

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

**December 2010**

**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	9	67	140	135	266	517	465	332	124	38	0	0	0	0	0	0	0	2094
2	0	0	0	0	0	0	0	54	211	358	465	431	345	272	341	99	18	0	0	0	0	0	0	0	2594
3	0	0	0	0	0	0	0	21	76	194	464	522	509	369	344	165	35	0	0	0	0	0	0	0	2699
4	0	0	0	0	0	0	0	47	198	351	419	439	490	292	240	48	10	0	0	0	0	0	0	0	2533
5	0	0	0	0	0	0	0	22	71	271 ?	480	322	351	399	249	112	26	0	0	0	0	0	0	0	2303
6	0	0	0	0	0	0	0	47	200	358	469	531	523	474	295	160	40	0	0	0	0	0	0	0	3098
7	0	0	0	0	0	0	0	45	198	356	379	466	521	459	337	170	40	0	0	0	0	0	0	0	2971
8	0	0	0	0	0	0	0	48	194	353	467	527	522	453	277	129	32	0	0	0	0	0	0	0	3001
9	0	0	0	0	0	0	0	45	189	351	466	524	519	456	333	169	36	0	0	0	0	0	0	0	3086
10	0	0	0	0	0	0	0	33	196	329	316	474	417	444	287	99	18	0	0	0	0	0	0	0	2613
11	0	0	0	0	0	0	0	44	98	89	97	94	85	50	35	29	4	0	0	0	0	0	0	0	624
12	0	0	0	0	0	0	0	24	86	153	174	88	66	53	42	18 ?	3	0	0	0	0	0	0	0	707
13	0	0	0	0	0	0	0	3	12 ?	54	109	143	176	167	85	69	49	0	0	0	0	0	0	0	867
14	0	0	0	0	0	0	0	39	182	342	459	526	526	468	350	185	45	0	0	0	0	0	0	0	3123
15	0	0	0	0	0	0	0	43	185	349	466	529	530	469	351	184	45	0	0	0	0	0	0	0	3150
16	0	0	0	0	0	0	0	16	49	51	96	66	61	52	34	16 ?	6	0	0	0	0	0	0	0	446
17	0	0	0	0	0	0	0	18	76	201	389	518	510	448	335	175	36	0	0	0	0	0	0	0	2704
18	0	0	0	0	0	0	0	9	96	228	196	192	190	100	60	27	4	0	0	0	0	0	0	0	1102
19	0	0	0	0	0	0	0	10	69	154	210	493	494	428	320	170	37	0	0	0	0	0	0	0	2385
20	0	0	0	0	0	0	0	34	164	323	440	507	507	449	336	176	41	0	0	0	0	0	0	0	2976
21	0	0	0	0	0	0	0	36	164	292	429	500	504	447	303	174	39	0	0	0	0	0	0	0	2887
22	0	0	0	0	0	0	0	8	66	88	92	186	211	124	64	41	24	0	0	0	0	0	0	0	904
23	0	0	0	0	0	0	0	33	164	324	439	507	514	458	344	185	45	0	0	0	0	0	0	0	3014
24	0	0	0	0	0	0	0	36	163	322	441	509	515	459	338	166	40	0	0	0	0	0	0	0	2990
25	0	0	0	0	0	0	0	12	86	237	277	153	121	169	112	63	22	0	0	0	0	0	0	0	1251
26	0	0	0	0	0	0	0	4	26	74	68	107	139	96	100	79	19	0	0	0	0	0	0	0	712
27	0	0	0	0	0	0	0	40	104	332	481	546	382	423	283	122	53	0	0	0	0	0	0	0	2766
28	0	0	0	0	0	0	0	35	167	333	459	527	533	476	362	202	46	0	0	0	0	0	0	0	3140
29	0	0	0	0	0	0	0	32	139	313	439	511	528	448	345	166	30	0	0	0	0	0	0	0	2952
30	0	0	0	0	0	0	0	38	155	299	392	352	272	126	104	72	28	0	0	0	0	0	0	0	1838
31	0	0	0	0	0	0	0	32	150	305	430	502	510	443	338	185	34	0	0	0	0	0	0	0	2929
Avg	0	0	0	0	0	0	0	30	129	256	343	389	390	337	248	122	30	0	0	0	0	0	0	0	2273
S D	0	0	0	0	0	0	0	15	59	105	147	170	169	160	120	60	14	0	0	0	0	0	0	0	927
S/A	0	0	0	0	0	0	5.57	0.51	0.46	0.41	0.43	0.44	0.43	0.47	0.48	0.49	0.47	0	0	0	0	0	0	0	0.41
Min	0	0	0	0	0	0	0	3	12	51	68	66	61	50	34	16	3	0	0	0	0	0	0	0	446
Max	0	0	0	0	0	0	1	54	211	358	481	546	533	476	362	202	53	0	0	0	0	0	0	0	3150
n	0	0	0	0	0	0	1	323	362	369	370	370	370	369	366	364	299	0	0	0	0	0	0	0	3563

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.0% 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 2010

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: 99.8% missing; 0.0% untested; 0.2% exceed the 15% QC threshold -- 3599 total daylight measurements.

Instrument: Eppley NIP Serial Number: 23398E6 Calibration Factor: 7.1447  $\mu\text{V}/\text{W}/\text{m}^2$  Calibration Date: 07/2007

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

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

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

**December 2010**

**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	0	8	52	107	116	187	68	54	54	72	20	0	0	0	0	0	0	0	738
2	0	0	0	0	0	0	0	21	51	64	111	129	253	201	116	80	17	0	0	0	0	0	0	0	1043
3	0	0	0	0	0	0	0	21	76	167	71	73	89	116	89	46	17	0	0	0	0	0	0	0	764
4	0	0	0	0	0	0	0	18	44	63	154	207	98	194	165	48	10	0	0	0	0	0	0	0	1000
5	0	0	0	0	0	0	0	19	38	85	128	216	214	138	137	81	17	0	0	0	0	0	0	0	1073
6	0	0	0	0	0	0	0	18	39	50	55	61	70	69	83	54	16	0	0	0	0	0	0	0	514
7	0	0	0	0	0	0	0	17	41	62	82	95	60	54	47	36	14	0	0	0	0	0	0	0	509
8	0	0	0	0	0	0	0	17	37	47	53	54	54	60	93	98	30	0	0	0	0	0	0	0	542
9	0	0	0	0	0	0	0	15	36	47	52	52	51	48	41	29	10	0	0	0	0	0	0	0	381
10	0	0	0	0	0	0	0	15	54	158	228	231	249	127	113	86	18	0	0	0	0	0	0	0	1280
11	0	0	0	0	0	0	0	41	90	89	97	94	85	48	32	28	4	0	0	0	0	0	0	0	608
12	0	0	0	0	0	0	0	24	85	151	174	79	60	48	39	17	3	0	0	0	0	0	0	0	680
13	0	0	0	0	0	0	0	3	12	54	109	143	176	167	85	68	38	0	0	0	0	0	0	0	856
14	0	0	0	0	0	0	0	16	38	50	53	54	54	51	45	34	15	0	0	0	0	0	0	0	411
15	0	0	0	0	0	0	0	15	36	46	51	53	50	46	41	31	13	0	0	0	0	0	0	0	382
16	0	0	0	0	0	0	0	17	49	51	96	66	61	52	33	15	6	0	0	0	0	0	0	0	446
17	0	0	0	0	0	0	0	16	76	174	123	65	59	65	51	35	11	0	0	0	0	0	0	0	674
18	0	0	0	0	0	0	0	9	66	192	196	192	190	100	60	27	4	0	0	0	0	0	0	0	1036
19	0	0	0	0	0	0	0	10	69	126	183	94	92	95	76	45	19	0	0	0	0	0	0	0	808
20	0	0	0	0	0	0	0	17	42	56	62	63	63	59	51	39	15	0	0	0	0	0	0	0	468
21	0	0	0	0	0	0	0	18	40	69	57	56	55	52	82	64	24	0	0	0	0	0	0	0	518
22	0	0	0	0	0	0	0	9	66	88	92	185	211	124	64	41	18	0	0	0	0	0	0	0	899
23	0	0	0	0	0	0	0	15	36	48	57	55	53	51	46	34	14	0	0	0	0	0	0	0	410
24	0	0	0	0	0	0	0	13	32	42	47	49	49	46	47	42	19	0	0	0	0	0	0	0	384
25	0	0	0	0	0	0	0	12	84	125	223	153	121	169	112	63	22	0	0	0	0	0	0	0	1083
26	0	0	0	0	0	0	0	4	26	74	68	107	139	96	100	79	19	0	0	0	0	0	0	0	712
27	0	0	0	0	0	0	0	32	100	173	106	282	279	146	157	93	17	0	0	0	0	0	0	0	1384
28	0	0	0	0	0	0	0	15	36	50	58	62	61	56	49	36	12	0	0	0	0	0	0	0	437
29	0	0	0	0	0	0	0	19	48	72	98	95	85	89	78	70	27	0	0	0	0	0	0	0	681
30	0	0	0	0	0	0	0	19	64	98	219	277	262	126	104	72	27	0	0	0	0	0	0	0	1269
31	0	0	0	0	0	0	0	19	42	52	60	68	83	90	82	62	20	0	0	0	0	0	0	0	578
Avg	0	0	0	0	0	0	0	17	52	88	106	116	113	92	77	52	17	0	0	0	0	0	0	0	728
S D	0	0	0	0	0	0	0	7	21	46	56	71	75	47	36	23	8	0	0	0	0	0	0	0	295
S/A	0	0	0	0	0	0	5.57	0.44	0.4	0.53	0.53	0.61	0.66	0.52	0.47	0.44	0.46	0	0	0	0	0	0	0	0.4
Min	0	0	0	0	0	0	0	3	12	42	47	49	49	46	32	15	3	0	0	0	0	0	0	0	381
Max	0	0	0	0	0	0	0	41	100	192	228	282	279	201	165	98	38	0	0	0	0	0	0	0	1384
n	0	0	0	0	0	0	1	308	372	372	372	372	372	372	372	372	299	0	0	0	0	0	0	0	3584

Daylight Data Recovery: 0.0% missing; 0.0% untested; 0.4% exceed the 15% QC threshold -- 3599 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31393F3 Calibration Factor: 7.6820  $\mu\text{V}/\text{W}/\text{m}^2$  Calibration Date: 07/2007

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

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

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

**December 2010**

**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	18.3	18.2	18.1	17.8	17.8	18.3	18.4	19.1	19.9	20.2	17.8	17.5	17.9	17.4	16.7	15.3	12.8	10.6	8.4	6.8	5.7	4.7	3.8	2.8	14.3
2	2	1.5	1.1	0.6	0.6	0.3	-0.9	-0.6	1.6	4.3	6	6.8	7.1	7.6	8	7.6	6.8	6.1	5.3	4.8	4.3	4	4.1	3.7	3.9
3	2.9	2.7	2.9	2.9	2.8	3.6	3.4	3.2	3.2	3.8	5.1	6.1	6.9	7	7.5	7.4	6.4	5	4.2	3.9	3.8	4	3.5	2.8	4.4
4	2.1	1.8	1.3	0.7	0.1	0.1	-0.5	-1.1	0.5	1.9	3.4	3.8	4.5	5	5.1	4.7	4.1	3.5	3	2.2	0.6	0.2	0.1	0	2
5	0	-0.1	-0.3	-0.3	-0.4	-0.9	-1.4	-1.3	-0.5	1	2.2	2.6	3.2	4.4	4.6	4.3	3.7	2.6	1.7	1.5	0.9	0.5	-0.1	-0.6	1.1
6	-1.2	-1.7	-2	-2.2	-2.4	-2.8	-2.9	-2.4	-1	0.8	2.4	3.2	3.8	4	4	3.7	2.9	1.6	0.6	0.1	-0.4	-1	-1.6	-2.1	0.2
7	-2.5	-2.9	-3.3	-3.6	-4	-4.3	-4.4	-4.4	-3.3	-1.5	-0.2	0.9	1.6	2.1	2.5	2.3	1.6	0.2	-0.7	-1.4	-1.8	-2.2	-2.5	-2.9	-1.5
8	-3.6	-4.2	-4.9	-5.3	-5.9	-6	-6.2	-6	-4.2	-1.7	-0.4	0.9	1.6	1.9	2.1	1.9	1.2	0.4	0	-0.3	-0.3	-0.3	-0.6	-0.8	-1.7
9	-0.9	-1	-1.4	-1.5	-2	-2.2	-3.2	-3.5	-1.5	0.4	1.3	2.4	3	3.6	4	4.2	2.9	1.2	0.3	0.1	-0.2	-0.5	-1.3	-1.9	0.1
10	-1.5	-2.4	-2.3	-2	-1.8	-1.4	-1.6	-1.4	0.8	3.8	5.7	7.9	9.7	10.2	10.3	9.6	9.3	8	6.9	5.6	4.6	3.6	3.1	2.9	3.6
11	3	2.8	2.5	2.4	2.6	2.9	3.3	3.8	4.7	5.5	6.5	7.8	9.1	9.3	9.1	8.9	8.3	7.9	8.3	8.9	9	9.6	10.5	11	6.6
12	12	12.9	14	14.2	14.5	13.4	12	11.2	10.9	10.7	10.9	11.2	11.2	11.3	11	10.5	10.6	11.9	11.5	11.4	11.1	9.4	8.5	7.7	11.4
13	7.4	7	6.1	4.1	2.2	1.8	1.5	0.6	0.1	-1	-1.7	-1.8	-1.4	-0.8	-0.8	-0.7	-0.6	-0.8	-0.6	-1.1	-1.7	-2.4	-3.5	-4.3	0.3
14	-4.8	-5.2	-5.4	-5.6	-5.8	-5.9	-6	-6	-5.2	-4.5	-3.7	-3	-2.5	-2.1	-1.8	-1.6	-2	-2.6	-3.1	-3.4	-3.6	-4	-4.6	-5.1	-4.1
15	-5.7	-6.3	-6.7	-7	-7.4	-7.8	-8	-8	-6.4	-4.5	-2.9	-1.6	-0.2	0.9	1.5	1.5	0.7	-0.6	-1.2	-2	-2.3	-2.8	-3.3	-3.4	-3.5
16	-3.6	-4	-4.4	-4.2	-4.3	-4	-3.2	-2.3	-1.2	-0.4	-0.6	-1.4	-1.3	-0.5	-0.1	0.4	1.2	1.3	1.2	1.2	1.2	1.3	1.2	1.2	-1
17	1.1	1	0.8	0.7	0.2	-0.2	-0.5	-0.9	-1.1	-1.1	-0.3	1.5	2.9	4.2	4.5	4.5	3.6	2.3	1.2	0.2	-0.2	-0.5	-1	-1.1	0.9
18	-1.4	-1.5	-1.7	-1.9	-1.6	-1	-0.9	-0.5	0.3	2.4	3.5	4.7	5.1	5.2	5	4.6	4.3	4	3.3	2.6	2.7	2.1	2	1.9	1.8
19	2.2	2.6	2.1	1.6	1.3	1	1.1	1.1	1.2	1.7	2.6	3.7	3.9	4	3.9	3.8	3.1	2	1.1	0.3	-0.2	-0.6	-0.9	-1.2	1.7
20	-1.6	-1.8	-2	-2.5	-2.9	-3	-3.1	-3	-2	-0.8	0.7	1.9	2.8	3.5	3.9	3.9	3.3	2	1	0.2	-0.3	-0.7	-1.3	-1.6	-0.1
21	-1.7	-1.5	-1.5	-2	-2.8	-3.1	-3.1	-2.8	-1.3	0.8	2.6	3.8	4.8	6	6.4	6.6	5.9	4.8	3.8	2.9	2.5	2.9	2.8	2.8	1.6
22	2.6	2.4	2.4	2	2.2	2.5	2.6	2.6	3	3.6	4.2	5.2	6	6.2	6.2	6.1	5.7	4.3	3.3	2.5	1.6	1.5	1.4	0.7	3.4
23	1.1	1.7	1.5	0.9	0.5	0	-0.4	-0.5	0.2	1.5	2.4	3.7	5.1	6	6.7	6.9	6.3	5.2	4.3	3.6	2.9	2.2	1.7	1	2.7
24	-0.5	-0.8	-0.7	-0.8	-0.8	-0.9	-1.1	-1.1	0.1	1.1	2.3	3.2	4.4	5.1	5.8	5.7	5	3.5	2.5	1.2	0.7	-0.3	-1	-1.7	1.3
25	-2	-2.3	-2.4	-2.4	-2.4	-1.9	-1.7	-1.2	-0.3	2	3	3.4	3.3	4	4.2	4.4	4.1	3.3	2.6	2.4	2.3	2.1	1.7	1.1	1.1
26	1.2	0.7	0.5	0.5	0.4	0.2	-0.2	-0.5	-0.8	-1.2	-1.2	-1.4	-1.7	-2.1	-2	-2.1	-2.5	-2.8	-3	-3	-3.1	-3.1	-3.2	-3.3	-1.4
27	-3.1	-3.1	-3.4	-4.1	-4.6	-4.9	-4.9	-4.8	-3.9	-2.7	-1.5	0.1	0.7	1.5	1.9	1.6	1.4	0.8	0.4	-0.4	-0.6	-0.7	-1.2	-1.7	-1.6
28	-2.2	-2.5	-2.4	-2.3	-2.3	-2.4	-3.3	-3.9	-3.4	-2.1	-0.8	0.4	1.6	3.1	3.8	4.7	4.9	3.1	2.4	1.5	0.7	0.2	0.2	0.3	0
29	0.2	0.1	-0.5	-1.3	-1.7	-2.1	-2.8	-3	-1.7	0.8	3.3	5.1	5.5	6	6.2	5.8	4.6	3.5	2	0.6	0.4	-0.4	-0.8	-1.4	1.2
30	-1.7	-2.3	-2.2	-2.9	-3	-3.2	-2.8	-3.5	-1.6	1.5	4.4	5.8	6.1	6.1	6.3	6.1	5.2	4.3	3.5	3.3	2.6	1.6	1.4	0.6	1.5
31	0.1	-0.1	-0.9	-0.3	-0.7	-1.5	-1.5	-1.3	1.4	4.4	6.8	8.5	9.5	10.7	11.6	11.5	10.6	9	8.4	8.1	7.8	7.1	6.9	6.3	5.1
Avg	0.6	0.4	0.2	-0.1	-0.4	-0.5	-0.7	-0.7	0.3	1.6	2.7	3.6	4.3	4.9	5.1	5	4.4	3.4	2.7	2.1	1.6	1.2	0.8	0.4	1.8
SD	4.8	4.9	5.1	5	5.1	5.1	5.1	5.1	4.8	4.6	4.2	4.2	4.3	4.1	4	3.8	3.5	3.5	3.4	3.4	3.3	3.4	3.4	3.5	3.8
S/A	8.15	13.34	30.99	-42.1	-14.1	-10.3	-6.95	-7	18.1	2.8	1.57	1.16	0.98	0.85	0.79	0.76	0.81	1.03	1.28	1.64	2.06	2.75	4.14	7.92	2.13
Min	-5.7	-6.3	-6.7	-7	-7.4	-7.8	-8	-8	-6.4	-4.5	-3.7	-3	-2.5	-2.1	-2	-2.1	-2.5	-2.8	-3.1	-3.4	-3.6	-4	-4.6	-5.1	-4.1
Max	18.3	18.2	18.1	17.8	17.8	18.3	18.4	19.1	19.9	20.2	17.8	17.5	17.9	17.4	16.7	15.3	12.8	11.9	11.5	11.4	11.1	9.6	10.5	11	14.3
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**December 2010**

**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	99	98.2	98.3	101.7	102.2	100.7	100.8	101	97.1	94.1	97.3	87.3	71.5	66	66.5	72.1	72.1	69.8	71.6	73.3	67.4	69	72.3	76.5	84.4	
2	80.3	82.4	83.9	87.2	87	88.8	97.5	97.1	84.6	73.3	61.5	58	58.1	56.1	54.8	56.7	61.5	67.7	71.5	74.5	81	84.8	84.5	89.9	76	
3	97.5	97.4	93.6	94.4	97.7	97.6	96	91.1	84.1	78.4	70.6	63	60.5	61	59.2	58.9	63.3	70.7	75.4	76.5	77.7	78.8	82.7	87.8	79.7	
4	93.3	93.5	96.3	99	100.1	95.9	93.5	96.9	86	78.8	70	64.5	58.7	57.6	57.5	58.2	63.9	66.8	73.8	85.6	102.6 ?	?	?	?	80.6 ?	
5	?	?	?	?	?	?	?	?	103.8 ?	100.4	88.9	78.2	71.3	60.8	58.2	59	63.7	69.8	74.7	74.2	73.3	73.1	76.5	76.8	75.2 ?	
6	76.8	76	74.9	78.1	82	86.4	87.7	85.9	80.3	71.4	60.6	54.3	51.6	49.5	50.1	51.4	54	59.3	62.5	63.5	63	63.9	66.2	67.5	67.4	
7	68.1	68.9	71.1	72.1	74	75.9	77.1	75.8	70.3	60.9	53.5	49.3	46.6	44.9	43.7	43.8	47.4	54.3	58.5	60.8	62.8	64.8	65.3	66.2	61.5	
8	70.1	73.1	77.7	78.8	81.7	82.1	82.4	82.1	73.6	62.6	54.2	48.3	45.3	43.8	43.1	44.8	47.7	52.2	54.3	57.2	58.9	61.1	66.3	69.3	62.9	
9	69.2	66.2	66.6	65	67.1	68.4	76.2	79.1	70.1	59	56.2	50.8	47.5	45.8	44.6	43.7	49.9	61	71.7	73.3	76.1	76.4	82.4	88.7	64.8	
10	94.7	89.3	85.6	87.2	87.7	86.6	87.6	89.8	86.3	82.8	81.9	77.3	72.8	73.6	75.6	80.1	82.9	90.3	95.5	99.2	101.1	103.5	104.7 ?	?	87.6	
11	?	?	?	?	?	?	?	?	?	?	?	104.6 ?	104.7	104.8 ?	?	?	?	?	?	?	?	?	?	?	?	?
12	104.4	104.1	103.4	104	104.1	100.3	100	102.6	101.2	100.4	98	97.8	98.8	101.3	103.9	104.6 ?	?	?	?	?	104.5	102.5	86.9	91.8	97.3	100.6 ?
13	91.2	90.6	89.1	89.5	91.8	95.7	99.1	94.2	94.8	101.9	104.1	104.3 ?	102.4	100.2	99.2	96.7	93.5	90	84.8	74.9	65.2	61.1	64.5	67	89.4	
14	66.3	70.7	72.5	72.8	72.3	71.5	71.5	69.6	64.2	58.6	54.4	52.5	49.7	47.8	45.9	43.2	43.5	45.8	48.3	47.9	47.8	49.6	54.2	58.5	57.5	
15	63.5	65.9	69.5	72.2	74.7	77.4	80.5	83.6	77.8	68.1	57.2	51.7	42.5	38.6	34.4	35.8	40.2	46.8	50.6	54.5	56.4	59.3	63.3	62.5	59.5	
16	62.3	64.5	68.5	67.8	71.3	75	75.2	81.2	87.7	80.6	91.1	?	?	?	?	?	?	?	?	?	?	?	?	?	75 ?	
17	?	?	?	?	?	?	?	?	103.9 ?	101.6	99.3	94.5	85.4	70.8	60.6	60.4	65.7	77.6	83.3	91.6	94.1	95.3	97.3	97.6	86.2 ?	
18	99.5	98.2	98.7	99.6	98.6	95.7	94.8	95.6	96.1	91.3	89.4	86.3	85.1	87.3	90.9	96.4	98.6	97.7	100.9	?	?	?	?	?	94.8 ?	
19	?	?	?	?	104.8 ?	102.5	98	99.2	96.4	88.4	82.9	79.8	79.5	76.7	71.4	68.9	72.1	78.6	81.9	83.1	84.8	86.4	87.5	87.8	85.5 ?	
20	89.9	90.6	88.2	85.5	85.4	85.1	85.8	85.5	82.1	77.9	73.4	67.8	63.5	62.2	61.2	60.8	63.3	68.7	73	74	74.8	76.7	78.2	80.2	76.4	
21	80.4	79.4	78.1	81	84.6	86.6	87.2	85.8	80	70.8	61.6	57	52.7	49.7	49.8	48.7	52.6	55	58.9	65.2	71.6	69.8	70.7	71.1	68.7	
22	68.9	69.8	70.5	76.7	75	73.7	73.5	72.1	67.8	64.8	62.1	58.2	56.3	57.3	54.5	59.2	60.9	67	69.9	73.5	78.2	76.6	74.5	75.9	68.2	
23	75.8	76.6	76.5	79.9	81.5	83	84	81.8	78.7	71.4	67	62	57.8	53.9	51.8	51	52.5	55	58.9	62.2	64.5	67.6	70.1	74.4	68.2	
24	81.6	83.3	83.2	83.8	84	83.1	83.5	83.4	77.6	73.7	69.7	66.2	62.4	60.8	57.7	57.7	59.7	66.4	71.3	76.2	77.7	83.3	88.1	92.7	75.3	
25	92.6	95.5	96.9	97.2	97	96.5	96.4	95.1	93.2	81.2	75.6	76.4	77.1	73.8	71.7	69.7	69.3	82.7	87.4	87.9	90.9	95.6	99.3	104.4 ?	87.7	
26	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
27	?	?	?	?	?	?	?	?	103.9 ?	97.3	87.9	79.2	70.7	66.3	62.4	60.2	61.2	60.5	60.6	68.3	69.5	67.4	69.3	71.4	72.3 ?	
28	74.2	76.1	78.1	78.7	79.7	79.3	80.5	81.5	77.5	73.8	71.3	68.5	65	61.4	59.8	54.8	55.1	60.9	63.3	66.8	70.1	72.8	73.2	71.2	70.6	
29	70	69.4	72.2	75.5	75.1	75.8	79.1	80.3	73.3	63.2	57.2	57.2	59.3	60	60.9	63.2	69	75.2	85.1	90.4	91.6	96.6	97.2	99.2	74.8	
30	98.3	101.5	100.3	102	101.5	101.9	97.7	100.8	93.3	82.6	70	57.8	56.3	58.4	58.5	59.6	69.3	76.3	80.3	82.5	86.8	92.1	90.3	95.2	83.9	
31	96.2	96.2	100.3	93	95.8	100.3	98.2	97.5	82.5	74.7	66.4	62.4	55.9	52.2	52	53.6	59.8	66.2	69.5	73.1	76.8	80.3	83.9	89.5	78.2	
Avg	82.6	83.1	83.8	84.9	86.8	87.2	87.8	88	85.1	78.8	73.6	69.5	65.8	63.5	60.7	61.2	62.7	67.9	71.8	74.6	76.6	76.6	79	80.7	76.3 ?	
S D	13.3	12.8	11.9	11.5	11.5	10.6	9.4	9.3	11.4	13.4	15.4	16.7	16.9	17.1	16.1	16.5	13.6	13	13.1	13.2	14.3	13.4	13	13	10.7	
S/A	0.16	0.15	0.14	0.14	0.13	0.12	0.11	0.11	0.13	0.17	0.21	0.24	0.26	0.27	0.27	0.27	0.22	0.19	0.18	0.18	0.19	0.18	0.16	0.16	0.14	
Min	62.3	64.5	66.6	65	67.1	68.4	71.5	69.6	64.2	58.6	53.5	48.3	42.5	38.6	34.4	35.8	40.2	45.8	48.3	47.9	47.8	49.6	54.2	58.5	57.5	
Max	104.4	104.1	103.4	104	104.8	102.5	100.8	102.6	103.9	101.9	104.1	104.6	104.7	104.8	103.9	104.6	98.6	97.7	100.9	104.5	102.6	103.5	104.7	104.4	100.6	
n	300	300	300	300	307	312	312	312	332	348	347	337	347	339	336	330	324	324	323	324	318	312	307	293	7664	

Data Recovery: 0.0% missing; 0.0% untested; 13.9% failed QC -- 8928 total measurements.

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

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

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

Prepared by: Afshin M. Andreas, NREL

December 2010

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	18.4	18.2	17.8	17.7	17.8	18	18.2	18.5	19	20.1	20.1	18.7	19.9	20.8	20.2	19.1	16.8	13.4	10.4	8	6.1	4.8	3.5	2.4	15.3
2	1.3	0.5	-0.2	-0.6	-1	-1.2	-1.8	-2.3	0.9	5.4	9.8	12.1	13	12.4	12.3	12.1	9.5	7.3	5.2	3.9	3.6	3.1	2.9	3	4.6
3	2.3	1.6	1.8	2.1	2.1	2.3	2.8	3.1	3.3	4	6.2	9.4	11.3	12.1	11.4	11.1	9.8	6.6	4	3	2.5	2.8	2.4	1.8	5
4	1.5	1.1	0.5	-0.4	-1.1	-1.6	-1.8	-2.2	0.1	4.2	7.4	9	9.6	9.9	9.1	8.6	6.6	5.1	4.1	3.4	2.5	1.4	0.9	0.6	3.3
5	0.5	0.4	0.3	0.1	0	-0.4	-1.1	-1.5	-0.6	2	4.6	5.5	5.8	6.9	7.5	6.9	5.8	3.6	1.4	0.2	-0.2	-0.7	-1.2	-1.5	1.8
6	-2	-2.6	-3.1	-3.3	-3.6	-3.9	-4.2	-4	-1.5	2	4.9	7	7.9	8	7.5	6.8	5.7	3.4	1.2	-0.1	-0.8	-1.4	-2.1	-2.7	0.8
7	-3.2	-3.6	-4	-4.4	-4.7	-5.1	-5.4	-5.4	-3.3	0	2.8	4.2	5.8	6.5	6.2	5.9	4.7	1.9	-0.5	-1.9	-2.6	-3.1	-3.6	-4	-0.7
8	-4.4	-5.1	-5.8	-6.5	-7.1	-7.7	-7.9	-7.6	-4.9	-0.3	3.5	6.1	7.6	7.8	6.9	5.4	3.5	1.3	-0.4	-1	-1.1	-1.1	-1.2	-1.3	-0.9
9	-1.4	-1.6	-2	-2.4	-2.8	-3.3	-4.1	-5.2	-2.5	2.2	5.1	7.1	8.7	9.1	9.1	8.8	7.5	3.6	0.3	-1.3	-2	-2.7	-3.6	-4.8	0.9
10	-4.9	-4.7	-4.8	-4.3	-3.9	-3.4	-2.9	-2.9	-0.6	4.7	7.9	10.9	14.1	15.5	15.5	14	11.9	9.9	7.6	5.5	4.1	3.2	2.6	2	4
11	2.1	2.2	2.1	1.9	2	2.2	2.5	2.9	4.1	5.4	6.4	7.7	8.9	9.8	9.9	9.6	9.3	8.8	8.6	8.8	9.2	9.5	10	10.7	6.4
12	11.2	11.9	12.9	13.8	14.3	14.3	13.5	12.6	12.2	12.2	12.4	12.8	12.8	12.6	12.4	12.1	11.4	11.4	11.7	11.6	11.3	10.4	9.2	8.4	12.1
13	7.7	7.4	6.9	6	4.5	3.2	2.6	2	1.3	0.7	0	-0.2	-0.1	0.3	0.6	0.5	0.4	-0.5	-1.2	-0.9	-1.1	-1.6	-2.4	-3.7	1.3
14	-4.9	-5.7	-6.2	-6.5	-6.7	-6.8	-6.9	-6.9	-5.3	-2.8	-0.7	0.7	1.7	1.7	1.4	1.1	0.4	-1.5	-3.2	-4.3	-4.8	-5.2	-5.6	-6.1	-3.5
15	-6.7	-7.2	-7.6	-8	-8.4	-8.8	-9.4	-9.5	-7.2	-3.6	-0.3	2	3.6	4.5	4.7	4.5	3.7	1	-1.4	-2.6	-3.4	-4.1	-4.8	-5.4	-3.1
16	-5.6	-5.8	-6.4	-6.7	-6.3	-6	-4.8	-3.6	-2.4	-0.9	0.1	0.3	0.1	0.2	0.5	0.7	1	1.4	1.5	1.5	1.6	1.6	1.7	1.7	-1.4
17	1.7	1.6	1.5	1.4	1.1	0.7	0.3	-0.4	-0.9	-0.3	1.7	5.6	8.4	10.1	10.6	10	8.5	4.7	1.3	-0.4	-1.8	-2.3	-2.6	-3.2	2.4
18	-3.5	-3.4	-3.4	-3.6	-3.6	-2.9	-2.2	-1.5	-0.6	1.8	4.3	5.6	6.6	7	6.7	6	5.2	4.6	4.1	3.3	3	2.7	2.5	2.3	1.7
19	2.3	2.5	2.6	2.4	2	1.7	1.4	1.4	1.5	2.1	3.2	5	7.3	7.9	7.7	7.3	6.1	3.8	1.7	0.4	-0.5	-1.2	-1.9	-2.2	2.7
20	-2.6	-3	-3.3	-3.4	-3.7	-4	-4.2	-4.3	-2.6	0.3	3	5.2	6.7	7.4	7.4	7.1	6.2	3.7	1.3	-0.3	-1.4	-2.1	-2.6	-3.1	0.3
21	-3.3	-3	-2.8	-2.7	-3.4	-4	-4.2	-4.2	-1.9	1.8	4.8	7.4	8.9	9.6	9.8	9.3	8.6	6.2	4	2.8	2	2.2	2.7	2.9	2.2
22	3	2.6	2.7	2.7	2.7	2.8	2.9	2.9	3.1	4	4.8	5.9	7.4	8.4	8.2	7.6	6.9	5.2	3.2	1.8	0.8	0	-0.3	-0.6	3.7
23	-0.9	-0.5	0	0.1	-0.2	-0.6	-1.1	-1.4	0.1	2.9	5.4	7.1	8.3	9.3	9.5	9.5	9	6.8	4.7	3.3	2.5	1.8	1.1	0.5	3.2
24	-0.4	-1.5	-1.9	-2	-2.1	-2.1	-2.2	-2.2	-0.4	2.8	5.5	7.8	9.4	10.2	10	9.7	8.3	5.3	2	0.3	-1	-2.1	-3.1	-3.8	1.9
25	-4.2	-4.4	-4.3	-4.2	-3.8	-3	-2.5	-2.2	-1.2	1.3	5.5	7	6.7	6.5	6.9	6.7	5.9	4.9	3.9	3.2	2.8	2.6	2.3	2	1.6
26	1.8	1.5	1.1	0.9	0.8	0.7	0.5	0.4	0.2	0.1	0.1	0.1	0.2	0.1	-0.2	-0.3	-0.6	-1.3	-1.8	-2.1	-2.2	-2.3	-2.4	-2.5	-0.3
27	-2.6	-2.5	-2.5	-3	-3.8	-4.5	-4.8	-4.6	-3.5	-1.7	1.1	3.4	4.3	4.2	4.3	3.9	3	1.6	0.1	-0.6	-1.1	-1.4	-1.6	-2	-0.6
28	-2.5	-2.9	-2.9	-2.7	-2.6	-2.6	-3.1	-3.9	-2.7	0.2	3.1	5.4	6.8	7.7	8.2	8	7.7	5.1	1.9	0.4	-0.7	-1.2	-1.4	-1.4	1
29	-1.4	-1.3	-1.5	-2	-2.6	-3.1	-3.7	-4.2	-2.4	2	7.3	11.3	13.2	13.1	12.1	10.9	8.5	4.9	2	0.2	-0.9	-1.9	-2.9	-3.6	2.3
30	-4.1	-4.4	-4.5	-4.9	-5.3	-5.4	-5.3	-5.3	-3.6	0.7	6	9.5	10.4	9.9	8.9	8.3	7.3	5.7	4.2	3.6	2.8	1.3	0.4	-0.5	1.5
31	-1.2	-1.7	-2	-2.3	-2.3	-2.8	-3.1	-3.3	-0.5	5.8	11.3	14.3	15.9	16.3	16.2	15.7	14.3	11.3	9.1	8	7.3	6.5	6.1	5.8	6
Avg	-0.2	-0.4	-0.6	-0.8	-1	-1.2	-1.4	-1.4	-0.1	2.6	5.1	6.9	8.1	8.6	8.4	8	6.9	4.8	2.9	1.9	1.2	0.6	0.2	-0.3	2.4
S D	5.2	5.3	5.4	5.5	5.5	5.6	5.5	5.5	4.9	4.4	4.3	4.3	4.5	4.6	4.5	4.3	3.9	3.6	3.6	3.6	3.7	3.7	3.7	3.9	3.8
S/A	-26.1	-12.2	-8.75	-6.8	-5.46	-4.63	-4.09	-3.82	-53.8	1.73	0.84	0.62	0.56	0.54	0.53	0.54	0.57	0.75	1.23	1.95	3.13	5.86	22.87	-14.4	1.56
Min	-6.7	-7.2	-7.6	-8	-8.4	-8.8	-9.4	-9.5	-7.2	-3.6	-0.7	-0.2	-0.1	0.1	-0.2	-0.3	-0.6	-1.5	-3.2	-4.3	-4.8	-5.2	-5.6	-6.1	-3.5
Max	18.4	18.2	17.8	17.7	17.8	18	18.2	18.5	19	20.1	20.1	18.7	19.9	20.8	20.2	19.1	16.8	13.4	11.7	11.6	11.3	10.4	10	10.7	15.3
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

Instrument: 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 2010**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	4.7	4.3	5	5.9	5.7	6.4	5.9	6.5	6.8	6.1	4.7	4.9	5.4	6.3	6	5	4.1	4.2	3.9	3.7	3.8	2.9	2.2	1.9	4.9
2	1.9	1.5	1.8	1.9	2.3	1.2	0.5	0.9	1.8	1.3	2.2	1.3	1	0.7	1.2	1.1	0.8	0.4	0.5	0.2	0.1	0	0	0	1
3	0.2	0.7	0.7	0.5	0.6	1.8	2.4	2.9	3.4	3	3.8	3.7	2.6	2.7	2.7	2.4	1.8	0.9	1.2	0.7	0.7	0.9	0.4	0.7	1.7
4	0.7	0.6	0.7	1	0.7	1.7	1.1	0.7	1.6	2.1	1.8	2.2	2.8	1.5	1.4	1.2	1.6	1.7	0.8	0.5	0.3	0.2	0.1	1.2	1.2
5	1.2	1.1	1.6	1.8	2	1.8	1.9	1.8	1.8	2.7	4.6	4.3	4.5	3.6	4.4	4.2	3	1.7	1.1	2.1	1.9	1.9	2.6	2.6	2.5
6	2.4	2.4	3	2.5	2.6	2.3	2.5	2.8	3.7	3.9	4.4	4.7	4.6	5	4.9	4.6	4.3	3.4	2.9	3.4	3.8	3.1	3.1	3.3	3.5
7	3.1	3.4	3.2	3.2	3.4	3.2	2.9	2.3	3.1	3.6	4	3.2	3.4	3.7	3	3.4	2.6	2.1	2	2.3	2.7	2.6	2.7	2.7	3
8	2.2	1.6	1.9	1.4	1.1	1.5	1.8	2.1	1.7	2	2.4	2	2.2	2.4	2.4	2.6	1.9	0.8	0.5	0.5	0.7	0.4	0.5	0.9	1.6
9	1.8	2.4	2.4	1.9	0.7	0.6	0.3	0.5	0.9	2.8	3.3	2.3	2.5	1.9	1.4	1.1	1.2	1.2	1.3	1.4	1	0.5	0	0.3	1.4
10	0.7	0.5	0.5	1	1.3	0.9	1.3	1	1.3	2	1.3	1.4	1.1	2	2.4	1.5	0.7	1	0.6	0.7	0.7	1.2	0.8	0.8	1.1
11	1.1	1.5	1.6	1.9	1.6	1.5	2.2	2	2.1	1.9	1.6	1.3	1.8	1.5	0.1	0.4	1.2	2.3	2.1	2.1	1.7	1.8	2.9	3.9	1.7
12	4.3	5	4.6	4.6	4.1	5.2	4.8	4.1	3.8	2.6	2.8	2.3	0.9	0.9	0.6	1.3	1	2.4	3.2	3.4	4.3	3.5	2.6	1.9	3.1
13	2.6	3.1	4.2	4.1	4.1	4.2	4.7	5.8	4.8	5.3	5.6	5.9	5.3	5	4	4.1	2.9	2	3.7	4	4.8	5	4.4	3.5	4.3
14	3.2	3.3	3.4	3.6	3.8	4	3.7	3.9	4.8	5.6	5.6	4.9	5.4	5.5	5.6	5.5	4.6	3.6	2.8	2.9	2.8	2.8	2.5	2.6	4
15	2.4	2.8	2.8	2.7	2.6	1.8	1.9	2	3.5	3.6	4.2	3.8	3.9	3.8	4.1	3.6	2.7	2.2	2.4	1.9	1.6	1.3	0.8	1.3	2.6
16	0.9	0.6	0.3	0.4	0.5	0.4	0.8	1	1.7	1.8	1.8	2.5	2.1	1.1	0.8	0.4	0.5	0.1	0.3	1.4	1.2	0.3	0.2	0	0.9
17	0	0.5	1.2	1.3	2	1.6	1	0.5	1.2	1.9	1.7	1.5	1.1	0.8	1.2	1.3	0.8	0.2	0.5	0.2	0.1	0.2	0	0	0.9
18	0.5	0.6	0.4	0.2	0.8	1.3	0.9	1.2	1.4	1.6	1.9	2.2	2.6	2.2	2.4	1.8	1.4	2.2	1.6	1.5	2.3	2.5	2.6	2.7	1.6
19	2.7	3.3	3.4	3.7	3.1	3.6	3.8	3.5	3.7	4.2	4.6	5.6	5.3	5.2	4.7	4.2	3.8	2.5	2.9	2.9	2.6	2.2	2.4	2.6	3.6
20	2	2.3	3.1	3.1	3.1	3.3	2.7	3.1	3.4	4.6	4.6	4.4	4.2	3.7	3.7	3.5	3.2	2	1.6	1.3	1.3	1.4	1.1	1.3	2.8
21	2	2.5	2.8	1.9	1.7	2.2	2.1	2	2.3	3	3.8	3.9	3.8	3.7	3.9	3	1.9	1.1	1	1.7	1.1	0.9	0.6	0.6	2.2
22	0.8	0.3	0.3	0.4	0.3	0	0.2	0.2	0.5	0.9	0.9	1.1	1.4	1.4	2.3	1.2	0.8	1	1.1	1	0.9	1.1	1.2	1.3	0.9
23	2.2	3.4	4.2	3.6	3.8	3.3	3.2	3.5	3.5	4.1	5.4	5.1	4.8	5.4	5.1	4.8	3.6	3.4	2.7	3.1	3.7	3.2	3	2.5	3.8
24	1.9	2.2	2.5	2.4	2.3	2.4	2.5	2.3	2.8	3.8	3.1	3.1	2.3	2.4	1.8	2	1.3	0.3	0.3	0.3	0.2	0.1	0.2	0	1.8
25	0	0.1	0.1	0.2	0.4	0.1	0	0	0.2	0.4	0.7	0.6	0.8	0.7	0.5	0.5	0.8	1.5	1.5	1.3	1.1	1.7	2.2	2.9	0.8
26	1.6	1.8	2.9	2.8	3.5	4.4	4.3	3.9	4.5	4.7	5.3	5	4.9	4.7	4.3	4	4	3.5	3.4	3.7	2.8	3	2.9	3.3	3.7
27	3.5	3.5	3.4	2.9	3	3	3.2	4	4.3	4.4	4.4	4.5	4.5	4.3	3.6	3.6	3	3.3	3.4	4.1	4.1	4.1	4.7	4.4	3.8
28	4.4	3.7	3.8	4	3.4	3.6	2.9	3.3	3.8	3.3	3.8	3.9	3.5	2.7	3	2.8	0.9	0.9	0.9	0.8	0.9	1.5	1.4	1.4	2.7
29	2	1.9	1.5	1.3	1.6	1.1	1	0.8	0.9	0.9	1.2	1.2	1.9	1.9	2.3	1.9	1	0	0	0	0	0	0	0	1
30	0	0.2	0	0	0.1	0.3	0.1	0.4	0.8	1.4	1.5	1.4	1	0.4	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.4	0	0	0.4
31	0	0	0.2	0.3	0	0	0	0	0.3	0.3	1.1	1.2	1.7	1.6	1.5	1.6	1	1.1	1.3	1.2	0.8	1	1.4	0.3	0.7
Avg	1.8	2	2.2	2.1	2.1	2.2	2.1	2.2	2.6	2.9	3.2	3.1	3	2.9	2.8	2.5	2	1.7	1.7	1.8	1.7	1.7	1.6	1.6	2.2
S D	1.3	1.4	1.5	1.5	1.4	1.6	1.6	1.7	1.6	1.5	1.6	1.6	1.6	1.7	1.7	1.5	1.3	1.2	1.2	1.3	1.4	1.3	1.4	1.3	1.3
S/A	0.71	0.69	0.68	0.69	0.68	0.73	0.73	0.75	0.62	0.53	0.5	0.51	0.51	0.59	0.61	0.6	0.64	0.68	0.71	0.73	0.82	0.79	0.85	0.8	0.57
Min	0	0	0	0	0	0	0	0	0.2	0.3	0.7	0.6	0.8	0.4	0.1	0.2	0.2	0	0	0	0	0	0	0	0.4
Max	4.7	5	5	5.9	5.7	6.4	5.9	6.5	6.8	6.1	5.6	5.9	5.4	6.3	6	5.5	4.6	4.2	3.9	4.1	4.8	5	4.7	4.4	4.9
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	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 2010**

**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	143	143	141	141	140	146	155	155	165	168	204	227	232	246	242	256	279	279	289	291	292	285	284	278	201
2	271	281	282	292	294	271	250	276	306	334	343	330	269	260	247	275	290	297	283	277	272	306	0	273	291
3	263	268	296	292	306	341	325	327	327	324	326	319	326	295	282	292	285	282	280	285	301	320	306	263	310
4	273	282	282	289	288	301	284	279	293	298	294	284	283	287	279	270	220	232	279	287	290	312	302	327	282
5	318	307	310	297	297	290	284	283	282	280	301	300	299	298	290	296	291	285	262	275	277	276	274	286	291
6	282	275	265	265	265	263	260	259	267	272	281	273	275	272	266	269	266	266	265	264	268	272	274	274	269
7	278	274	272	271	269	268	269	277	276	288	291	291	287	294	288	277	277	273	263	261	266	267	276	272	277
8	273	277	274	279	283	288	274	277	293	292	298	295	293	257	261	256	259	259	238	240	257	265	240	250	274
9	305	326	333	330	301	299	293	289	297	330	347	1	334	335	20	341	47	57	63	63	64	39	33	21	347
10	12	312	327	340	353	346	321	338	341	3	20	48	40	91	86	80	117	54	52	356	342	343	335	336	18
11	330	333	345	350	3	3	21	6	6	12	16	336	41	29	311	339	332	28	52	35	32	56	72	97	24
12	115	123	130	123	154	185	190	190	190	179	186	186	164	118	82	80	127	173	175	184	197	242	224	204	169
13	217	222	230	223	225	242	253	261	258	259	260	262	266	270	274	275	285	274	278	283	292	292	287	285	263
14	280	272	276	272	275	274	275	274	278	284	282	284	281	274	276	276	277	273	271	272	278	274	281	271	277
15	279	269	271	282	279	284	267	254	268	276	272	274	282	289	275	277	270	271	266	250	239	221	209	227	270
16	240	229	201	208	202	201	199	157	163	177	195	173	159	148	150	193	236	251	268	266	266	291	300	274	193
17	272	325	333	331	344	327	317	320	325	336	343	318	331	18	348	14	31	3	30	53	27	14	0	17	341
18	349	9	6	359	348	352	3	19	28	25	44	50	55	51	44	29	11	5	359	19	345	5	356	356	18
19	13	14	354	356	353	333	332	344	353	337	354	341	340	335	337	326	330	317	316	315	310	303	306	307	337
20	303	304	303	298	297	299	296	296	302	315	313	307	296	292	293	292	293	292	280	290	281	279	278	283	298
21	283	295	292	286	280	275	281	284	285	295	302	293	289	280	268	270	276	283	265	265	262	283	276	292	283
22	297	288	275	246	241	287	284	279	323	350	343	329	289	284	299	288	288	284	282	284	282	291	280	287	294
23	307	311	314	313	305	301	297	305	298	300	304	308	301	299	300	303	304	302	294	296	296	297	299	290	302
24	286	293	292	303	299	312	314	320	323	328	336	336	315	272	301	290	291	287	273	262	285	237	2	270	309
25	268	263	262	265	254	296	313	295	8	50	92	83	52	68	60	46	74	62	54	46	6	31	22	23	40
26	36	5	359	1	4	356	360	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	10
27	12	12	12	12	12	12	12	12	276	273	277	283	288	287	282	281	273	277	272	267	271	274	274	274	300
28	278	277	271	270	275	273	276	266	265	265	264	255	256	249	236	246	249	255	265	261	242	241	239	247	262
29	254	262	260	254	258	268	267	274	299	334	4	22	25	2	350	355	4	346	274	277	0	0	0	0	313
30	304	271	0	0	247	303	283	272	300	13	356	348	19	33	21	18	256	122	261	18	278	264	305	26	343
31	0	13	278	276	0	248	247	227	242	205	154	191	209	174	194	203	171	180	194	192	187	188	188	181	191
Avg	289	292	293	292	290	289	287	289	288	299	303	299	297	292	289	290	292	291	287	286	285	291	291	293	290
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.

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 2010**

**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	7.6	7.2	8	10.3	9.6	10.7	9.5	10.9	11.7	10	9	9	9.2	10.6	10.3	9.3	8.6	8.5	7.9	7	7.7	5.7	4.8	3.6	8.6
2	3.7	3	3.7	3.7	4.7	2.2	1	1.8	3.6	2.8	4.2	2.9	2.5	2	2.7	2.7	2.3	1.4	1.2	0.7	0.3	0.1	0	0.2	2.2
3	0.6	1.3	1.4	1.4	1.5	3.2	4.8	5.6	5.9	5.7	6.6	6.8	5.5	5.4	5.5	5.2	3.8	2	2.4	1.6	1.5	1.8	1.3	1.2	3.4
4	1.6	1.5	1.9	2.2	1.9	3.8	2.5	1.7	3.7	4.2	4.3	4.6	5.4	3.9	3.2	2.5	2.9	3.4	1.9	1.5	1	1	0.7	2.6	2.7
5	3	3.3	3.8	4.1	4.6	4.5	4.4	4.3	4.1	5.8	9.5	9.2	9.3	8.3	8.8	8.6	6.1	2.9	1.9	3.9	3.7	3.7	5.2	5.3	5.3
6	4.7	4.4	5.2	4.4	4.5	4	4.1	5	6.5	7.5	8.8	9.6	9	9.6	9.1	8.3	8.3	6	5.2	6	6.7	6	6.1	6.5	6.5
7	6.5	6.5	6.2	5.9	6	5.8	5.2	4.8	6	7.3	8	6.6	7.1	7.1	6.3	6.3	5.3	4	3.4	3.9	4.4	4.7	5.5	4.9	5.7
8	4	3.1	3.4	2.9	2.7	2.8	3.4	4	3.9	4	4.8	4.3	4.9	4.7	4.6	4.6	3.4	1.7	0.9	1.1	1.2	1.1	1.1	1.5	3.1
9	3.5	4.2	4.2	3.4	1.9	1.4	1	1.4	2.1	5.3	5.7	4.5	4.7	4.2	2.9	2.5	2.3	2.1	2.2	2.2	1.6	1	0.2	0.6	2.7
10	1.1	0.9	1.1	1.7	2	1.9	2.2	1.8	2.4	3.4	2.5	2.7	2	3.6	3.7	2.5	1.4	1.8	1	1.2	1.2	1.8	1.3	1.4	1.9
11	1.9	2.5	2.8	3.2	2.8	2.8	3.6	3.4	3.6	3.3	2.8	2.6	3.3	2.8	0.7	1.2	2.4	3.9	3.7	3.6	3.3	3.2	4.7	6.3	3.1
12	7.2	7.9	7.8	7.3	7	8.6	7.9	6.4	6.4	4.7	5.1	4.1	2.1	1.9	1.4	2.3	2	4.4	5.5	5.4	7.1	6.3	4.9	3.8	5.3
13	4.9	6	7.4	7.5	7.4	7.2	8.5	10	8.4	9	9.7	9.9	9.7	9.8	8	8.2	5.8	4.1	7.2	8.1	9.9	9.9	9	6.8	8
14	6.5	6.9	6.6	7	7.2	8	7.5	7.6	9	10.9	10.6	9.9	10.7	10.8	11.1	11	8.7	7.3	5.5	5.4	5.7	5.2	4.9	5.3	7.9
15	5.2	4.7	5.1	5.4	5.2	3.8	3.3	3.4	6.8	7	7.6	7.1	7.7	7.6	8	7.3	5.3	3.9	4.1	3.1	2.6	2.5	1.6	2.3	5
16	1.5	1.2	0.7	0.8	1	1	1.8	1.9	2.9	3.2	3.4	4.6	3.8	2.4	2.2	1.5	1.6	0.5	1.2	3.1	2.7	1.4	0.7	0.1	1.9
17	0.2	1.5	2.6	3	3.8	3.2	2.5	1.6	3.2	4.2	3.1	3.4	2.6	1.9	2.6	2.4	1.5	0.6	1.1	0.7	0.6	0.6	0	0.1	2
18	1	1.3	0.9	0.6	1.6	2.2	1.7	2.2	2.7	3	3.2	4	4.5	3.8	4.3	3.3	2.5	4	3	3	4	4.6	4.9	4.6	3
19	5	6.1	6	6.7	5.7	6.5	6.9	6.2	6.3	7.7	8.3	9.3	9.1	8.8	8.6	7.8	6.7	4.8	5.5	5.8	5.4	4.8	5.2	5.2	6.6
20	4.1	5	6.7	6.4	6.3	7.5	6	6.6	7.1	9.2	9.6	8.9	8.5	8	7.9	7.4	6.5	4	3.1	2.9	2.8	2.6	2.3	3	5.9
21	4.3	5	5.8	3.9	3.8	4.3	4.5	4.1	4.7	6.6	8.1	7.7	7.6	7.6	7.1	5.7	3.7	2.5	1.9	2.8	2.5	2.5	1.8	2	4.6
22	1.9	1.2	1.1	1.2	0.9	0.3	0.7	0.9	1.6	2	2.1	2.5	3.2	3.4	4.5	3	2	2.3	2.4	2.1	2	2.4	2.6	2.9	2.1
23	4.4	7.3	8.4	7	8.1	7.2	6.9	7.2	7.7	8.4	11	9.9	10	10.8	11.4	10.6	7.7	7.5	6	6.7	7.1	6.8	6.7	5.1	7.9
24	3.8	4.6	5.2	5.5	5.2	5	5	4.5	5.6	7.2	5.9	5.5	4.8	5	4.1	4.1	3	1.1	0.7	0.9	0.5	0.2	0.5	0.1	3.7
25	0.2	0.3	0.3	0.6	1.1	0.3	0.3	0.2	0.5	1.2	1.7	1.4	1.4	1.5	1.3	1.3	1.6	2.9	2.7	2.3	2.3	3	4.3	5.2	1.6
26	2.9	3.4	5.1	5.4	6.9	7.5	8	7	8	7.5	9	9.4	9.8	9.3	8.9	8.3	8.3	7.5	7.1	7.2	6.1	5.8	6.1	6.8	7.1
27	6.7	6.8	7.2	5.5	5.2	5.3	5.8	6.8	7.8	8.3	9	8.9	9.3	8.5	7.7	6.8	5.8	6.1	6.6	6.8	7.2	7.8	8.4	8.3	7.2
28	8	7.4	6.8	6.9	6.6	6.6	5.7	5.5	6.6	6	6.7	6.4	5.7	5	5.3	4.9	1.8	1.5	1.6	1.2	1.6	2.4	2.4	2.3	4.8
29	3.3	3.1	2.3	2	2.5	2	1.8	1.5	2.1	2	2.1	2.5	3.5	4	4	3.7	1.8	0.2	0.1	0.1	0	0	0	0	1.9
30	0	0.4	0	0	0.3	0.6	0.4	0.8	1.5	2.5	2.8	2.5	2	1.1	0.2	0.7	0.6	0.6	0.4	0.3	0.1	0.8	0.1	0	0.8
31	0	0	0.7	0.7	0	0.1	0	0.1	0.8	0.8	2	2.4	3.3	3	2.7	3.2	1.9	2.2	2.3	2.1	1.7	1.9	2.6	1.3	1.5
Avg	3.5	3.8	4.1	4.1	4.1	4.2	4.1	4.2	5	5.5	6	5.9	5.9	5.7	5.5	5.1	4	3.4	3.2	3.3	3.4	3.3	3.2	3.2	4.3
S D	2.4	2.5	2.6	2.6	2.6	2.8	2.7	2.8	2.7	2.7	3	2.9	3	3.1	3.2	3	2.5	2.3	2.2	2.3	2.7	2.5	2.6	2.5	2.3
S/A	0.67	0.64	0.63	0.64	0.62	0.67	0.66	0.68	0.55	0.5	0.49	0.49	0.5	0.55	0.58	0.59	0.63	0.67	0.7	0.7	0.79	0.76	0.81	0.77	0.54
Min	0	0	0	0	0	0.1	0	0.1	0.5	0.8	1.7	1.4	1.4	1.1	0.2	0.7	0.6	0.2	0.1	0.1	0	0	0	0	0.8
Max	8	7.9	8.4	10.3	9.6	10.7	9.5	10.9	11.7	10.9	11	9.9	10.7	10.8	11.4	11	8.7	8.5	7.9	8.1	9.9	9.9	9	8.3	8.6
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: 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 2010**

**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	1013	1012	1011	1009	1008	1007	1007	1006	1005	1005	1005	1005	1005	1005	1006	1007	1009	1011	1013	1014	1015	1016	1017	1017	1009
2	1017	1017	1018	1018	1018	1019	1020	1021	1021	1021	1021	1020	1019	1018	1018	1018	1019	1019	1019	1019	1019	1019	1018	1018	1019
3	1017	1017	1017	1017	1017	1017	1017	1017	1017	1018	1017	1017	1016	1015	1015	1015	1015	1015	1016	1016	1016	1016	1016	1016	1016
4	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1014	1013	1012	1011	1011	1011	1010	1010	1010	1009	1009	1008	1007	1013
5	1006	1006	1006	1006	1007	1007	1008	1008	1009	1009	1009	1009	1008	1008	1008	1009	1009	1010	1010	1011	1011	1011	1012	1012	1009
6	1012	1012	1012	1012	1011	1011	1011	1011	1011	1010	1010	1008	1007	1006	1006	1006	1006	1007	1007	1007	1007	1007	1007	1007	1009
7	1007	1007	1007	1007	1007	1007	1008	1008	1008	1009	1009	1008	1008	1007	1008	1008	1009	1010	1011	1011	1012	1012	1013	1014	1009
8	1014	1014	1015	1015	1016	1016	1017	1018	1018	1018	1018	1017	1017	1016	1016	1017	1017	1018	1019	1019	1020	1020	1020	1021	1017
9	1021	1021	1021	1022	1023	1023	1023	1024	1025	1025	1026	1025	1024	1023	1022	1022	1022	1025	1025	1026	1026	1027	1027	1027	1024
10	1026	1026	1026	1026	1026	1025	1026	1025	1026	1025	1025	1025	1024	1023	1022	1022	1022	1022	1023	1023	1022	1022	1022	1022	1024
11	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1020	1020	1019	1018	1018	1018	1018	1016	1015	1014	1014	1012	1011	1010	1018
12	1008	1006	1006	1004	1003	1003	1003	1003	1003	1003	1002	1000	998	996	995	993	993	992	991	990	990	990	990	991	998
13	991	990	990	990	990	991	991	992	993	994	994	994	994	994	995	996	996	997	998	999	1000	1000	1001	1002	995
14	1002	1003	1003	1004	1004	1005	1006	1007	1007	1008	1007	1007	1007	1007	1007	1007	1008	1009	1010	1011	1012	1013	1013	1013	1007
15	1013	1013	1014	1014	1014	1014	1015	1015	1015	1015	1014	1013	1012	1012	1012	1012	1012	1013	1013	1014	1014	1014	1014	1014	1014
16	1014	1014	1014	1014	1013	1013	1014	1013	1012	1012	1011	1010	1008	1006	1005	1005	1005	1005	1006	1006	1006	1006	1007	1007	1010
17	1008	1009	1009	1010	1011	1011	1012	1013	1015	1016	1016	1016	1016	1016	1016	1017	1017	1017	1018	1019	1019	1019	1020	1019	1015
18	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1018	1017	1016	1015	1015	1015	1014	1014	1014	1013	1013	1013	1013	1017
19	1012	1012	1012	1011	1011	1011	1012	1012	1012	1012	1012	1011	1011	1010	1011	1011	1011	1011	1011	1011	1011	1011	1012	1012	1011
20	1011	1011	1012	1012	1013	1013	1013	1014	1014	1014	1014	1014	1014	1013	1013	1014	1014	1014	1015	1015	1015	1015	1016	1016	1014
21	1016	1016	1016	1016	1015	1015	1016	1016	1016	1016	1016	1015	1014	1013	1013	1012	1013	1014	1014	1014	1014	1014	1014	1014	1015
22	1013	1013	1013	1012	1012	1011	1011	1011	1011	1011	1011	1010	1009	1008	1009	1009	1009	1009	1010	1010	1010	1011	1011	1011	1011
23	1011	1012	1012	1012	1013	1013	1014	1014	1015	1015	1015	1014	1013	1013	1013	1013	1013	1014	1014	1015	1015	1016	1016	1016	1014
24	1016	1016	1016	1017	1017	1017	1018	1018	1019	1019	1019	1019	1018	1017	1017	1017	1017	1017	1018	1018	1018	1018	1018	1018	1018
25	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1016	1015	1014	1014	1014	1014	1013	1013	1013	1012	1012	1012	1011	1010	1015
26	1010	1008	1007	1007	1005	1004	1002	1002	1001	1000	998	998	997	996	997	997	997	998	999	999	999	999	999	999	1001
27	999	999	1000	1000	1000	1000	1001	1001	1002	1003	1003	1003	1003	1003	1004	1005	1005	1006	1008	1009	1010	1011	1012	1013	1004
28	1013	1014	1015	1016	1016	1016	1016	1016	1017	1018	1018	1018	1018	1017	1016	1015	1015	1015	1015	1016	1016	1016	1016	1016	1016
29	1016	1016	1016	1016	1016	1016	1016	1017	1017	1018	1018	1017	1017	1016	1016	1017	1017	1017	1018	1019	1019	1019	1020	1020	1017
30	1019	1020	1020	1020	1021	1021	1022	1023	1023	1024	1024	1023	1022	1022	1022	1022	1022	1021	1022	1022	1022	1022	1022	1022	1022
31	1022	1022	1022	1022	1022	1022	1023	1023	1023	1024	1023	1023	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022
Avg	1013	1013	1013	1013	1013	1013	1013	1014	1014	1014	1014	1013	1012	1012	1012	1012	1012	1012	1013	1013	1013	1013	1013	1013	1013
SD	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	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	991	990	990	990	990	991	991	992	993	994	994	994	994	994	995	993	993	992	991	990	990	990	990	991	995
Max	1026	1026	1026	1026	1026	1025	1026	1025	1026	1025	1026	1025	1024	1024	1024	1024	1025	1025	1026	1026	1026	1027	1027	1027	1024
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.

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

**December 2010**

**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	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.8	13.2	13.2	13.3	13.4	13.4	13.4	13.3	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9	
2	12.6	12.6	12.6	12.5	12.5	12.5	12.5	13.8	13.9	13.8	13.7	13.6	13.6	13.6	13.6	13.5	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13.1
3	12.7	12.7	12.7	12.6	12.6	12.6	12.5	12.5	12.8	13.8	13.7	13.7	13.6	13.6	13.6	13.7	13.4	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13
4	12.7	12.7	12.7	12.6	12.6	12.6	12.5	13.7	13.9	13.8	13.7	13.7	13.7	13.7	13.7	13.2	12.9	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1	
5	12.7	12.7	12.6	12.6	12.5	12.5	12.5	12.7	13.2	13.9	13.8	13.8	13.8	13.8	13.7	13.3	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13.1	
6	12.7	12.7	12.6	12.6	12.5	12.5	12.4	13.7	14	13.9	13.8	13.7	13.7	13.7	13.8	13.8	13.5	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13.1	
7	12.7	12.7	12.7	12.6	12.6	12.6	12.5	13.8	14	13.9	13.9	13.8	13.8	13.8	13.8	13.8	13.5	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.2	
8	12.7	12.7	12.6	12.6	12.6	12.5	12.4	13.8	14.1	13.9	13.8	13.8	13.7	13.7	13.8	13.9	13.2	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13.1	
9	12.7	12.7	12.7	12.6	12.6	12.6	12.5	13.7	14	13.9	13.8	13.7	13.7	13.7	13.7	13.7	13.5	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1	
10	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.1	13.9	13.8	13.7	13.6	13.5	13.5	13.5	13.5	13	12.9	12.9	12.8	12.8	12.8	12.8	12.7	13.1	
11	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.2	13.7	13.3	13.3	13.3	13.2	13	12.9	12.9	12.8	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.9	
12	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.5	13.5	13.2	13	12.9	12.9	12.8	12.8	12.7	12.7	12.6	12.6	12.6	12.6	12.5	12.8	
13	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.4	12.4	12.5	13.3	13.8	14	13.9	13.3	13.2	13.3	12.8	12.7	12.7	12.7	12.6	12.5	12.4	12.8	
14	12.4	12.4	12.3	12.3	12.3	12.3	12.3	13.6	14.1	14	14	13.9	13.9	13.9	13.9	13.9	13.6	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13.1	
15	12.6	12.6	12.6	12.6	12.5	12.5	12.5	13.7	14.1	14	13.9	13.9	13.8	13.8	13.8	13.8	13.6	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13.2	
16	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.7	13.1	12.8	12.6	12.5	12.5	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.6	
17	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.8	13.7	13.8	13.7	13.6	13.6	13.6	13.7	13.4	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9	
18	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	13.1	13.9	13.8	13.8	13.8	13.3	13	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9	
19	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.8	13.9	13.9	13.8	13.7	13.7	13.7	13.8	13.4	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13	
20	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13.4	14	13.9	13.8	13.8	13.8	13.7	13.8	13.8	13.5	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13.1	
21	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.4	14	13.9	13.8	13.7	13.7	13.7	13.7	13.7	13.3	12.9	12.8	12.8	12.8	12.8	12.8	12.7	13.1	
22	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.8	13.1	13	13.7	13.7	13.4	13.1	12.9	13	12.8	12.8	12.7	12.7	12.6	12.6	12.6	12.9	
23	12.6	12.6	12.6	12.5	12.5	12.5	12.5	13.3	13.9	13.8	13.8	13.7	13.7	13.7	13.7	13.7	13.5	12.9	12.9	12.8	12.8	12.8	12.8	12.7	13.1	
24	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.4	13.9	13.9	13.8	13.7	13.7	13.7	13.7	13.7	13.5	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1	
25	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	13.2	13.9	13.8	13.7	13.6	13.8	13.6	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13	
26	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.6	14	13.6	13.7	13.4	12.9	12.8	12.8	12.8	12.7	12.7	12.6	12.6	12.9	
27	12.5	12.5	12.5	12.5	12.5	12.5	12.5	13.2	13.6	14	13.9	13.9	13.9	13.9	13.9	13.9	13.7	12.9	12.8	12.8	12.8	12.8	12.8	12.7	13.1	
28	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.4	14	13.9	13.8	13.8	13.8	13.7	13.7	13.8	13.6	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13.2	
29	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.4	14	13.9	13.7	13.6	13.6	13.6	13.6	13.7	13.2	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1	
30	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.1	14	13.9	13.7	13.7	13.7	13.7	13.7	13.3	13	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13.1	
31	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.3	13.9	13.7	13.6	13.5	13.5	13.5	13.5	13.5	13.2	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13.1	
Avg	12.7	12.6	12.6	12.6	12.6	12.6	12.5	13.1	13.5	13.7	13.7	13.7	13.6	13.6	13.5	13.5	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13	
S D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.6	0.4	0.3	0.2	0.3	0.3	0.3	0.4	0.3	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	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Min	12.4	12.4	12.3	12.3	12.3	12.3	12.3	12.4	12.4	12.5	13	12.8	12.6	12.5	12.5	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.6	
Max	12.8	12.7	12.7	12.7	12.7	12.7	12.7	13.8	14.1	14	14	13.9	14	13.9	13.9	13.9	13.7	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13.2	
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: 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.