	606	599	523	386	214	53	0	0	0	0	0	0	0	3780
12	0	0	0	0	0	0	15	102	275	430	538	585	580	508	376	206	49	0	0	0	0	0	0	0	3664
13	0	0	0	0	0	0	9	96	270	421	530	577	575	459	232	71	12	0	0	0	0	0	0	0	3252
14	0	0	0	0	0	0	9	105	177	247	489	541	529	482	346	171	59	0	0	0	0	0	0	0	3155
15	0	0	0	0	0	0	7	49	215	340	397	392	433	432	259	158	29	0	0	0	0	0	0	0	2713
16	0	0	0	0	0	0	2	21	138	118	124	165	399	379	264	157	27	0	0	0	0	0	0	0	1794
17	0	0	0	0	0	0	0	4 ?	?	40 ?	42 ?	57 ?	59 ?	133	45	63	17	0	0	0	0	0	0	0	460 ?
18	0	0	0	0	0	0	8	89	259	423	533	579	573	500	367	194	41	0	0	0	0	0	0	0	3567
19	0	0	0	0	0	0	10	93	246	344	508	548	546	453	336	156	27	0	0	0	0	0	0	0	3266
20	0	0	0	0	0	0	7	52	148	360	470	521	461	427	321	154	46	0	0	0	0	0	0	0	2967
21	0	0	0	0	0	0	2	56	143	259	299	242	216	182	268	124	35	0	0	0	0	0	0	0	1826
22	0	0	0	0	0	0	3	22	42	151	141	256	239	216	250	87	24	0	0	0	0	0	0	0	1431
23	0	0	0	0	0	0	0	7	83	111	115	163	331	452	222	77	11	0	0	0	0	0	0	0	1572
24	0	0	0	0	0	0	4	68	230	388	498	548	543	478	354	183	37	0	0	0	0	0	0	0	3330
25	0	0	0	0	0	0	3	70	233	389	499	552	549	481	353	183	36	0	0	0	0	0	0	0	3347
26	0	0	0	0	0	0	5	84	204	396	485	556	553	472	345	168	23	0	0	0	0	0	0	0	3292
27	0	0	0	0	0	0	5	79	229	391	415	415	372	421	344	157	31	0	0	0	0	0	0	0	2859
28	0	0	0	0	0	0	1	18	79	127	185	372	209	148	275	144	35	0	0	0	0	0	0	0	1592
29	0	0	0	0	0	0	4	22	46	63	69	51 ?	75	75 ?	82	42	10	0	0	0	0	0	0	0	540
30	0	0	0	0	0	0	2	56	211	366	477	521	569	479	251	168	22	0	0	0	0	0	0	0	3122
Avg	0	0	0	0	0	0	8	67	193	311	392	425	442	395	298	159	37	0	0	0	0	0	0	0	2721
S D	0	0	0	0	0	0	7	37	82	136	167	185	173	142	97	59	17	1	0	0	0	0	0	0	1009
S/A	0	0	0	0	0	0	0.82	0.55	0.42	0.44	0.43	0.43	0.39	0.36	0.33	0.37	0.46	4.06	0	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	0	4	32	40	42	51	59	75	45	32	10	0	0	0	0	0	0	0	460
Max	0	0	0	0	0	0	26	132	313	474	586	631	626	558	418	247	70	3	0	0	0	0	0	0	4027
n	0	0	0	0	0	0	111	357	340	355	349	348	350	355	359	357	318	3	0	0	0	0	0	0	3603

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.9% exceed the 15% QC threshold -- 3672 total daylight measurements.

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

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

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

November 2011

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	*	
2	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	*	
4	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	*	
6	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	*	
8	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	*	
10	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	*	
12	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	*	
14	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	*	
16	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	*	
18	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	*	
20	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	*	
22	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	*	
24	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	*	
26	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	*	
28	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	*	
29	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	*	
30	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	0	*	
Avg	0	0	0	0	0	0	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	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	0	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	0	0	0	N/A
Max	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	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

Daylight Data Recovery: 100.0% missing; 0.0% untested; 0.0% exceed the 15% QC threshold -- 3672 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**

**November 2011**

**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	12	57	117	182	214	234	175	191	157	53	24	3	0	0	0	0	0	0	1419
2	0	0	0	0	0	0	12	35	51	61	68	68	69	65	60	48	21	1	0	0	0	0	0	0	559
3	0	0	0	0	0	0	13	35	48	50	56	61	59	56	51	41	18	1	0	0	0	0	0	0	489
4	0	0	0	0	0	0	0	17	26 ?	62	161	229	134	141	147	28	15	0	0	0	0	0	0	0	960
5	0	0	0	0	0	0	4	26	105	190	249	275	227	193	179	105	21	0	0	0	0	0	0	0	1574
6	0	0	0	0	0	0	15	78	148	217	314	167	160	80	66	52	23	0	0	0	0	0	0	0	1321
7	0	0	0	0	0	0	12	36	52	57	59	64	64	61	58	47	21	0	0	0	0	0	0	0	531
8	0	0	0	0	0	0	11	35	53	85	216	71	63	65	57	58	19	0	0	0	0	0	0	0	733
9	0	0	0	0	0	0	17	78	66	145	182	153	181	159	81	61	40	0	0	0	0	0	0	0	1164
10	0	0	0	0	0	0	10	64	126	138	291	276	264	232	133	105	22	0	0	0	0	0	0	0	1661
11	0	0	0	0	0	0	11	35	57	67	70	73	71	66	61	47	20	0	0	0	0	0	0	0	577
12	0	0	0	0	0	0	10	34	57	68	76	79	77	72	62	47	19	0	0	0	0	0	0	0	600
13	0	0	0	0	0	0	7	40	71	62	63	67	78	163	201	71	12	0	0	0	0	0	0	0	835
14	0	0	0	0	0	0	8	65	155	210	135	94	109	115	111	82	39	0	0	0	0	0	0	0	1122
15	0	0	0	0	0	0	9 ?	49	148	198	214	265	210	178	195	118	28	0	0	0	0	0	0	0	1613
16	0	0	0	0	0	0	3 ?	21	129	118	124	165	222	224	162	114	25	0	0	0	0	0	0	0	1306
17	0	0	0	0	0	0	0	4 ?	16 ?	34	31 ?	42	43	132	45	63	17	0	0	0	0	0	0	0	427 ?
18	0	0	0	0	0	0	5	24	40	52	57	58	56	52	45	31	10	0	0	0	0	0	0	0	429
19	0	0	0	0	0	0	9 ?	32	65	168	176	75	91	108	83	63	20	0	0	0	0	0	0	0	889
20	0	0	0	0	0	0	8 ?	36	71	106	91	97	162	156	85	64	34	0	0	0	0	0	0	0	911
21	0	0	0	0	0	0	2	54	134	189	254	242	216	180	222	103	31	0	0	0	0	0	0	0	1627
22	0	0	0	0	0	0	3	22	40	102	130	238	210	194	155	87	24	0	0	0	0	0	0	0	1206
23	0	0	0	0	0	0	0	7	83	110	115	163	190	135	133	74	11	0	0	0	0	0	0	0	1021
24	0	0	0	0	0	0	6 ?	23	44	54	57	56	54	49	43	31	9	0	0	0	0	0	0	0	428
25	0	0	0	0	0	0	4 ?	20	38	42	44	48	49	47	41	30	9	0	0	0	0	0	0	0	373
26	0	0	0	0	0	0	7 ?	35	56	68	73	68	93	75	54	47	16	0	0	0	0	0	0	0	592
27	0	0	0	0	0	0	4	21	65	148	137	224	277	124	56	41	14	0	0	0	0	0	0	0	1113
28	0	0	0	0	0	0	1	18	79	127	184	243	207	148	125	87	27	0	0	0	0	0	0	0	1245
29	0	0	0	0	0	0	?	21	46	63	69	45	71	62	77	42	10	0	0	0	0	0	0	0	508
30	0	0	0	0	0	0	?	19	41	51	55	66	128	143	96	97	21	0	0	0	0	0	0	0	717

Avg	0	0	0	0	0	0	7	35	74	107	132	133	134	122	101	65	21	0	0	0	0	0	0	0	932
S D	0	0	0	0	0	0	5	19	39	58	80	84	72	57	54	27	8	1	0	0	0	0	0	0	412
S/A	0	0	0	0	0	0	0.64	0.54	0.53	0.54	0.61	0.63	0.54	0.47	0.54	0.42	0.4	3.98	0	0	0	0	0	0	0.44
Min	0	0	0	0	0	0	0	4	16	34	31	42	43	47	41	28	9	0	0	0	0	0	0	0	373
Max	0	0	0	0	0	0	17	78	155	217	314	276	277	232	222	118	40	3	0	0	0	0	0	0	1661
n	0	0	0	0	0	0	96	357	352	360	357	357	359	360	360	360	318	3	0	0	0	0	0	0	3639

Daylight Data Recovery: 0.0% missing; 0.0% untested; 0.9% exceed the 15% QC threshold -- 3672 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31393F3 Calibration Factor: 7.6820 μV/W/m<sup>2</sup> 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.

**November 2011**

**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	10.2	9.8	9.6	9.6	9.8	9.9	9.5	9.4	10.6	12.1	13.5	14.1	14.7	14.9	15.3	15.3	14.3	12.9	12.1	11.6	10.6	9.9	9.1	8.7	11.6
2	8.4	7.9	7.3	7	6.6	6.3	6.3	7.4	10.3	12.9	14.6	15.4	16.2	16.4	16.3	15.7	14.5	12.6	11.4	10.8	10.2	9.3	8	6.7	10.8
3	6	5.6	5.6	5.5	5.4	5.2	5	7	11.1	14.1	15	16.4	17.4	17.6	18.4	18.6	17.8	15	13.5	12.7	12.1	11.3	10.9	11.1	11.6
4	10.3	10.3	10.7	10.8	10.9	11.1	11.4	11	11.4	11.9	12.9	14	13.7	13.5	13.9	14.3	14.3	13.8	13.6	13.1	12.7	12.4	11.7	11.3	12.3
5	11.5	11.6	11.2	10.1	9.3	9.2	9.5	10.7	9.4	10.8	12.8	13.2	13.6	13.5	13.2	12.6	12.1	11.9	11.9	11.9	12	12	12.2	12.4	11.6
6	12.2	11.7	11.2	10.6	10.7	10.4	10.1	10.7	12.5	14.3	15.1	15.7	15.9	16	16.3	15.7	14.7	13.4	12.6	11.5	10.8	10.6	10	9.7	12.6
7	9.5	9.2	9.3	9.5	9.4	9.4	9.7	10.9	13.9	16	17.9	18.7	19.3	19.7	19.3	18.2	16.7	14.8	13.7	12.7	11.7	10.8	10.2	9.7	13.4
8	9.3	8.8	8.8	8.8	8.2	7.8	7.6	8.7	11.3	13.6	15.2	16.5	17.6	18.1	18.5	18.1	16.9	14.8	13.4	12.8	12.4	12.3	11.6	11.2	12.6
9	10.7	10.8	10.9	10.8	10.7	10	10.3	11.9	14.4	17.2	19.1	18.8	20.7	21.2	21	20.3	18.6	17.1	15.7	15	14.4	14	13.7	13.7	15
10	13.7	13.9	14.3	14.6	14.4	13.9	13.8	14.3	15.6	18.1	20.2	20.3	20.2	19.4	18	17.9	18	16.6	14.9	13.9	11.2	9.4	8.8	9	15.2
11	8.9	8.2	6.8	5.9	5.7	5.1	4.2	4.1	5.5	7.3	8.2	9	9.9	10.6	10.8	10.9	10.3	8.7	7.7	6.8	6.1	5.9	5.1	4.4	7.3
12	4	4.3	3.9	3.9	4	4.1	4.1	5.9	8.1	10.3	12.3	13.7	15	16.1	16.6	16.6	15.6	13.6	12.5	11.7	11.3	10.9	10.6	9.7	9.9
13	9.3	9.1	8.8	8.7	8.8	8.9	9.4	10.1	12.7	15.2	17.1	18.4	19.5	20.2	20.1	19.7	18.7	17.7	17.3	16.7	16	16	15.9	15.6	14.6
14	16	16.3	16.1	15.9	15.6	15.4	15.3	15.6	17	17.5	19.3	21	22.2	23	23.3	22.9	21.8	20.2	19.4	19	18.6	18.5	18.5	18.2	18.6
15	17.9	17.7	17.8	18	17.9	17.2	17	17.3	18.7	20.5	21.5	22.2	23.2	24.4	25	24.8	23.1	21.7	20.9	20.4	19.9	19.5	19.2	18.7	20.2
16	18.3	18.3	18.6	18.6	18.8	18.7	18.7	18.5	18.9	19.4	19.7	20.3	22.3	24.1	25	24.5	23.6	22.3	21.7	21.4	21	20.7	20.8	21	20.6
17	20.7	19.9	14.6	13.9	13.6	13.3	12.6	12.1	11.8	11.7	11.5	10.7	7.5	7	6.9	6.3	6.1	5.6	4.7	4.2	3.6	3.5	3.6	3.5	9.5
18	3.1	2.6	1.6	0.8	0.6	0.7	0.6	1.6	3.7	5.1	6.1	7.2	7.8	8.5	8.9	9.2	8.7	6.3	5.7	5.1	5	4.5	4.3	4	4.7
19	3.2	3.4	3.5	3.1	3.2	1.7	1.9	3.3	7.3	11.3	13.6	15.5	17.1	17.9	18.6	18.8	17.1	15.2	14.5	13.9	13.9	13.6	13.4	12.9	10.8
20	12.8	12.7	12.4	12.6	12.9	13	12.9	12.5	13.8	16.8	20.2	21.6	22.4	22.7	23.3	23.3	22.3	20.5	19.1	18	17.5	17.6	17.3	16.6	17.3
21	16.4	16.3	16.4	16.8	16.9	17	16.9	16.6	17.5	18.6	19.8	20.5	20.6	20.6	20.5	19.5	16.7	15.5	15	14.5	14.2	14.3	14.4	14.4	17.1
22	14.2	14.1	14.1	14	14	14	14.2	14.5	15	16.1	16.4	17.7	19.8	20	20.7	20.1	18.8	18.3	18.5	18.2	18	18	18.5	18.4	16.9
23	18.6	18.8	19.3	19.6	19.6	19.6	19.4	17.9	18.3	19.2	19.7	20.2	20.8	22.3	22.6	20.8	18.1	16.3	14.1	12.3	11.3	11	10.8	10.9	17.6
24	10.3	9.7	8.9	8	7.4	7	6.4	6.6	8.1	9.8	11.5	12.7	13.8	14.3	14.5	15	14.6	12.6	10.9	9.9	9.4	8.8	7.8	7	10.2
25	7.3	7.8	7.1	6.8	6.6	6.2	5.9	6.4	8.6	11.9	14.9	16.7	17.8	18.6	18.9	18.8	17.9	15.1	13.6	12.3	11.4	10.7	10.2	10	11.7
26	9.6	9	9.1	8.9	8.6	7.9	7.4	7.7	9.7	12.7	14.9	17	18.3	19.1	19.9	19.9	18.1	15.9	14.8	14.2	13.5	12.8	12.8	12.7	13.1
27	12.8	12.6	12	11.4	11.4	11.2	10.7	11.4	13.3	16.5	18.6	19.6	20.2	20.8	21.1	20.8	19.3	17.6	16.5	15.9	16	16.4	16.5	16.8	15.8
28	17	17	17.4	17.1	16.6	16.4	16.5	16.6	17.1	18.1	19.1	20.9	20.8	20.1	18.4	19.4	19.1	17.7	16.7	16.2	17.2	18	18.4	18.1	17.9
29	18.3	18.1	17.8	18.6	18.3	18.8	18.8	19.2	14.5	13.8	12.9	12	10.5	9.1	9.3	9.9	9.7	9.6	9.9	10	10	10.1	10.5	9.3	13.3
30	7.4	6.5	6	5.5	5.1	4.8	4.3	4.1	5.2	6.8	8.3	9.3	10.2	10.8	10.6	10.4	9.6	9.1	7.9	7.3	6.6	5.9	5.7	5.1	7.2

Avg	11.6	11.4	11	10.8	10.7	10.5	10.3	10.8	12.2	14	15.4	16.3	17	17.4	17.5	17.3	16.2	14.7	13.8	13.1	12.6	12.3	12	11.7	13.4
S D	4.8	4.8	4.8	5	5.1	5.2	5.2	4.8	4.1	3.9	4	4.1	4.5	4.7	4.8	4.6	4.3	4.1	4.1	4.1	4.2	4.4	4.6	4.7	3.9
S/A	0.41	0.42	0.43	0.46	0.47	0.49	0.51	0.45	0.34	0.28	0.26	0.25	0.26	0.27	0.27	0.27	0.27	0.28	0.3	0.32	0.34	0.36	0.38	0.4	0.29
Min	3.1	2.6	1.6	0.8	0.6	0.7	0.6	1.6	3.7	5.1	6.1	7.2	7.5	7	6.9	6.3	6.1	5.6	4.7	4.2	3.6	3.5	3.6	3.5	4.7
Max	20.7	19.9	19.3	19.6	19.6	19.6	19.4	19.2	18.9	20.5	21.5	22.2	23.2	24.4	25	24.8	23.6	22.3	21.7	21.4	21	20.7	20.8	21	20.6
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

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

**November 2011**

**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	?	104.1	104.2	104.5	104.4	104.5	104	103.2	101.3	99	94.4	89.5	85.6	78.3	71.6	71.5	78.9	85.8	88.2	89.9	93.5	96.4	99.1	100.6	93.6	
2	101.6	102.3	102.9	103.5	103.9	104.2	102.6	99.3	91.1	81.2	74	63.9	61.5	65.4	67.6	70.3	75	85.9	95.2	98.6	100	103.4	?	?	88.8	
3	?	?	?	?	?	?	?	?	99.4	84.3	73.4	66	61.1	47.6	54.1	61.7	67.4	86.2	96.3	103.9	?	?	?	?	75.1	
4	?	?	?	?	?	?	102.7	103.5	102.3	102.1	102.8	97.9	98.2	99.2	97	98.1	97.2	98.1	97	95.3	87.7	83.1	74.2	77	95.2	
5	77.8	75.9	77.5	80.4	82.7	86.5	88	83.7	91.7	85.6	72.1	74.3	73.1	75.4	78.9	83.8	86.7	87.1	85.7	85.6	86.5	90.1	83.7	80.5	82.2	
6	84.4	88.5	90.8	93.1	94.3	98.1	100.3	99.3	92.7	84.5	80.3	77.8	77.2	78	77.5	80.9	87.6	95.7	100.1	102.9	?	?	?	?	89.2	
7	?	?	?	?	?	?	?	?	103.3	?	97.7	85.3	78.6	74.5	74.1	76.4	79	84.1	91.7	96.9	102.1	103.9	?	?	88.3	
8	?	?	?	?	?	?	?	?	?	100.7	94.9	88.6	84.1	85.8	86.4	87.7	94.5	102	104.6	?	?	?	?	?	92.9	
9	?	?	?	?	?	?	?	?	?	98.5	89.1	85.1	82	83.9	86.6	89.7	96.9	101.5	104.4	?	?	?	?	?	91.8	
10	?	?	?	?	?	?	?	?	104.5	?	100.6	95.7	93.1	91.4	94.7	99.7	98.6	97.5	102	102.9	100.8	101.9	101.3	96	91.4	98.3
11	92.6	91.2	97.4	102.2	103.3	96.7	95.1	92.6	83.9	69.3	56.7	53.5	51.8	50.9	50	49.8	53.7	63.3	67.6	72.8	76.7	76.3	80.6	86.7	75.6	
12	92.5	91.5	93.2	93.1	92.6	96.5	94.5	88.9	78.2	65.9	57.2	52.4	48.3	45.2	42.1	43.7	50.3	62.1	70.1	80.7	78.3	77.6	80.8	84.2	73.3	
13	84.8	88.4	92.7	95	96.9	98.7	100.7	99.9	91.7	85.3	79.1	74.1	72.8	70.7	70.8	72.1	77.5	86	90	93.3	96.4	96.4	97	97.8	87.8	
14	96.3	96.4	97.6	98.5	99.5	100.7	100.9	100.7	96.6	95.4	87.8	78.9	73.4	70.7	69.1	70.8	74	79.9	85.9	91.8	92.5	92.7	90.1	91.6	88.8	
15	95.6	97.8	97.9	96.3	96.9	99.5	101.1	101.6	98.4	92	88.6	85.9	82.6	77.6	74.7	74.5	80.3	86.5	89.5	97.3	100.5	102.1	103.4	104.8	92.7	
16	?	?	?	?	?	?	?	?	?	?	104.9	?	103.2	96.5	90.3	88.2	92	97.5	101.8	103.6	104.1	104	104.4	103.4	102.6	99.7
17	103.9	101.8	103.4	105	104.8	104.1	104.6	104.8	?	104.2	103.8	104.3	103.8	102.7	98.7	96.6	95	98	101.4	103.7	?	?	?	105	102.5	
18	103.7	100.8	102.1	102.7	101.8	98.1	96	89.3	77.9	59.2	55.5	49.7	47.4	47.9	45.3	44.3	47.3	66.1	72.8	81	82	84.5	88.4	95.6	76.6	
19	99.1	102.7	?	?	?	104.5	102.1	101.1	96	90.4	87.8	86.4	81.1	78.1	75.2	74.7	83.7	91.8	92.9	93.7	93.2	96.3	98.3	100.2	91.9	
20	100.9	101.1	102.6	102.3	102	102.1	102.3	104.2	101.4	95.4	86.1	82.6	77.7	74	72	71.6	76.6	83.9	88.7	93.7	96.8	96.3	96.7	99.9	92.1	
21	101.4	102.7	103.8	104.5	105	?	?	?	?	102.9	98.2	94.4	92.8	92.3	91.4	94.7	103.3	?	?	?	?	?	?	?	99	
22	?	?	?	?	?	?	?	?	?	?	?	102.1	?	94.3	93.1	91.4	91.2	95.8	98.9	97.6	101.2	103.8	?	104.9	104.9	98.2
23	104.9	?	103.4	101.9	102.3	102.9	103.9	104	101.9	101.9	100.4	97.6	93.2	84.5	76.3	72.6	70.4	64.6	63.9	74.3	82	84.3	83.9	76.5	89.2	
24	74.3	76.1	80	83.8	86.4	87.9	90.1	88.1	82.6	81	74.7	66.2	61.3	55.2	49.1	49.8	52.7	61	69.6	73	74.7	77.8	83.6	88.8	73.6	
25	89.6	87.3	89	89.6	89.3	90.3	91.3	90	82.9	76.4	67.8	57.1	51.8	48.1	49.6	52.2	55.5	65.1	72.1	79.4	88.2	97.1	98.5	98.5	77.4	
26	93.5	92.3	91.1	89.7	89.2	89	89.4	88.7	82.2	73.3	65.3	63.3	61.5	59.5	58.4	58.5	68.5	77.1	80.5	83.6	89.1	94.4	98	100.3	80.7	
27	100.5	101.4	103	?	?	?	?	?	102.3	?	93.9	83.5	77.5	73.9	71.1	69.7	71.6	79.4	87.5	92.1	95.7	97.2	94.5	92.2	88.6	
28	90.7	91.2	87.6	90.3	94.6	95.7	96.5	98.1	98.7	96.6	93.3	92.7	95.8	93.4	102.9	?	102.7	104.3	?	?	102.9	?	103.1	103.3	?	97
29	104.7	102.7	100.7	100.4	101.9	98.8	98.9	96.2	?	?	?	?	103.4	104.6	?	?	?	104.8	104.7	104.8	104.5	104.4	104.9	105	102.5	
30	90.9	94.7	93.9	95.1	95.3	96.7	99.5	101	98.3	94	85.8	79.5	72.9	70.4	69.8	69.9	71.5	74.7	82	84.9	88.5	92	93.3	95.1	87.1	
Avg	94.5	94.8	95.9	96.6	97.4	97.8	98.3	97.1	93.9	89.3	83.5	79.9	77.5	75.4	73.8	75	79.4	86	89.1	91.9	92.7	93.1	93.2	94	89	
SD	8.7	8.4	7.9	7.2	6.7	5.6	5.2	6.5	8.6	12.3	14.3	15.8	16.4	17.2	17.1	16.9	16.4	14.1	12.5	10.4	9.3	8.9	8.8	8.7	8.6	
S/A	0.09	0.09	0.08	0.07	0.07	0.06	0.05	0.07	0.09	0.14	0.17	0.2	0.21	0.23	0.23	0.23	0.21	0.16	0.14	0.11	0.1	0.1	0.09	0.09	0.1	
Min	74.3	75.9	77.5	80.4	82.7	86.5	88	83.7	77.9	59.2	55.5	49.7	47.4	45.2	42.1	43.7	47.3	61	63.9	72.8	74.7	76.3	74.2	76.5	73.3	
Max	104.9	104.1	104.2	105	105	104.5	104.6	104.8	104.5	104.2	104.9	104.3	103.8	104.6	102.9	102.1	103.3	104.8	104.7	104.8	104.5	104.4	104.9	105	102.5	
n	243	248	252	230	225	234	248	250	256	323	328	340	353	353	345	348	345	331	316	302	276	264	261	249	6926	

Data Recovery: 0.0% missing; 0.0% untested; 19.8% failed QC -- 8640 total measurements.

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**November 2011**

**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	10.9	10.4	9.9	9.7	9.7	9.8	9.7	9.5	10.5	14	16.6	17.5	18.1	18.1	17.9	18.7	18.2	15.7	12.9	11.5	10.3	9.1	8.1	7.3	12.7
2	6.8	6.3	5.8	5.3	5	4.6	4.4	5.6	10	14.6	18.4	20.6	21.6	22.2	22	21.3	19.9	16.2	12.3	10.3	9.2	8.1	6.9	5.8	11.8
3	4.9	4.1	3.9	3.6	3.2	2.9	2.9	4.7	10.3	16.6	20.3	22.6	24.2	24	23.2	23.1	22.4	19.1	15	12.8	11.6	10.6	9.7	9.7	12.7
4	9.6	9.2	9.6	10.1	10.5	10.6	10.8	10.9	10.8	11	11.8	13.3	14.2	13.8	13.7	14.1	14.5	14.6	14.1	13.9	13.5	13.2	12.6	11.7	12.2
5	11.5	11.6	11.7	11.2	10.4	9.9	9.7	10.1	10.5	10.9	12.6	15	16.2	16.7	16.2	15.6	14.3	13.1	12.5	12.3	12.2	12.2	12.1	12.3	12.5
6	12.4	12.2	11.5	10.2	9.7	10.1	10.1	10.3	12.5	15.4	18	19.3	20.9	21.1	21	20.8	19.6	16.5	13.4	11.6	10.1	9.5	9.3	9.1	13.9
7	8.7	8.3	8.4	8.5	8.7	8.7	8.6	9.7	13.6	17.9	21.9	24.5	25.5	25.8	25.4	24.3	22.3	18.5	14.9	12.6	10.9	9.7	8.9	8.6	14.8
8	8.1	7.7	7.2	7.2	7.3	6.9	6.5	7.5	11.4	15.6	19	21.4	23.3	24.2	24.2	24.1	22.9	18.8	15	13.1	12.2	11.7	11.3	10.8	14.1
9	10.6	10.4	10.4	10.6	10.6	10.6	10.4	11.2	14.7	18.7	22.3	22.8	23	25.8	26.2	25.7	23.7	20.2	17.3	15.5	14.6	14	13.6	13.5	16.5
10	13.8	14	14.2	14.5	14.6	14.2	13.9	14.1	15.3	18.2	24	25.7	25.1	24.3	22.9	21.1	21.6	19.3	16.9	15.5	14.1	11.7	10	9.3	17
11	9.2	8.9	7.4	5.9	5.1	4.6	3.9	3.9	6.4	9.5	11.9	13.3	14.2	14.6	14.6	14.3	13.5	10.8	7.9	6.2	4.9	4.2	3.6	2.9	8.4
12	2.2	2.1	2	1.7	1.7	1.8	1.8	3.1	7.3	11.7	15	17.6	18.8	19.6	20	19.9	19.1	16	12.9	11.3	10.3	9.8	9.5	8.9	10.2
13	8	7.7	7.5	7.2	7.2	7.2	7.4	8.2	12	16.5	20	22	23.1	23.9	23.2	22.1	20.5	18.9	17.8	17	16	15.5	15.4	15	15
14	15	15.3	15.6	15.5	15.3	15.1	14.9	15.1	17.3	18.6	20.4	23.7	25.4	26.4	26.7	26.4	25.2	22.7	20.3	19.1	18.5	18.2	18.2	18.1	19.4
15	17.9	17.6	17.5	17.7	17.9	17.7	17.3	17.1	18.1	21	23.7	25	25.9	27	27.9	27.7	26.2	23.6	21.6	20.7	20.4	19.8	19.3	18.7	21.1
16	18.2	17.8	17.9	18.2	18.5	18.8	18.9	19	19.1	20.1	20.8	21.3	22.7	25.6	27	27.4	26.6	24.4	22.8	21.9	21.4	21.1	20.9	20.9	21.3
17	20.7	20.3	18.9	16.3	15.1	14.5	13.8	12.9	12.4	12.2	12	11.8	10.5	8.6	7.9	7.4	7.1	6.5	5	3.9	3.2	2.7	2.5	2.4	10.4
18	2.1	1.5	0.7	-0.2	-0.8	-1.2	-1.4	-0.9	2.7	6.7	9.2	11.6	13	13.8	13.9	14	13.3	9.1	4.8	3.5	2.7	1.9	0.9	0.5	5.1
19	0.3	0.2	0.6	0.9	1.1	0.9	0.3	0.9	5.5	12	16.8	20	21.7	22.5	23	22.9	21.3	17.8	15.3	14	13.1	12.6	12.3	12	11.2
20	11.5	11.3	11.1	10.9	11.3	12	12.5	12.3	13.3	16.5	21.3	24.8	26.5	26.5	26.5	26.5	25.3	22.8	20.2	18.5	17.5	17.5	17.5	16.9	18
21	16.5	16.4	16.5	16.6	16.8	16.8	16.9	16.8	17.4	19	21.1	22.7	23.3	23.4	23.5	23.2	21.1	17.9	16	15	14.3	14.2	14.4	14.6	18.1
22	14.5	14.1	14.1	14.1	14.1	14.1	14.2	14.4	14.8	15.6	17.4	18.2	20.6	22	22.8	22.8	21.3	19.6	18.6	18.2	18	17.7	17.7	17.9	17.4
23	18	18.1	18.4	18.9	19.3	19.5	19.4	18.9	18.1	18.6	19.5	20.3	21.2	23.4	25	24.1	21.8	19.2	17	14.5	13	12.1	11.5	11.3	18.4
24	11.1	10.6	9.7	8.5	7.2	6.2	5.5	5.4	8.1	11.5	14.3	16.6	18.1	18.7	18.6	18.3	17.8	14.3	10.6	8.4	7.2	6.6	6	5.1	11
25	4.9	5.1	5.3	5	4.8	4.5	4.2	4.5	8.4	13.8	18.6	21.9	23	23	22.8	22.4	21.4	17.6	13.6	11.1	9.7	8.8	8.1	7.7	12.1
26	7.5	7.2	7.1	7.1	7.1	6.7	6.2	6.3	9.6	13.3	17.2	19.9	21.6	22.5	22.9	23.1	21.7	17.8	14.9	13.4	12.6	11.7	11.4	11.3	13.3
27	11.4	11.5	11.2	10.4	10	10	9.9	10.3	13	17.2	21.4	22.8	23.6	23.9	24.5	24.4	23	19.9	17.6	16.2	15.5	15.3	15.5	16.1	16.5
28	16.6	16.9	17.1	17.2	17	16.7	16.6	16.7	17	18	19.4	21.6	23.4	23	22	22	21.7	19.9	17.9	16.5	16.1	16.8	17.6	17.9	18.6
29	17.8	17.7	17.8	17.9	18.2	18.2	18.2	18.8	18	15.9	14.7	13.6	12.5	10.8	10	10.1	10.2	9.9	9.8	9.8	9.7	9.5	9.8	9.9	13.7
30	8.8	7.1	6.1	5.4	4.8	4.4	3.9	3.5	5.7	8.7	11.3	13.2	14	14.7	14.7	13.4	12.1	10.5	8.5	6.6	5.5	4.7	4.2	4	8.2
Avg	11	10.7	10.5	10.2	10.1	9.9	9.7	10	12.1	15	17.7	19.5	20.5	21	21	20.7	19.7	17	14.6	13.2	12.3	11.7	11.3	11	14.2
S D	5.2	5.4	5.4	5.5	5.7	5.8	5.9	5.6	4.3	3.6	4	4.2	4.5	5	5.2	5.2	4.8	4.4	4.5	4.6	4.7	4.9	5.1	5.3	3.9
S/A	0.48	0.5	0.52	0.54	0.56	0.58	0.6	0.56	0.36	0.24	0.22	0.22	0.22	0.24	0.25	0.25	0.25	0.26	0.31	0.35	0.38	0.42	0.45	0.48	0.28
Min	0.3	0.2	0.6	-0.2	-0.8	-1.2	-1.4	-0.9	2.7	6.7	9.2	11.6	10.5	8.6	7.9	7.4	7.1	6.5	4.8	3.5	2.7	1.9	0.9	0.5	5.1
Max	20.7	20.3	18.9	18.9	19.3	19.5	19.4	19	19.1	21	24	25.7	26.5	27	27.9	27.7	26.6	24.4	22.8	21.9	21.4	21.1	20.9	20.9	21.3
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**November 2011**

**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	5.2	5.5	4.2	3.8	3.3	2.3	2	1.9	2.2	2.6	4	4.2	4.1	3.7	4.3	4.1	3.7	2.4	2.6	1.7	1.1	0.9	0.9	1	3
2	0.9	0.7	0.8	1.1	1	1	0.9	1.2	1.6	2.3	2.9	2.9	2.4	2.4	2.3	2.3	1.8	1.1	1	1.1	0.7	0.2	0	0	1.4
3	0	0	0	0	0	0	0	0	0	1	1.5	1.4	1.6	2.6	2	2.1	1.5	1.6	1.8	1.3	1.2	0.2	1.1	1.3	0.9
4	0.1	0.2	0.2	0.6	0.5	2.9	3.9	3.4	3.3	3.7	4.5	4.6	5	5	5.3	5.1	6.4	6.7	7.5	7.3	7.9	7.6	7.7	6.3	4.4
5	6.1	6.9	5.7	5.9	5.4	4.9	4.1	4.6	4.5	5.3	7.5	6.7	6.6	5.6	5.7	5.5	5.1	3.9	3.6	3.2	2.9	2.5	2.4	2.1	4.9
6	1.7	2.5	1.7	1.2	2.2	1.9	2.3	2.4	2.9	3.9	4.4	4.2	4.1	3.9	3.1	3.1	2.4	1.3	0.6	0.1	0.2	0.6	0.8	0.6	2.2
7	0.1	1	0.8	0.8	0.7	0.5	0.3	0.1	1.2	1.9	2	2.6	2.3	2.2	2.6	2.8	2.4	1.6	0.3	0.2	0	0	0.2	0	1.1
8	0	0	0.1	0.2	0	0	0.2	0.7	1.2	2	2.1	2.3	2	2.1	1.5	1.8	1.6	1.4	1.1	1.2	1.3	0.8	0.3	0.8	1
9	0.5	0.9	0.7	0.5	0.6	0.8	1.1	1.5	1.4	1.4	2.4	1.9	2.5	2.6	2.8	3.1	2.1	1.5	1.1	0.6	0.9	0.1	0	0.6	1.3
10	0.2	0.4	0.6	0.1	0.3	0.4	0.4	0.4	0.8	1.3	1.7	1.6	2.1	2.2	1.9	1.4	1.2	1.5	3.8	4	3.9	4.1	3.4	2.8	1.7
11	2.4	2	2.1	2.1	2.8	2.8	2.2	2.8	3.2	4.2	5.1	5.1	4.3	3.7	4.4	4.1	2.6	1.6	1.2	1.1	1.4	1.2	1.1	1	2.7
12	1.3	1	1	1.2	1.3	1.5	1.3	1.9	2.5	3.1	3.3	4	3.9	3.6	4.1	3.7	2.8	2.1	2.1	2.3	2.9	2.9	2.5	1.4	2.4
13	2.3	2.4	2	2.3	2.4	1.5	1.6	1.6	2.4	2.9	3.8	4.7	4.8	5.3	4.1	3.8	2.7	1.8	2.5	1.7	2.1	2.5	2.3	2.4	2.7
14	3	3.3	3.2	2.9	2.8	2.4	2.7	2.6	2.7	3.2	3.8	4.7	4.3	4.2	4.7	4.5	3.2	2.1	2.5	3.3	3.8	5	5	5	3.5
15	4.6	2.9	2.6	2.5	2.7	3.5	3.4	3.5	3.8	4.1	3.9	3.6	4.1	3.6	2.7	3	2.7	1.8	2.2	2.6	2.5	2.8	2.5	2	3.1
16	1.5	2.2	2.1	2.1	2.1	2.6	2	1.7	2	2.8	3.2	4	4.2	4.1	3.9	3.4	3.1	3.2	3.4	3.9	4.4	4.5	4.8	5.1	3.2
17	3.1	2.8	3.7	2.9	3.8	3.7	3.5	3.2	3.4	3	3	5	5.6	4.7	5.3	4.4	3	2.3	1.9	1.9	1.5	1.4	1.3	1.6	3.2
18	1.4	1	0.5	0.6	0.6	1	1.1	1.6	2.5	5.5	4	3.3	2.7	2.5	1.8	0.8	0.3	0.1	0.9	0.7	0.4	0	0.1	0.3	1.4
19	0.1	0.4	0.4	0.3	0.4	0.3	0.5	0.4	0.5	1	1.6	2.5	2.7	2.1	1.9	1.2	1.7	1.8	1.9	1.6	1.6	1.5	1.7	1.1	1.2
20	1.1	1.1	0.7	1.5	1.9	1.1	1	0.9	1.7	2.6	3.1	3.3	3.8	4	3.5	2.9	1.5	1.4	1.4	1.2	1.9	2.2	2.1	2.3	2
21	1.9	1.8	2.6	2.3	1.7	1.6	1.5	0.9	2.2	3.6	3	2.3	1.8	1.6	2.8	2.3	2.3	1.6	1.8	0.8	0.8	1.5	1.4	1.7	1.9
22	0.2	0	0.3	0.5	0.1	0.1	0.1	0.8	0.5	1.2	0.9	0.6	2.1	2.6	2.8	2.3	2.7	2	2.3	2.8	2.9	3	3.3	2.7	1.5
23	2.8	2.8	4.5	5.2	5.6	4.1	5.3	4.8	3.6	3.8	3.8	3.7	4.3	4.9	5.3	4.8	5.1	5.5	5.2	6.1	5.7	5.6	5	5.4	4.7
24	6	5.4	4.1	2.9	2.1	2	1.8	1.7	2.7	4	3.9	3.6	3.2	3.4	3.5	1.9	0.7	0.2	0.6	0.6	1	0.9	0.7	1.3	2.4
25	1.2	1.6	1.2	1.5	1.3	1.3	1	0.9	0.8	0.9	1.1	2.2	2.7	2.8	2.6	2.2	1.5	0.7	0.6	0.7	0.9	0.9	1	1.7	1.4
26	1.4	1.5	2.3	1.9	2	1.8	1.5	1	2	2.6	3.3	4.2	4.2	3.4	2.7	1.9	1.3	0.8	1.1	1	1.1	1.8	2.1	2	2
27	2.4	2.1	1.4	1.4	1.6	1.4	1.5	1.4	2	2.4	3.5	4.1	4	4	4.1	3.4	2.8	2.6	2	2	2	2.1	2.3	2	2.4
28	1.9	2	1.2	0.6	0.6	0.9	1.4	1.1	1.9	1.5	2	3.1	3.3	4.1	3.7	3	2.5	1.7	1.5	1.4	2.6	3.1	2.6	2.9	2.1
29	3	3	3.2	5.1	4.4	4.8	5	5.6	3.8	2.5	2.5	2.3	3.6	2.2	0.4	1.4	2.2	2.3	2.3	2	1.8	2.3	3.6	5.5	3.1
30	3.6	3.3	3.9	3.2	3.5	2.8	1.7	1.4	3.4	3.7	4.2	5.2	5.2	4.7	4.2	4.5	3.2	1.7	1.1	1	1	1.2	1.7	1.2	2.9

Avg	2	2	1.9	1.9	1.9	1.9	1.8	1.9	2.2	2.8	3.2	3.5	3.6	3.5	3.3	3	2.5	2	2.1	2	2.1	2.1	2.1	2.1	2.4
S D	1.7	1.7	1.5	1.6	1.5	1.4	1.4	1.4	1.1	1.2	1.3	1.3	1.2	1.1	1.3	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.8	1.7	1.1
S/A	0.87	0.83	0.8	0.82	0.8	0.73	0.77	0.75	0.51	0.44	0.42	0.38	0.34	0.31	0.39	0.41	0.51	0.68	0.73	0.83	0.83	0.85	0.83	0.8	0.44
Min	0	0	0	0	0	0	0	0	0	0.9	0.9	0.6	1.6	1.6	0.4	0.8	0.3	0.1	0.3	0.1	0	0	0	0	0.9
Max	6.1	6.9	5.7	5.9	5.6	4.9	5.3	5.6	4.5	5.5	7.5	6.7	6.6	5.6	5.7	5.5	6.4	6.7	7.5	7.3	7.9	7.6	7.7	6.3	4.9
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**November 2011**

**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	32	54	49	45	41	30	22	21	23	13	42	48	48	53	40	44	48	46	53	38	30	31	10	14	40
2	21	8	10	11	9	16	9	5	30	60	84	76	96	97	108	102	102	93	106	112	114	126	332	0	73
3	334	4	0	0	0	0	0	0	0	213	206	229	214	229	254	230	211	190	172	178	209	231	190	197	211
4	124	71	50	48	94	66	54	66	83	93	98	99	96	94	89	84	83	84	77	71	72	73	74	73	80
5	81	86	73	55	58	57	58	68	51	73	92	86	88	90	92	88	85	83	85	90	90	93	94	90	79
6	57	39	33	29	44	32	33	46	57	78	87	93	84	100	113	106	100	102	68	38	35	64	44	48	73
7	30	35	46	54	60	56	71	106	114	113	93	85	84	90	117	121	122	124	158	174	0	0	18	348	98
8	9	5	62	53	29	29	43	48	53	65	92	77	93	118	99	109	103	119	111	97	107	112	52	59	92
9	60	82	78	77	54	56	65	82	80	82	104	96	97	103	106	119	119	79	55	61	89	72	105	351	91
10	357	5	31	67	26	21	40	57	14	43	22	13	11	19	40	81	78	83	66	47	25	26	23	18	35
11	2	345	350	335	331	350	339	332	344	354	357	352	342	337	341	341	330	310	301	280	298	305	274	265	338
12	276	269	256	257	261	248	252	243	251	269	265	248	247	255	248	247	245	237	231	241	246	248	249	263	251
13	252	248	257	250	252	238	244	248	246	248	261	268	253	251	257	245	241	232	237	243	233	238	243	240	249
14	241	243	247	247	249	249	248	253	265	278	260	271	261	261	250	246	243	241	232	241	243	247	247	248	251
15	251	258	254	259	245	246	248	247	250	251	266	272	274	265	250	240	245	246	240	243	245	247	240	242	252
16	236	239	244	239	241	246	245	243	239	238	234	242	250	253	243	233	230	217	232	241	241	243	246	252	241
17	276	324	51	61	51	57	57	53	54	64	57	39	18	28	22	25	23	356	343	342	341	347	343	347	28
18	351	346	331	327	336	345	358	22	33	47	40	51	51	57	65	63	54	158	158	176	155	162	107	158	39
19	12	63	66	57	56	4	24	39	61	81	119	165	199	227	255	266	196	187	183	211	204	213	211	193	
20	215	232	224	216	233	325	286	247	251	247	254	267	274	270	274	259	255	228	236	235	237	250	245	249	254
21	248	236	248	254	263	258	251	261	281	310	329	2	16	21	54	70	83	81	85	93	91	102	123	127	336
22	127	102	120	119	99	96	134	123	120	157	65	140	164	160	162	163	171	185	198	208	219	230	233	228	187
23	233	231	239	238	243	241	246	247	258	281	290	289	292	304	321	352	352	0	6	16	20	25	26	29	311
24	27	30	27	21	24	17	16	11	31	44	45	48	41	48	48	30	17	336	289	316	306	311	283	262	28
25	289	301	286	301	302	296	283	278	287	277	278	281	275	273	258	255	247	230	234	230	215	232	256	246	270
26	254	269	282	289	287	293	278	269	285	300	298	315	310	303	292	273	236	214	215	217	232	232	239	244	280
27	249	248	244	245	240	234	218	218	223	234	243	241	246	236	245	241	213	205	191	185	189	183	178	191	226
28	190	187	190	174	151	151	161	147	155	157	149	164	170	180	154	161	155	136	142	150	176	182	180	180	167
29	179	191	176	181	178	185	188	222	286	276	267	281	291	296	274	227	221	204	237	238	235	243	268	300	229
30	294	284	290	285	301	300	269	269	297	303	295	313	317	323	332	324	341	340	310	299	288	294	325	341	307
Avg	290	305	305	286	295	310	292	290	326	350	1	344	320	300	332	229	132	134	143	183	228	245	250	265	305
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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



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

**November 2011**

**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	9.2	9.9	7.4	7.3	6.1	4.7	4.5	4.2	5.1	5.2	7.2	7.7	7.1	6.6	7.8	7.7	6.5	4.4	4.5	3.3	2.1	1.9	1.9	2	5.6
2	2	1.4	1.7	2	1.9	2	1.8	2.3	3.3	4.1	5.5	5.3	4.4	4.6	4	4.3	3.3	2	1.9	1.9	1.4	0.6	0.1	0	2.6
3	0	0.4	0	0	0	0	0	0	0	2	2.8	3	3.1	4.4	3.6	3.4	2.4	2.5	2.7	2	2	0.6	1.9	2.5	1.6
4	0.3	0.5	0.3	1.4	1.3	5	6.6	6.3	5.9	6.8	8.3	8.6	9.2	9	9.7	9.5	11	12	13.4	13.5	13.9	13.3	13.9	11.9	8
5	11.4	12.9	10.6	10.4	9.2	8.7	7.7	8.7	7.8	9.4	13.5	12.3	11.5	10.2	10.4	9.7	9	7.4	6.6	5.8	5.4	4.6	4.5	3.9	8.8
6	2.9	4	3.1	2.4	3.8	3.8	4.1	4.3	5.1	6.8	7.5	7.1	7.3	6.6	5.4	5.5	4.4	2.3	1.1	0.4	0.5	1.1	1.3	1.3	3.8
7	0.3	1.6	1.6	1.6	1.6	1.5	1	0.5	2.4	3.1	3.5	4.3	4.1	3.9	4.4	4.5	4	2.9	0.8	0.6	0	0	0.5	0.1	2
8	0.1	0.2	0.3	0.7	0.4	0.5	0.8	1.8	2.5	3.8	3.9	4.3	3.8	3.7	3	2.9	2.7	2.6	2.3	2.2	2.6	1.6	0.9	1.9	2.1
9	1.8	2	1.9	1.5	1.9	2.1	2.4	3	3.1	2.8	4.1	3.8	4.2	4.3	4.9	5.1	3.5	2.6	2.2	1.5	1.7	0.8	0.3	1.8	2.6
10	1.5	1.7	2	0.5	1.3	1.4	1.4	1.5	2.4	2.8	3.3	3.6	4.2	4.2	3.7	2.7	2.3	2.8	6.6	7	7.6	7.9	6.9	6.1	3.5
11	5.5	4.2	4.3	4.3	5.2	5.4	4.6	5.6	6.6	8.8	10	9.7	9.2	7.5	8.8	7.8	5.1	2.9	2.1	1.9	2	1.8	1.5	1.5	5.3
12	1.9	1.6	1.7	1.9	2	2	2.1	3.1	4	5.6	5.9	6.6	6.5	6.4	6.7	6	4.4	3.5	3.6	4	4.7	4.4	4	2.4	4
13	3.3	3.7	3.1	3.5	3.7	2.4	2.7	2.7	3.9	5	6.6	8.3	8.1	9.1	7.3	6	4.3	3.2	4.3	2.8	3.6	4.1	3.7	4	4.6
14	5	5.4	5	4.8	4.4	4	4.3	4.2	5	5.7	6.7	8	7.3	7.9	7.9	7.7	5.2	3.5	4.1	5.5	6.5	8	7.9	7.9	5.9
15	7.3	5.1	4.3	4.7	4.9	5.3	5.2	5.7	6.5	6.9	7.1	6.6	7.3	6.7	5	5.2	4.6	2.8	4	4.4	4	4.3	4	3.2	5.2
16	2.4	3.5	3.7	3.7	3.8	4.4	3.5	3.2	3.6	4.8	5.4	6.8	7.1	7	6.5	5.3	4.9	5.2	6	7	7.2	7.2	7.8	8.2	5.3
17	6.3	5.6	6	5	6.3	6.3	6.5	5.6	6.5	5.8	5.7	8.6	11.2	9.1	10	7.9	5.8	4.9	4.1	3.9	3.2	3.1	3.4	3.7	6
18	3.3	2.4	1.4	1.4	1.7	2.5	2.7	3.7	5	9	7	5.8	5.6	4.9	3.7	2	0.8	0.2	1.5	1.4	0.9	0.1	0.3	0.7	2.8
19	0.2	0.7	0.8	0.7	0.7	0.7	0.9	0.9	1.3	2	3.1	4.3	5	3.9	3.2	2.3	2.6	2.6	2.9	2.5	2.6	2.5	2.7	1.9	2.1
20	2	1.8	1.5	2.3	3.1	2	1.7	1.6	2.6	4.4	5.4	6.4	7	7.1	6.1	5	2.6	2.2	2.6	2.1	3.2	3.4	3.3	3.8	3.5
21	3.1	2.9	4.1	3.7	3.3	3	2.7	2	3.9	6.1	5.9	4.6	3.8	3.6	4.7	4.1	4.1	2.8	3.1	1.8	1.9	3	2.7	3.2	3.5
22	0.5	0.2	0.8	1.5	0.6	0.7	0.6	1.9	1.5	2.5	2	1.7	3.4	4.2	4.3	3.7	4.2	3.2	4	4.9	4.8	5.1	5.5	4.7	2.8
23	5	5	7.6	8.8	8.9	6.8	8.8	7.3	6.6	7	6.5	6.3	7.4	8.9	9.8	10.1	9.9	10.9	10.9	12.2	11.3	10.5	9.6	10.2	8.6
24	11.4	9.4	7.9	5.6	4.4	3.8	3.5	3.7	5.2	6.8	6.8	6.4	6.1	5.6	6.1	3.9	1.9	0.7	1	1	1.4	1.4	1.2	1.8	4.5
25	1.8	2.3	1.8	2.2	2	2	1.5	1.3	1.5	1.9	2.3	3.7	4.8	4.7	4.2	3.6	2.4	1.4	1.3	1.5	1.5	1.5	1.6	2.5	2.3
26	2.2	2.5	3.6	3	2.9	2.7	2.4	2	3.3	4.6	5.4	7.1	6.8	5.7	4.9	3.5	2.2	1.5	1.8	1.9	2	2.8	3.7	3.2	3.4
27	3.4	2.9	2	2	2.5	2.3	2.4	2.5	3.1	4	5.6	6.6	6.4	6.5	6.8	5.7	4.3	4.1	3.6	3.3	3.6	3.5	3.5	3.4	3.9
28	3.3	3.4	2.2	1.3	1.4	1.7	2.2	1.8	3.4	2.8	3.7	5.2	6	6.8	6.4	5	4.3	3	2.8	2.5	4.4	4.9	4.1	4.9	3.7
29	5	4.8	5.1	8.1	6.8	7.5	7.8	9.5	7.1	4.8	5.1	4.7	6.4	4.2	1.5	2.8	4	4	4.1	3.5	3.2	4.1	6.6	9.2	5.4
30	6.6	5.9	6.7	5.8	5.8	4.8	3.2	2.7	5.6	6.2	7.1	8.4	9.3	9.1	8.1	8	6.5	3.8	1.9	1.4	1.4	1.8	2.8	2.6	5.2
Avg	3.6	3.6	3.4	3.4	3.4	3.3	3.3	3.4	4.1	5.1	5.8	6.2	6.5	6.2	6	5.4	4.4	3.6	3.7	3.6	3.7	3.7	3.7	3.8	4.3
SD	3.1	3	2.6	2.6	2.4	2.2	2.3	2.3	1.9	2.1	2.4	2.2	2.2	2	2.3	2.3	2.5	2.8	2.8	3.1	3.1	3.1	3.1	3	1.9
S/A	0.86	0.83	0.77	0.77	0.72	0.66	0.69	0.68	0.47	0.41	0.41	0.36	0.34	0.32	0.39	0.42	0.52	0.7	0.75	0.85	0.83	0.85	0.83	0.78	0.44
Min	0	0.2	0	0	0	0	0	0	0	1.9	2	1.7	3.1	3.6	1.5	2	0.8	0.2	0.8	0.4	0	0	0.1	0	1.6
Max	11.4	12.9	10.6	10.4	9.2	8.7	8.8	9.5	7.8	9.4	13.5	12.3	11.5	10.2	10.4	10.1	11	12	13.4	13.5	13.9	13.3	13.9	11.9	8.8
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**November 2011**

**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	1019	1018	1018	1018	1019	1019	1020	1020	1021	1021	1022	1021	1021	1021	1022	1022	1023	1023	1024	1024	1024	1025	1025	1025	1021
2	1024	1024	1024	1025	1025	1026	1026	1027	1028	1027	1027	1027	1026	1025	1025	1025	1025	1025	1025	1025	1024	1024	1024	1023	1025
3	1023	1022	1022	1022	1021	1021	1021	1021	1021	1021	1020	1019	1018	1017	1016	1015	1014	1014	1013	1013	1013	1013	1012	1011	1018
4	1011	1011	1010	1009	1008	1007	1008	1008	1009	1008	1007	1007	1007	1007	1007	1007	1008	1009	1010	1012	1013	1014	1014	1015	1009
5	1016	1016	1016	1017	1018	1019	1020	1021	1022	1023	1024	1024	1024	1024	1025	1025	1026	1026	1026	1026	1027	1027	1027	1027	1023
6	1027	1027	1026	1026	1027	1028	1028	1029	1029	1030	1030	1030	1029	1028	1028	1028	1028	1027	1028	1028	1028	1027	1027	1027	1028
7	1027	1026	1026	1026	1026	1026	1026	1027	1027	1027	1027	1026	1025	1024	1024	1024	1024	1024	1025	1024	1024	1024	1024	1024	1025
8	1023	1023	1022	1022	1022	1023	1023	1023	1024	1024	1024	1023	1022	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1020	1022
9	1020	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1018	1017	1016	1015	1015	1015	1015	1014	1014	1013	1013	1012	1012	1017
10	1012	1011	1011	1010	1009	1009	1009	1009	1009	1009	1008	1006	1006	1005	1005	1005	1004	1005	1006	1006	1006	1007	1007	1007	1008
11	1008	1008	1008	1009	1009	1010	1011	1012	1013	1013	1013	1013	1013	1014	1014	1015	1015	1016	1017	1018	1019	1020	1020	1020	1014
12	1020	1021	1021	1021	1021	1022	1023	1023	1024	1024	1024	1024	1023	1022	1022	1022	1022	1022	1022	1022	1023	1023	1023	1023	1022
13	1023	1022	1023	1023	1023	1023	1023	1023	1024	1023	1023	1022	1021	1020	1020	1019	1019	1019	1019	1019	1020	1020	1020	1019	1021
14	1019	1018	1019	1018	1018	1019	1019	1019	1019	1019	1018	1017	1016	1015	1014	1014	1014	1014	1014	1014	1014	1014	1013	1013	1016
15	1013	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1013	1012	1012	1012	1012	1012	1013	1013	1014	1013	1013	1013	1013
16	1012	1012	1012	1011	1011	1012	1012	1012	1012	1011	1011	1010	1009	1008	1007	1007	1006	1006	1007	1007	1007	1007	1006	1006	1009
17	1007	1007	1007	1007	1007	1007	1008	1008	1008	1008	1008	1008	1010	1010	1012	1013	1014	1016	1018	1019	1020	1021	1022	1022	1012
18	1023	1024	1024	1025	1026	1026	1028	1029	1030	1030	1030	1030	1030	1029	1028	1027	1027	1027	1027	1027	1026	1026	1026	1025	1028
19	1030	1030	1030	1029	1029	1030	1030	1030	1030	1030	1030	1030	1029	1028	1027	1027	1027	1027	1027	1026	1026	1026	1026	1025	1028
20	1025	1025	1025	1024	1024	1025	1025	1025	1025	1025	1025	1024	1023	1022	1022	1022	1022	1022	1022	1022	1022	1022	1021	1023	1023
21	1021	1020	1020	1020	1020	1020	1020	1021	1021	1021	1021	1021	1021	1020	1020	1019	1019	1020	1021	1021	1021	1022	1022	1021	1020
22	1021	1021	1020	1020	1020	1021	1021	1021	1022	1022	1022	1022	1020	1019	1018	1017	1017	1017	1017	1016	1016	1015	1014	1013	1019
23	1012	1011	1010	1008	1007	1006	1006	1005	1005	1004	1004	1003	1002	1002	1002	1003	1005	1006	1008	1010	1011	1012	1013	1014	1007
24	1015	1016	1017	1017	1018	1019	1020	1021	1022	1022	1023	1023	1023	1023	1023	1023	1023	1024	1024	1025	1025	1025	1025	1024	1022
25	1024	1024	1024	1024	1024	1025	1025	1025	1026	1026	1026	1025	1024	1023	1023	1023	1023	1022	1022	1022	1022	1023	1023	1023	1024
26	1023	1023	1023	1023	1023	1024	1024	1025	1025	1025	1025	1024	1023	1023	1022	1023	1023	1023	1023	1023	1023	1023	1023	1022	1023
27	1022	1022	1022	1022	1021	1022	1022	1022	1023	1023	1023	1022	1021	1021	1020	1020	1020	1020	1020	1020	1020	1020	1019	1019	1021
28	1019	1018	1018	1018	1017	1018	1018	1018	1018	1018	1018	1017	1017	1016	1015	1015	1015	1015	1015	1015	1014	1014	1014	1013	1016
29	1012	1011	1010	1009	1009	1008	1008	1008	1010	1010	1010	1009	1009	1008	1007	1007	1007	1007	1007	1007	1007	1007	1007	1008	1008
30	1007	1007	1008	1008	1009	1009	1010	1010	1010	1011	1011	1010	1009	1009	1010	1010	1011	1012	1013	1013	1014	1015	1015	1016	1011
Avg	1019	1018	1018	1018	1018	1018	1019	1019	1020	1020	1020	1019	1018	1018	1017	1018	1018	1018	1018	1019	1019	1019	1019	1019	1019
S D	6	6	6	6	7	7	7	7	7	7	8	8	7	7	7	7	7	7	7	7	7	6	6	6	
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Min	1007	1007	1007	1007	1007	1006	1006	1005	1005	1004	1004	1003	1002	1002	1002	1003	1005	1004	1005	1005	1006	1006	1006	1006	1007
Max	1030	1030	1030	1029	1029	1030	1030	1030	1030	1030	1030	1030	1030	1029	1029	1029	1029	1030	1030	1030	1031	1031	1031	1030	1028
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640	

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**November 2011**

**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	12.9	13.6	13.5	13.5	13.5	13.4	13.5	13.4	13.4	13.3	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13	
2	12.7	12.7	12.7	12.6	12.6	12.6	13	13.8	13.6	13.5	13.4	13.3	13.3	13.3	13.3	13.4	13.3	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13	
3	12.7	12.6	12.6	12.6	12.6	12.6	13	13.8	13.6	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.2	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13	
4	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.7	13.4	13.5	13.4	13.3	13.4	13	12.8	12.8	12.8	12.8	12.7	12.7	12.6	12.6	12.8	
5	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13	13.6	13.5	13.5	13.5	13.4	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.9
6	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.4	13.6	13.5	13.4	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	
7	12.7	12.7	12.7	12.7	12.7	12.7	12.8	13.7	13.5	13.4	13.3	13.2	13.2	13.2	13.2	13.3	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13	
8	12.7	12.7	12.7	12.6	12.6	12.6	12.8	13.7	13.6	13.5	13.4	13.3	13.3	13.3	13.3	13.3	13.2	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13	
9	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.6	13.5	13.4	13.3	13.3	13.3	13.2	13.2	13.3	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.7	13	
10	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.9	13.3	13.4	13.2	13.2	13.3	13.3	13.3	13.2	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9	
11	12.7	12.7	12.6	12.6	12.6	12.5	12.7	13.9	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	12.7	12.7	12.7	13.1	
12	12.7	12.7	12.6	12.6	12.6	12.6	12.7	13.9	13.7	13.6	13.5	13.4	13.4	13.4	13.4	13.4	13.3	12.9	12.8	12.8	12.8	12.8	12.8	12.7	13	
13	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.5	13.6	13.4	13.4	13.3	13.3	13.3	13.3	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13	
14	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.4	13.5	13.4	13.3	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	
15	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13.4	13.3	13.3	13.3	13.2	13.2	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.9	
16	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.1	13.2	13.2	13.3	13.3	13.2	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.9	
17	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13.3	12.7	12.7	12.5	12.5	12.5	12.5	12.5	12.4	12.4	12.4	12.6	
18	12.4	12.4	12.4	12.4	12.4	12.4	12.5	14	13.9	13.7	13.7	13.6	13.5	13.5	13.5	13.3	13.3	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13	
19	12.7	12.6	12.6	12.6	12.6	12.6	12.6	13.9	13.7	13.6	13.4	13.4	13.3	13.3	13.3	13.3	13	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13	
20	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.6	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	12.7	13	
21	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.9	13.4	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13	
22	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.7	13.1	13.3	13.4	13.4	13.3	13.3	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9	
23	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.1	13.2	13.3	13.3	13.3	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9	
24	12.6	12.6	12.6	12.5	12.5	12.5	12.5	13.7	13.7	13.6	13.5	13.5	13.4	13.4	13.4	13.4	13.3	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13	
25	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.8	13.7	13.5	13.4	13.3	13.3	13.3	13.3	13.3	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13	
26	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.8	13.7	13.5	13.4	13.4	13.3	13.3	13.3	13.3	13	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13	
27	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.6	13.6	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13	
28	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.8	13.2	13.3	13.3	13.3	13.3	13.3	13.3	13	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.9	
29	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.7	12.7	12.7	12.8	12.7	12.8	12.8	13	12.8	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.7	
30	12.5	12.5	12.5	12.5	12.5	12.5	12.5	13.7	13.8	13.7	13.6	13.6	13.5	13.5	13.5	13.5	13	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13	
Avg	12.7	12.7	12.7	12.6	12.6	12.6	12.7	13.3	13.4	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.1	12.8	12.8	12.8	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	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	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	0.01	0.01	0.01	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Min	12.4	12.4	12.4	12.4	12.4	12.4	12.5	12.6	12.6	12.6	12.6	12.6	12.6	12.8	12.7	12.7	12.5	12.5	12.5	12.5	12.5	12.4	12.4	12.4	12.6	
Max	12.8	12.7	12.7	12.7	12.7	12.7	13	14	13.9	13.7	13.7	13.6	13.5	13.5	13.6	13.6	13.4	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13.1	
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640	

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

Instrument: CSI    Serial Number: 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.