

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

**December 2006**

**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	4	54	95	184	343	336	293	204	145	70	23	0	0	0	0	0	0	0	1751
2	0	0	0	0	0	0	0	66	218	376	485	524	541	408	335	162	41	0	0	0	0	0	0	0	3156
3	0	0	0	0	0	0	0	48	164	351	444	598	490	466	219	29 ?	2	0	0	0	0	0	0	0	2812
4	0	0	0	0	0	0	0	11	63	178	471	514	484	468	342	176	40	0	0	0	0	0	0	0	2746
5	0	0	0	0	0	0	0	46	195	351	469	533	529	461	335	169	35	0	0	0	0	0	0	0	3123
6	0	0	0	0	0	0	0	45	193	355	436	509	453	330	308	107	21	0	0	0	0	0	0	0	2758
7	0	0	0	0	0	0	0	22	111	234	377	500	390	306	247	124	30	0	0	0	0	0	0	0	2342
8	0	0	0	0	0	0	0	49	198	363	480	538	532	469	345	177	41	0	0	0	0	0	0	0	3192
9	0	0	0	0	0	0	0	53	180 ?	?	?	?	?	?	?	165	41	0	0	0	0	0	0	0	438 ?
10	0	0	0	0	0	0	0	44	120 ?	?	?	?	?	?	?	134 ?	37	0	0	0	0	0	0	0	335 ?
11	0	0	0	0	0	0	0	23	97	177 ?	262 ?	216 ?	?	?	?	122 ?	35	0	0	0	0	0	0	0	933 ?
12	0	0	0	0	0	0	0	40	111 ?	?	?	?	?	?	?	114 ?	34	0	0	0	0	0	0	0	299 ?
13	0	0	0	0	0	0	0	16	76	139	346	218 ?	306	148	153	76	15	0	0	0	0	0	0	0	1493
14	0	0	0	0	0	0	0	27	114	211 ?	?	?	259 ?	?	195 ?	103	25	0	0	0	0	0	0	0	934 ?
15	0	0	0	0	0	0	0	21	50	138	?	?	?	?	?	104 ?	37	0	0	0	0	0	0	0	351 ?
16	0	0	0	0	0	0	0	42	108 ?	?	?	?	?	?	?	102 ?	43	0	0	0	0	0	0	0	296 ?
17	0	0	0	0	0	0	0	44	119 ?	?	?	?	?	?	?	131	40	0	0	0	0	0	0	0	334 ?
18	0	0	0	0	0	0	0	32	99 ?	?	?	?	?	?	305	157	34	0	0	0	0	0	0	0	627 ?
19	0	0	0	0	0	0	0	30	130	242	291	279	390	336	252	123	24	0	0	0	0	0	0	0	2097
20	0	0	0	0	0	0	0	35	163	319	435	489	481	434	294	150	36	0	0	0	0	0	0	0	2836
21	0	0	0	0	0	0	0	11	99	264	225	296	239	261	101	66	17	0	0	0	0	0	0	0	1579
22	0	0	0	0	0	0	0	14	45	76	99	83	145	128	47	36	6	0	0	0	0	0	0	0	680
23	0	0	0	0	0	0	0	3	25	37 ?	59	165	114	139	115	117	37	0	0	0	0	0	0	0	812
24	0	0	0	0	0	0	0	29	144	282	381	494	453	356	308	168	47	0	0	0	0	0	0	0	2663
25	0	0	0	0	0	0	0	6	37	36	42	77	74	48	33 ?	6 ?	2	0	0	0	0	0	0	0	362 ?
26	0	0	0	0	0	0	0	16	52	115	121	161	179	266	287	180	32	0	0	0	0	0	0	0	1408
27	0	0	0	0	0	0	0	32	157	314	438	505	512	458	348	188	45	0	0	0	0	0	0	0	2997
28	0	0	0	0	0	0	0	32	157	308	430	500	505	454	343	184	45	0	0	0	0	0	0	0	2957
29	0	0	0	0	0	0	0	44	201	320	416	486	469	441	335	180	42	0	0	0	0	0	0	0	2935
30	0	0	0	0	0	0	0	21	109	300	392	498	470	423	305	154	12	0	0	0	0	0	0	0	2685
31	0	0	0	0	0	0	0	19	80	157	297	360	354	429	251	105	19	0	0	0	0	0	0	0	2072
Avg	0	0	0	0	0	0	0	31	120	233	337	386	377	338	248	125	30	0	0	0	0	0	0	0	1742 ?
S D	0	0	0	0	0	0	1	16	53	105	140	164	146	132	99	49	13	0	0	0	0	0	0	0	1090
S/A	0	0	0	0	0	0	5.57	0.5	0.44	0.45	0.42	0.42	0.39	0.39	0.4	0.39	0.43	0	0	0	0	0	0	0	0.63
Min	0	0	0	0	0	0	0	3	25	36	42	77	74	48	33	6	2	0	0	0	0	0	0	0	296
Max	0	0	0	0	0	0	4	66	218	376	485	598	541	469	348	188	47	0	0	0	0	0	0	0	3192
n	0	0	0	0	0	0	1	323	323	289	272	270	264	264	278	318	299	0	0	0	0	0	0	0	2901

Daylight Data Recovery: 0.0% missing; 0.0% untested; 19.4% exceed the 15% QC threshold -- 3599 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31256F3 Calibration Factor: 7.561 μV/W/m<sup>2</sup> Calibration Date: 08/2003

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 2006

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	38	4	69	287	154	149	9	15	10	7	0	0	0	0	0	0	0	741
2	0	0	0	0	0	0	0	370	634	794	854	530	628	532	793	611	319	0	0	0	0	0	0	0	6065
3	0	0	0	0	0	0	0	249	461	714	608	517	172	348	156	0	0	0	0	0	0	0	0	0	3225
4	0	0	0	0	0	0	0	6	0	163	842	791	766	884	823	691	357	0	0	0	0	0	0	0	5323
5	0	0	0	0	0	0	0	319	672	796	867	897	895	866	804	659	325	0	0	0	0	0	0	0	7100
6	0	0	0	0	0	0	0	325	683	790	671	685	587	380	588	252	43	0	0	0	0	0	0	0	5003
7	0	0	0	0	0	0	0	1	118	195	502	716	297	171	260	112	62	0	0	0	0	0	0	0	2435
8	0	0	0	0	0	0	0	391	709	799	824	830	832	826	790	669	362	0	0	0	0	0	0	0	7031
9	0	0	0	0	0	0	0	262	335 ?	?	?	?	?	?	?	501	288	0	0	0	0	0	0	0	1387 ?
10	0	0	0	0	0	0	0	214	345 ?	?	?	?	?	?	?	332	149	0	0	0	0	0	0	0	1040 ?
11	0	0	0	0	0	0	0	6	18	24 ?	31 ?	15 ?	?	?	?	382 ?	219	0	0	0	0	0	0	0	695 ?
12	0	0	0	0	0	0	0	173	295 ?	?	?	?	?	?	?	336 ?	168	0	0	0	0	0	0	0	972 ?
13	0	0	0	0	0	0	0	0	5	3	145	14 ?	36	1	36	3	0	0	0	0	0	0	0	0	242
14	0	0	0	0	0	0	0	11	16	38 ?	?	?	74 ?	?	109 ?	33	0	0	0	0	0	0	0	0	280 ?
15	0	0	0	0	0	0	0	0	0	17	?	?	?	?	?	245 ?	125	0	0	0	0	0	0	0	387 ?
16	0	0	0	0	0	0	0	99	120 ?	?	?	?	?	?	?	224 ?	137	0	0	0	0	0	0	0	580 ?
17	0	0	0	0	0	0	0	74	152 ?	?	?	?	?	?	?	89	73	0	0	0	0	0	0	0	388 ?
18	0	0	0	0	0	0	0	47	101 ?	?	?	?	?	?	664	509	207	0	0	0	0	0	0	0	1530 ?
19	0	0	0	0	0	0	0	93	237	298	149	89	387	265	257	198	14	0	0	0	0	0	0	0	1987
20	0	0	0	0	0	0	0	253	614	765	810	785	733	753	544	372	156	0	0	0	0	0	0	0	5785
21	0	0	0	0	0	0	0	1	35	234	55	56	48	29	0	0	0	0	0	0	0	0	0	0	458
22	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7
23	0	0	0	0	0	0	0	0	0	0	0	3	4	7	34	175	118	0	0	0	0	0	0	0	342
24	0	0	0	0	0	0	0	194	395	609	571	805	654	413	618	543	244	0	0	0	0	0	0	0	5046
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26	0	0	0	0	0	0	0	0	0	4	0	0	12	100	286	506	87	0	0	0	0	0	0	0	995
27	0	0	0	0	0	0	0	214	632	789	859	888	887	858	802	680	370	0	0	0	0	0	0	0	6980
28	0	0	0	0	0	0	0	253	635	787	858	878	879	863	809	677	361	0	0	0	0	0	0	0	7000
29	0	0	0	0	0	0	0	195	592	749	821	846	754	812	752	623	294	0	0	0	0	0	0	0	6438
30	0	0	0	0	0	0	0	0	12	404	786	813	704	650	554	387	0	0	0	0	0	0	0	0	4310
31	0	0	0	0	0	0	0	1	8	12	167	269	224	616	228	9	0	0	0	0	0	0	0	0	1535
Avg	0	0	0	0	0	0	0	122	252	362	466	460	423	426	413	317	145	0	0	0	0	0	0	0	2752 ?
S D	0	0	0	0	0	0	0	131	270	347	361	375	347	349	324	252	135	0	0	0	0	0	0	0	2607
S/A	0	0	0	0	0	0	0	1.07	1.07	0.96	0.77	0.81	0.82	0.82	0.78	0.8	0.93	0	0	0	0	0	0	0	0.95
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Max	0	0	0	0	0	0	0	391	709	799	867	897	895	884	823	691	370	0	0	0	0	0	0	0	7100
n	0	0	0	0	0	0	1	323	323	293	273	270	264	264	282	341	299	0	0	0	0	0	0	0	2933

Daylight Data Recovery: 0.0% missing; 0.0% untested; 18.5% exceed the 15% QC threshold -- 3599 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25521E6 Calibration Factor: 8.034 μV/W/m² Calibration Date: 06/2002

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 2006**

**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	?	49	94	148	184	235	217	200	139	63	22	0	0	0	0	0	0	0	1350
2	0	0	0	0	0	0	0	31	65	63	65	203	199	149	42	29	17	0	0	0	0	0	0	0	863
3	0	0	0	0	0	0	0	25	46	71	132	294	367	286	152	23	2	0	0	0	0	0	0	0	1399
4	0	0	0	0	0	0	0	11	63	104	65	86	73	50	43	31	12	0	0	0	0	0	0	0	537
5	0	0	0	0	0	0	0	19	40	50	53	55	54	50	42	31	11	0	0	0	0	0	0	0	405
6	0	0	0	0	0	0	0	17	37	54	106	132	126	132	86	45	19	0	0	0	0	0	0	0	756
7	0	0	0	0	0	0	0	21	83	160	113	102	215	206	141	98	24	0	0	0	0	0	0	0	1163
8	0	0	0	0	0	0	0	16	36	45	50	53	54	50	45	34	14	0	0	0	0	0	0	0	398
9	0	0	0	0	0	0	0	24	80 ?	?	?	?	?	?	?	31	12	0	0	0	0	0	0	0	148 ?
10	0	0	0	0	0	0	0	18	30 ?	?	?	?	?	?	?	37	20	0	0	0	0	0	0	0	104 ?
11	0	0	0	0	0	0	0	25	86	160 ?	237 ?	187 ?	?	?	?	22 ?	10	0	0	0	0	0	0	0	727 ?
12	0	0	0	0	0	0	0	17	29 ?	?	?	?	?	?	?	31 ?	14	0	0	0	0	0	0	0	91 ?
13	0	0	0	0	0	0	0	17	73	139	252	204 ?	261	148	124	75	15	0	0	0	0	0	0	0	1309
14	0	0	0	0	0	0	0	24	107	182 ?	?	?	172 ?	?	118 ?	84	25	0	0	0	0	0	0	0	712 ?
15	0	0	0	0	0	0	0	21	50	118	?	?	?	?	?	35 ?	17	0	0	0	0	0	0	0	242 ?
16	0	0	0	0	0	0	0	24	48 ?	?	?	?	?	?	?	32 ?	18	0	0	0	0	0	0	0	122 ?
17	0	0	0	0	0	0	0	25	50 ?	?	?	?	?	?	?	89	26	0	0	0	0	0	0	0	190 ?
18	0	0	0	0	0	0	0	21	44 ?	?	?	?	?	?	63	46	16	0	0	0	0	0	0	0	189 ?
19	0	0	0	0	0	0	0	24	79	138	213	229	178	199	148	77	21	0	0	0	0	0	0	0	1307
20	0	0	0	0	0	0	0	18	39	52	64	83	92	70	81	61	20	0	0	0	0	0	0	0	581
21	0	0	0	0	0	0	0	12	91	176	202	266	215	246	101	66	17	0	0	0	0	0	0	0	1392
22	0	0	0	0	0	0	0	15	45	76	99	83	143	128	47	36	6	0	0	0	0	0	0	0	679
23	0	0	0	0	0	0	0	3	25	33	59	165	107	137	104	76	24	0	0	0	0	0	0	0	733
24	0	0	0	0	0	0	0	14	57	67	117	80	105	147	79	42	23	0	0	0	0	0	0	0	731
25	0	0	0	0	0	0	0	6	37	36	42	77	74	48	29	11 ?	2	0	0	0	0	0	0	0	363
26	0	0	0	0	0	0	0	17	52	114	121	161	173	211	179	61	20	0	0	0	0	0	0	0	1110
27	0	0	0	0	0	0	0	14	34	47	53	55	55	53	47	35	13	0	0	0	0	0	0	0	407
28	0	0	0	0	0	0	0	18	37	47	49	55	52	47	40	32	14	0	0	0	0	0	0	0	392
29	0	0	0	0	0	0	0	17	41	49	50	56	74	54	51	38	16	0	0	0	0	0	0	0	446
30	0	0	0	0	0	0	0	23	98	122	66	65	94	101	85	56	12	0	0	0	0	0	0	0	723
31	0	0	0	0	0	0	0	21	79	151	210	221	231	126	163	103	19	0	0	0	0	0	0	0	1324
Avg	0	0	0	0	0	0	0	20	57	96	113	137	145	129	90	49	16	0	0	0	0	0	0	0	674 ?
S D	0	0	0	0	0	0	0	8	23	49	69	78	82	72	46	24	6	0	0	0	0	0	0	0	432
S/A	0	0	0	0	0	0	0	0.41	0.41	0.51	0.61	0.57	0.57	0.56	0.51	0.49	0.38	0	0	0	0	0	0	0	0.64
Min	0	0	0	0	0	0	0	3	25	33	42	53	52	47	29	11	2	0	0	0	0	0	0	0	91
Max	0	0	0	0	0	0	0	49	107	182	252	294	367	286	179	103	26	0	0	0	0	0	0	0	1399
n	0	0	0	0	0	0	0	302	323	291	273	270	266	264	282	333	299	0	0	0	0	0	0	0	2903

Daylight Data Recovery: 0.0% missing; 0.0% untested; 19.3% exceed the 15% QC threshold -- 3599 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17880F3 Calibration Factor: 8.067  $\mu\text{V}/\text{W}/\text{m}^2$  Calibration Date: 07/2002

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 2006**

**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	19.8	19.5	19	18.6	18.8	18.5	18.7	18.9	20	21.4	22.7	23.7	23.6	22.1	22.1	21.7	21.6	21.5	20.9	20.8	20.8	20.8	20.4	19.9	20.7
2	19.3	16.7	14.2	12.7	11.4	10.1	8.9	8.9	10.6	11.4	12.2	12.9	13.7	13.6	13.4	13.4	12.8	10.8	9.7	9.3	8.9	8.9	9	8.9	11.7
3	8.5	8.1	7.4	7.2	6.9	6.6	6.4	6.6	8.4	10.8	12	12.9	13.5	13.7	13.5	12.4	11.9	11.7	11.7	11.5	11.6	11.4	10.9	10.6	10.3
4	9.9	8.3	7.3	7.5	7.4	7	6.6	6.3	6.3	6.4	7.4	7.7	7.8	8	8	7.4	6.4	5.2	4.3	3.4	2.1	1.2	0.4	0.6	6
5	0.3	0.8	1.3	1.2	1.2	1.4	1	1.1	2.3	4.6	6.6	7.7	8.3	8.8	9.4	9.4	8.5	6.7	5.5	5.2	5	4.2	3.8	3.9	4.5
6	4.1	4.8	5	5.1	5.4	4.9	4	4.9	7.1	9.2	10.5	11.4	12	12.9	13.9	13.9	12.9	11.9	11.9	11.4	11.2	11.3	11.5	11.6	9.3
7	12.4	13.2	12.9	13.3	13.6	13	12.8	12.4	12.4	13.3	13.9	14.7	15.1	14.6	14.9	14.6	13.5	12	10.7	9.8	9	7.4	6.2	3.3	12
8	1.8	0	-1.3	-2.1	-2.6	-3.1	-3.6	-3.8	-3.2	-2	-1.2	-0.1	0.6	1.1	1.4	1.5	1.1	-0.1	-0.7	-1.2	-1.6	-2	-2.3	-2.3	-1.1
9	-2.8	-2.9	-3.2	-3.1	-3.5	-3.8	-4	-4	-2.6	-0.4	1.5	2.7	4.1	5	5.5	6.2	5.9	4.2	3.3	2.3	2.6	2	2.7	2.5	0.8
10	2.6	2.5	2.3	2.1	2.2	2	1.8	2.1	3.7	6.2	8.5	10.3	11.8	12.8	13.4	13.5	12.6	10.8	9.8	8.6	7.7	7.1	6.5	6.7	7
11	6.2	5.6	5.7	5.6	5.2	4.6	4.1	4.4	5.1	6.8	10.3	11	13.2	14.7	15.4	16.1	13.6	11.4	9.7	8.3	8.2	7.6	7.1	6	8.6
12	5.6	5	4.3	4.2	3.9	3.8	3.6	4.3	6.9	9.8	12.9	15.1	16.2	17.1	17.3	16.9	15.3	13.4	12.2	11.2	10.8	10.7	10.8	11	10.1
13	10.5	10.9	11	11.2	11.6	11	11	11.2	11.7	12.9	14.8	16	16.8	17.5	18.1	17.2	15.8	14.8	13.8	12.8	12.1	12.5	12.4	11.8	13.3
14	11.5	11.6	11.9	12.1	11.8	11.5	10.5	10.3	9.6	11.2	13.5	16.7	17	17.3	17	16.7	15.1	14.1	13.3	12.8	12.9	12.6	12.3	12.3	13.2
15	12.4	12.2	11.8	11.5	11.1	10.8	10.1	9.6	9.4	9.6	11	13.1	15.2	16.6	17.8	18.1	17.2	15.8	15	14.3	13.8	13.5	13.5	12.6	13.2
16	11.5	10.7	10.2	9.4	8.6	8.2	7.4	7.2	8.9	11	12.6	13.3	13.6	14	14.5	13.3	11.8	10.2	9	8.4	7.9	7.4	7	7.2	10.1
17	6.8	6.2	6	6	5.7	5.1	4.9	5.7	8	11.5	14.1	15.7	17	18.1	19	18.7	17.8	15.7	14.4	13.7	13	12.7	12.5	12.4	11.7
18	12.1	11.8	11.6	11.7	11.6	11.5	11.6	11.5	12.8	15.5	17.5	19.2	20.6	21.4	22	22.2	21.2	19.6	18.8	17.8	17.3	16.8	16.3	16.2	16.2
19	15.3	14.8	14.2	12.6	11.5	10.9	10.4	10.2	10.7	11.5	12	12.2	12.7	12.9	12.8	12.2	11.2	9.8	9.3	8.4	7.5	6.8	6.2	5.8	10.9
20	5.4	4.8	4.4	4.8	4.5	4.1	3.5	3.4	4.6	6.2	8.2	9	9.9	10.3	10.3	9.8	8.7	7.4	6.6	6	5.2	4.4	4.3	3.8	6.2
21	3.5	2.4	2.4	1.9	2.4	3	3.1	5.2	6.3	8.5	10.4	12.1	13.3	14.1	14.1	14	13.4	12.5	11.5	11.5	11.2	11.1	11	10.8	8.7
22	10.5	10.6	10.9	10.6	10.5	10.9	11.1	11.5	12.3	13.2	14.3	15.1	15.7	16.6	16.9	16.8	17.1	16.8	16.9	17.2	17.5	17.1	17.1	17.2	14.3
23	17.4	18.1	18	17.8	17.9	18	17.9	17.9	18.1	18.3	18.3	18.7	19	19.4	19.4	19.6	19.2	18.1	17.4	16.7	15.4	14.2	13.5	12.4	17.5
24	11.5	11.1	11.1	9.8	9.8	8.9	8.1	7.3	7.9	10	11.5	12.6	13.3	13.3	13.3	12.9	11.7	10.2	9.1	8.5	8.2	8.4	8.2	7.8	10.2
25	7.4	7.6	7.1	7.1	7.8	8.9	10.1	10.5	11	11.7	11.7	12.4	13.9	14.5	15	15.4	17.6	18.8	19.7	20.1	20.1	19.2	18.7	18.3	13.5
26	17.9	17.7	17.7	17.8	18	17.6	16.9	16.3	15.1	14.3	14.2	13.9	13.3	13.3	13.8	13.8	12.8	12	11.2	10.5	10.2	10	9.8	9.8	14.1
27	9.5	8.9	8.2	8.3	7.6	6.9	6.6	6.4	6.8	7.7	8.9	9.7	9.8	10.2	10.3	10.6	10.1	8.6	7.7	7	6.3	5.1	4.4	4.7	7.9
28	4.9	4.1	3.6	3.1	2.3	3.1	2.8	3	4.3	7.6	10.7	11.4	12.1	13	13.6	13.4	11.8	10.6	9.6	9.4	8.8	8.6	8	7.6	7.8
29	6.8	5.7	5.4	5.4	5.8	4.9	4.4	4.3	6.2	9.4	13	14.4	15	15.7	15.4	15	12.8	11	9.9	9.2	8.4	8.1	7.6	7.3	9.2
30	6.7	6.3	5.9	6	5.6	4.7	4.4	4.1	4.3	6.6	10.1	12.9	14.2	14.7	15.1	15.8	14.8	13.8	13.2	13.2	12.7	12.1	11.6	10.8	10
31	9.9	9.5	9.9	9.8	9.6	9.2	9.3	9.8	10.6	11.2	12.6	14	14.4	14.5	14.2	13.5	12.7	12.1	11.8	11.8	12.1	13	14.7	15.7	11.9
Avg	9	8.6	8.3	8	7.9	7.5	7.2	7.3	8.2	9.9	11.5	12.7	13.4	13.9	14.2	14.1	13.2	12	11.2	10.6	10.2	9.8	9.6	9.3	10.3
SD	5.5	5.5	5.5	5.4	5.4	5.4	5.4	5.3	5	4.7	4.4	4.5	4.4	4.3	4.4	4.3	4.4	4.6	4.8	4.9	5	5.1	5.2	5.2	4.4
S/A	0.61	0.64	0.66	0.67	0.69	0.71	0.75	0.72	0.61	0.47	0.39	0.36	0.33	0.31	0.31	0.31	0.33	0.38	0.42	0.46	0.49	0.52	0.54	0.56	0.43
Min	-2.8	-2.9	-3.2	-3.1	-3.5	-3.8	-4	-4	-3.2	-2	-1.2	-0.1	0.6	1.1	1.4	1.5	1.1	-0.1	-0.7	-1.2	-1.6	-2	-2.3	-2.3	-1.1
Max	19.8	19.5	19	18.6	18.8	18.5	18.7	18.9	20	21.4	22.7	23.7	23.6	22.1	22.1	22.2	21.6	21.5	20.9	20.8	20.8	20.8	20.4	19.9	20.7
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

Instrument: CSI 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 2006**

**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	101.9	101.9	103.7	?	?	?	?	?	104.7 ?	102.1	98	93.9	94.1	98.1	96.4	99.3	100.7	101.1	104.9 ?	104.4	104.1	102.4	101.1	100.9	100.7 ?	
2	98.5	66.7	65.7	69.2	73.8	79.8	82	80.2	72.2	70.4	63.6	60.3	57.6	55.7	50.9	49.7	54.3	73.7	78.9	79.6	80.3	82.5	80	79.6	71	
3	80	80.3	85	85.1	83.3	84.8	86.5	89	86.1	81.2	74.6	70.7	72.3	74.7	78.2	85.1	89.7	93	95.3	98.5	99.9	103.1	?	?	85.3	
4	?	?	?	105 ?	103.5	99.2	93.1	89.3	85.8	81.3	68.8	61.4	54.1	44.2	43.6	41.2	44.7	51.6	62.3	67.1	74.1	82.6	83.1	78.4	72.1 ?	
5	83.9	78.2	75.4	76.8	75.4	70.5	72.9	71.1	67.1	56.7	50.8	47.8	43.8	42.1	41.3	40.6	43.1	57.1	69.7	72.7	75	80.8	82.5	84.5	65	
6	80.6	79	75.8	74.1	68.7	70.6	78.9	78.2	72.2	69.7	64.5	64	66.2	66.3	65.5	70.8	78.7	85.9	87.2	90.3	92.1	94.3	94.4	94.6	77.6	
7	94.6	94.2	96.7	97.1	96.6	98.8	99	99.4	96.8	80.6	70.8	58.8	54.8	51.3	49.1	47.6	44.8	48.8	53.9	53.5	41.5	39.6	46.3	59.1	69.7	
8	49.7	46.2	43.4	40.5	41.4	42.7	47.6	52.4	52.4	45.1	41.7	39	37.8	37.4	38	38.7	41.3	48	49.7	53.2	55.8	58.6	60	62	46.8	
9	66.8	70.4	73.9	74	76.3	77.3	75.5	75.1	70.1	61.8	53.9	46.5	41.3	36.6	37.2	33.4	34.3	40	45	48.7	45.5	49.7	51.4	56.7	55.9	
10	58	59.5	63.1	62.2	58.5	60.5	63.1	63.3	55.6	48.2	43.7	39.3	34.5	36	30.8	31.7	34.3	39.1	46.9	58.1	62.9	69.1	71	61.9	52.1	
11	60.6	63.2	59.4	59.8	62.4	66.7	69.9	69.6	69.6	65.6	55.2	54.8	42.3	33.9	31.8	31.4	44	55.2	65.2	68.1	63.3	70.3	74.1	81	59.1	
12	86.1	94.2	98.5	97.7	93.6	90	93.7	85	76.1	77.6	76.7	74.9	68.4	59.1	62	66.1	82	92.1	99	103.7 ?	?	?	?	?	83.8 ?	
13	?	?	?	?	?	?	?	?	?	?	?	104.2	101.5	98.5	94.5	95.2	100.9	104	104.7 ?	?	?	?	?	?	100.4 ?	
14	?	?	?	?	?	?	?	?	?	?	?	101.8 ?	94	91.8	88.6	88.6	89.4	95.7	99.8	102.1	104.2 ?	?	?	?	95.6 ?	
15	?	?	?	?	?	?	?	?	?	?	?	100.9 ?	93.5	84.9	72.7	67.1	70.7	76.2	78.5	80.4	81.3	81.6	80.2	84	80.9 ?	
16	86.9	88.3	89	91.6	94.7	95.7	96.7	96.4	88	74.7	69.2	62.6	59.4	57.6	56.3	60.8	67.7	78.1	84	84	93.3	97.7	98.7	96.8	82	
17	100.1	104.1	?	?	?	?	?	104.6 ?	98	77.3	62.9	57.3	56.1	54.2	53.8	55.1	58.5	60.9	60	63.5	71.2	73.8	73.8	74.4	71.6 ?	
18	78	83.2	88.7	93.2	96.5	98.7	100.4	102.8	102.2	96.9	89	77.2	69.4	59.6	57.2	57	61.4	65	66	71.2	73.8	75.9	77.4	76.6	79.9	
19	80.3	82.6	83.2	92.5	97.3	101	103	101.8	92.8	84.3	83.9	82.2	84.3	82.5	82.1	84	87.7	92.7	89.5	93.8	97.3	97.5	97.6	96.9	90.5	
20	95	95.4	94.7	87.7	87.8	87	87.5	85.9	83.3	81.7	78.7	73	66.3	62.2	62.7	66.9	75.9	85.2	89.9	95.5	99.1	102.2	102.5	104.2	85.4	
21	104.7	?	?	104.6 ?	?	104.6 ?	104.8 ?	100.7	98	91.3	82.7	69	63	57.2	49.1	52.9	54	61.9	69.6	71.4	71.9	73.2	77	78.7	78.1 ?	
22	82.3	83.1	82.4	91.6	93.4	91.5	92.3	96.7	99.2	96.4	89.1	88.5	89.9	90.7	92.1	94.7	95.5	98.1	99.4	100.3	100.9	104.5 ?	?	?	93.3 ?	
23	?	?	?	?	?	?	?	?	?	?	?	?	102.2	100.6	99.4	97.6	99.2	102.7	104.5 ?	102.1 ?	97	90	87.4	89.2	97.7 ?	
24	89.5	87.6	87.6	93.1	91.3	91.8	91.3	93.9	90	81.8	74.6	68.6	70	72	73.5	76.4	76.4	81.9	87.5	90	90.5	90.6	94.6	97.8	85.1	
25	99.9	100.2	101.7	101.8	100.5	100	98.1	98.2	99.9	100.8	104.2 ?	?	103.9 ?	103.7	104 ?	?	?	?	?	?	104.3 ?	104.5 ?	?	?	101.6 ?	
26	?	?	?	104.8 ?	103.9	102.7	100.1	90.6	86.5	86.9	87.3	79.1	77.6	74.5	73.4	72.2	77	80.6	81.7	86	87.9	89.8	90.5	91.2	86.9 ?	
27	86.2	83.9	90.5	79.4	83.9	91.4	96.2	90	81.1	75.4	66.5	57.8	56	54.7	53.6	52.2	56.1	63.7	67.6	69.7	71.8	80.3	83	81.8	73.9	
28	81.7	84	86.7	90	94.6	92.9	94.9	95.5	88.5	73.6	54.8	54.2	52.2	47.3	44.3	51.3	61.1	65.7	71.4	73.1	78.4	80.1	83.3	87.6	74.5	
29	101.7	104.3 ?	99.1	100.8	101.6	103.6 ?	?	?	101.8 ?	89.7	64.6	51	47.5	46.4	46.8	50.8	61.6	62.4	73.4	86.6	96.5	100.5	103.6	?	80.7 ?	
30	?	?	?	?	?	?	?	?	?	?	?	100.4 ?	93.8	82.6	73	69.6	63.8	68.7	75.3	78.3	78.8	82.1	85.8	89.2	95.9	81.2 ?
31	97.4	99.1	98.9	98.2	97.9	99.9	99.1	96.5	93	95.7	90.9	82.2	79.7	81.8	85.2	89.7	93.1	96.6	97.5	98.1	100.4	101.9	100.9	99.7	94.7	
Avg	85.2	83.9	83.8	86.3	86	87.6	88.1	87.8	85	78.7	73.7	69.2	68.2	65.3	64	63.8	68.4	74.5	78.8	80.9	81.9	84.4	83.4	83.9	79.8 ?	
S D	14.7	15.1	15.5	16.4	16.3	15.8	14.3	13.6	14.4	14.9	17.4	18	20.2	20.9	21.3	20.9	20.9	19.6	18	16.7	17.4	16.8	15.2	13.8	14.2	
S/A	0.17	0.18	0.18	0.19	0.19	0.18	0.16	0.15	0.17	0.19	0.24	0.26	0.3	0.32	0.33	0.33	0.31	0.26	0.23	0.21	0.21	0.2	0.18	0.16	0.18	
Min	49.7	46.2	43.4	40.5	41.4	42.7	47.6	52.4	52.4	45.1	41.7	39	34.5	33.9	30.8	31.4	34.3	39.1	45	48.7	41.5	39.6	46.3	56.7	46.8	
Max	104.7	104.3	103.7	105	103.9	104.6	104.8	104.6	104.7	102.1	104.2	104.2	103.9	103.7	104	99.3	100.9	104	104.9	104.4	104.3	104.5	103.6	104.2	101.6	
n	286	270	263	259	276	274	271	278	303	312	314	345	365	372	365	360	360	356	336	330	331	323	300	288	7538	

Data Recovery: 0.0% missing; 0.0% untested; 15.6% failed QC -- 8928 total measurements.

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**December 2006**

**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	19.7	19.6	19.1	18.6	18.4	18.4	18.3	18.6	19.4	20.7	22.6	24.8	25.9	24.3	23	23	22.2	21.5	21.1	20.8	20.3	20.1	20	19.8	20.8
2	19.4	18.4	15.7	13.4	11.6	10	8.6	7.9	9.6	12.5	14.7	16.4	17.6	18.2	17.4	16.8	15.6	12.8	9.9	8.3	7.8	7.6	7.9	8.1	12.7
3	7.7	7.1	6.5	5.9	5.6	5.4	5.1	5.1	6.5	9.9	13.2	15.3	16.7	17.3	17.5	15.9	14	13	12.6	12.3	12	12	11.9	11.5	10.8
4	11.1	10.2	8.8	8	7.7	7.2	6.6	6.5	6.4	6.6	8.2	10.4	11.3	11.5	11.4	10.9	9.6	6.6	4	2.3	0.5	-1.1	-1.8	-2.2	6.7
5	-2.4	-2.4	-1.8	-1.2	-0.8	-0.6	-0.4	-0.2	1.6	4.6	7.8	10.2	11.6	12.2	12.5	12.4	11.3	7.9	5.3	4.1	3.4	2.4	1.4	0.9	4.2
6	0.7	1	1.9	2.2	2.4	2.6	2	1.5	4.1	8.3	11.5	13.4	14.6	15.1	15.5	15.8	14.7	12.7	11.5	10.9	10.4	10.2	10	10.1	8.5
7	10.4	11.3	12	12.3	12.9	12.9	12.9	12.7	12.5	13.5	15	16.7	18	17.7	17.1	16.5	15.4	13.2	11.4	9.9	8.8	7.9	6.7	5.4	12.6
8	3.5	1.9	-0.1	-1.7	-2.6	-3.6	-4.4	-4.7	-3.4	-1.1	1.1	2.6	3.8	4.3	4.4	4.2	3.4	0.9	-1.3	-2.5	-3.3	-4.1	-4.8	-4.8	-0.5
9	-5	-5.3	-5.5	-5.9	-5.9	-6	-6.2	-6.1	-4	-0.2	3.5	5.9	7.2	8.1	8.3	8.3	7.8	5.1	2.4	0.8	-0.2	-0.3	-0.4	0	0.3
10	0.2	0.4	0.4	0.5	0.6	0.6	0.5	0.7	2.6	5.7	9	11.7	13.7	15	15.7	15.7	14.8	12.2	9.7	8.4	7	6	5.3	5	6.7
11	4.9	4.6	4	3.9	3.8	3.2	2.4	2.2	3	4.9	8.9	11.8	13.9	16.5	17.6	17.9	17.3	13.3	9.3	6.9	5.6	5	4.1	3.4	7.8
12	2.9	2.6	2.1	1.8	1.7	1.5	1.6	2.1	4.5	8.7	12.9	16.3	18.4	19.8	20.4	20.3	19	15.9	13.1	11.5	10.7	10.4	10.3	10.5	9.9
13	10.3	10	10.2	10.7	11.1	11.4	11.3	11.4	11.7	12.6	14.2	17.9	18.9	19.6	19.5	19.5	18.4	16.7	14.9	14	12.6	11.9	11.7	11.5	13.8
14	11.1	11.1	11.1	11.5	12.1	12.1	11.6	10.7	10.6	11.7	14.2	17.6	20.4	21	20.7	19.4	17.5	14.9	13.3	12.5	12.3	12.2	12.1	12	13.9
15	12.2	12.6	12.4	12	11.3	11.1	10.7	10.5	10.3	10.3	11.5	13.9	16.5	18.3	19.3	19.8	19.3	17.2	15.1	13.8	13.1	12.8	12.6	12.3	13.7
16	11.3	10.2	9.3	8.4	7.6	6.9	6.1	5.6	7	10.2	13.7	16.3	17.6	18	18.3	17.8	15.7	12.4	9.4	7.6	6.6	5.7	5	4.7	10.5
17	4.5	4.2	4	4	3.7	3.3	3.2	3.6	5.6	8.8	13.1	16.6	18.8	20.2	21	21.1	19.8	17.3	14.8	13.2	12.3	11.7	11.4	11.2	11.1
18	11.1	10.9	10.8	10.7	10.8	10.7	10.8	10.8	11.9	14.6	17.8	20.2	22.1	23.4	23.9	24	23.3	21	18.9	17.8	16.9	16.4	15.9	15.5	16.2
19	15	14.4	13.8	13.2	12.1	11.1	10.3	9.9	10.3	12	13.5	14.4	15.2	16.1	16.3	15.6	14	11.6	9.6	8.2	6.9	5.7	4.9	4.1	11.6
20	3.4	2.9	2.4	2.3	2.7	2.7	2.4	2.1	3.5	6.4	9.3	11.8	13.4	14.5	14.5	13.7	12	9.1	6.7	5.1	3.8	2.5	2	1.6	6.3
21	1.2	1	0.6	0.6	1	1.5	1.8	2.6	4	6	10.1	12.3	14.3	15.7	16.2	15.7	14.9	13.4	12.3	11.9	11.6	11.4	11.1	10.8	8.4
22	10.7	10.8	10.8	10.7	10.5	10.6	11	11.4	12	12.7	13.8	15	15.9	17.1	17.4	17.2	17	16.9	16.6	16.7	17	17	17	17.2	14.3
23	17.3	17.6	18	18	18.1	18.2	18.3	18.3	18.4	18.6	18.8	18.9	19.1	19.7	20.2	20.5	20.5	19.3	17.9	17	15.8	14.1	12.5	11.2	17.8
24	10	9.3	8.8	8.5	7.9	7.8	7.2	6.5	7	9.5	12.7	15	16.6	17.1	16.8	16.6	15.4	12.2	9.5	7.9	7.1	7	7	6.8	10.4
25	6.3	6.3	6.4	6.5	6.8	7.5	8.5	9.5	10.2	10.8	11.5	11.9	12.7	13.5	14.1	14.7	15.8	17.2	18.4	19.2	19.6	19.5	19.1	18.8	12.7
26	18.5	18.1	18	17.9	18	17.7	17.4	17.1	16.5	15.7	15.4	15.3	15	14.9	15.2	15.7	15.1	13.2	11.9	10.9	10	9.6	9.5	9.6	14.8
27	9.8	9.7	9.1	8.6	8.4	7.7	7.1	6.4	6.8	8.7	10.9	12.8	13.8	14	13.6	13.1	12.6	10.1	7.3	5.5	4.6	3.6	2.2	1.8	8.7
28	2.2	2.3	1.4	0.3	-0.4	-0.5	-0.3	-0.2	1.6	6.1	11	14.4	16	16.7	17	16.9	15.7	12.6	9.7	8.8	8	7.4	7	6	7.5
29	5	4.2	3.5	2.7	2.7	2.7	2.5	2.3	4	7.6	12.2	16.6	19	19.9	20	19.2	17.4	13.8	10.6	8.9	7.8	6.8	6.5	6.3	9.3
30	6	5.3	4.9	4.7	4.5	4.1	3.4	3.4	3.9	5.9	9.8	13.9	17.2	18.4	18.5	18.3	17.4	15.6	14.3	13.7	13.3	12.9	12.3	11	10.5
31	9.7	8.7	8.6	9.3	9.5	8.8	8.5	8.9	9.8	11.1	13	15.5	16.7	17.8	18	17.2	15.5	14.1	13	12.2	11.9	12.2	13.2	14.5	12.4
Avg	8	7.7	7.3	7	6.9	6.7	6.4	6.3	7.3	9.5	12.1	14.4	15.9	16.6	16.8	16.6	15.6	13.3	11.4	10.3	9.5	8.9	8.5	8.2	10.5
S D	6.3	6.2	6.2	6.1	6.1	6.1	6.1	6.1	5.5	4.7	4.1	4.1	4.1	4	4	4	4	4.4	4.9	5.3	5.6	5.8	5.9	6	4.6
S/A	0.78	0.81	0.84	0.87	0.89	0.91	0.95	0.96	0.75	0.5	0.34	0.28	0.26	0.24	0.24	0.24	0.26	0.33	0.43	0.52	0.58	0.65	0.7	0.73	0.43
Min	-5	-5.3	-5.5	-5.9	-5.9	-6	-6.2	-6.1	-4	-1.1	1.1	2.6	3.8	4.3	4.4	4.2	3.4	0.9	-1.3	-2.5	-3.3	-4.1	-4.8	-4.8	-0.5
Max	19.7	19.6	19.1	18.6	18.4	18.4	18.3	18.6	19.4	20.7	22.6	24.8	25.9	24.3	23.9	24	23.3	21.5	21.1	20.8	20.3	20.1	20	19.8	20.8
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 2006**

**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	3.5	3.2	2.6	3	3.2	2.9	2.8	3.2	3.9	4.7	6.1	7.2	7.2	6.2	6.9	7.1	6.4	5.5	4.5	4.5	4.5	4.9	5	4.7	4.7
2	4.3	2.9	2.3	2.1	1.8	1.8	1.5	0.8	1.4	3.1	2.9	2.5	1.8	2.5	2.7	2.1	1.8	1.4	0.9	1.7	1.5	1.2	1.8	1.9	2
3	2	2.1	1.6	1.9	1.7	2.1	1.4	1.7	1.6	3.3	3.8	3.9	3.6	4	3.7	3.2	3.1	2.9	2.6	2.3	2.9	2.2	2.6	3.1	2.6
4	2.5	3.9	4.1	3.5	3.5	3.3	3.2	2	2.1	3.1	3.9	4.2	3.7	3.5	2.9	3.4	2.3	1.4	0.8	0.3	0	0.3	0.4	0.4	2.5
5	0.4	1.1	1.5	1.7	1.7	2	2.2	1.7	2.1	2.5	2.5	2.8	3	2.2	1.6	1.4	0.8	1.1	1.9	1.9	1.1	0.7	0.7	0.8	1.6
6	0.9	1.7	1.3	1.2	1.3	1.1	0.3	0.2	1.4	2.8	3.7	4.2	3.7	2.9	2.8	2.3	0.9	1	1.9	2	1.9	1.6	1.4	1.6	1.8
7	2.4	2.6	1.8	2.1	2.6	2.1	2.5	2.5	2.5	2.8	3.6	4.2	3.7	3.9	4.2	3.1	3.2	3.1	2.7	3.1	4.8	4.2	4.8	5.7	3.3
8	5.3	6.5	5.5	5.9	4.2	3.8	3.3	3.3	3.4	3.7	4.3	4.1	4.5	4.1	3.7	3.6	2.3	1.6	1.7	1.2	1.2	0.7	1.3	1.3	3.4
9	1.2	1.2	0.8	1.2	1.1	1.4	1.5	1	1.2	1.1	2	2.5	2.3	3.2	3.3	3	1.5	0.8	0.8	0.7	1.2	1	1.6	1.6	1.6
10	1.8	1.7	2	2.6	2.4	2.1	2.2	2.4	3.1	3.5	3.5	3.5	3.8	3.1	3.6	2.5	1.5	1.3	1.8	1.6	1.1	1.2	1.3	1.3	2.3
11	1.3	0.4	1	1.5	1	0.5	0.3	0.5	0.6	1	1	1.1	1.9	2.2	1.9	1	0.8	0	1	0.2	0.5	0.1	0	0.1	0.8
12	0.1	0	0	0.3	0.2	0.6	1.5	0.8	0.7	1.7	2.3	2.7	2.6	2.3	2.3	2.2	2	1.3	1.1	1.4	2.2	1.4	1.3	1.2	1.3
13	0.7	1.5	1.3	0.6	0.1	0.5	0.3	0	0	0.4	0.5	1.6	1.4	1.5	0.5	0.1	0.4	0.2	0.6	0.2	0.2	0.2	0.1	0	0.5
14	0	0	0.2	1.2	0.6	0.5	0.4	0.3	0.1	0.3	0.9	1.1	1.8	2	2.4	1.1	0.4	0.4	0.9	1	1	0.7	1	1	0.8
15	1.9	2.7	1.8	0.7	1.2	1.2	0.5	0.6	0.6	2.2	2.6	3.2	3.5	3.9	4.1	3.5	2.5	2	1.5	1.9	2.9	2.9	2.8	2.5	2.2
16	2	2.1	1.7	1.4	1.7	0.9	1	0.6	0.3	2	2.1	2.3	2	1.8	1.2	2.7	1.7	1.1	0.5	1	0.6	0.3	1.1	0.6	1.4
17	0.2	0.2	0.5	0.1	0	0	0.6	0.9	1.2	2.3	2.4	2.7	2.9	2.5	2.4	2.1	1.7	1.7	1.3	1.7	1.9	1.7	1.7	1.9	1.4
18	2.2	2.3	2.4	2.9	2.9	3	2.8	2.5	3.2	3.7	4.5	4.9	4.3	4.8	3.9	3.6	1.9	1.8	1.9	2.3	2.5	2.3	2.4	2.3	3
19	1.9	2.1	2.6	3.4	2.2	2.2	2.1	2.1	2.1	3.6	3.7	2.8	2.8	2.7	2.6	2.1	2.3	1.6	1.5	1	0.5	0.9	0.6	0.2	2.1
20	0.4	0.5	0.7	2	1.9	1.7	1.6	2.2	3.2	2.8	2.8	3	1.7	1.7	1.5	1.6	1.6	1.8	0.8	0.3	0	0	0	0	1.4
21	0	0	0	0.5	0.1	0	0	0.1	0.3	0.3	1.2	1.5	0.9	1.3	1.9	0.7	0.4	0.2	0	0	0.5	0	0	0	0.4
22	0.2	0.3	0.8	1	1.1	1.6	2.1	1.6	1.8	2.2	1.5	0.9	1.7	2.7	2.6	2.8	3.8	4	4.8	4.7	5	4.9	5.8	4.5	2.6
23	4.2	5.5	3.1	2.3	1.8	1.8	1.2	2.1	1.9	2.6	2.3	3.1	3.4	3.8	3.6	3.5	2.8	2	1.7	1.9	1.6	1	0.9	0.7	2.4
24	1	1	1.2	0.8	1.9	1.7	1.7	1.6	1.6	1.4	2	3.1	2.8	2	1.8	2.4	1.9	1.3	1	0.7	1.7	1.4	1	0.4	1.6
25	0.4	0.9	1.3	1.7	1.9	2.3	2.8	3.2	3	2.4	2.2	2.4	3.7	4	6	6	5.6	6.7	5.5	4.3	4.7	4.1	3.3	2.5	3.4
26	1.9	1.9	2.5	3.2	3.1	2.5	3.8	6	5.8	5	5.5	6.1	6.7	6.8	6.4	6.3	4.6	4.6	3.9	3.3	3.5	4.4	4.3	4.1	4.4
27	3.8	2.7	1.8	3.5	1.9	1.8	2.5	3.3	2.9	3.1	3	2.8	3.3	3.5	4.3	3.3	2.1	1	0.6	1.1	1	0.3	0.6	1.3	2.3
28	1.4	0.6	0.2	0.1	0.2	0.8	0.1	0	0.4	0.4	1	1.5	1.6	1.5	1.5	1.5	1.6	0.9	1.2	0.5	0	0.2	0	0	0.7
29	0	0.2	0	0	0	0.1	0	0	0.3	0.5	0.3	0.6	1	1	1.9	2.1	2.2	1.7	1.4	1.6	0.8	1.1	1.4	1.3	0.8
30	0.3	0.4	0.6	0.3	0.3	0.1	0.5	0.4	0.2	0.5	1	1.3	1.5	2.4	2.3	1.1	0.6	1	1.4	0	0	0.1	0	0.4	0.7
31	0.1	0	0.1	0.1	0.6	0	0.3	0.7	1.9	2	2.9	3	3.3	3.3	3.2	3.3	3.1	2.5	2.9	2.3	2.5	2.8	3.7	3.9	2
Avg	1.6	1.7	1.5	1.7	1.6	1.5	1.5	1.6	1.8	2.3	2.6	2.9	3	3	3	2.7	2.2	1.9	1.7	1.6	1.7	1.6	1.7	1.7	2
S D	1.4	1.6	1.3	1.3	1.1	1	1.1	1.4	1.3	1.3	1.4	1.5	1.5	1.3	1.5	1.6	1.4	1.5	1.3	1.3	1.5	1.5	1.6	1.6	1.1
S/A	0.93	0.94	0.82	0.79	0.72	0.69	0.72	0.87	0.75	0.56	0.53	0.5	0.49	0.44	0.49	0.57	0.65	0.82	0.77	0.78	0.86	0.97	0.94	0.94	0.54
Min	0	0	0	0	0	0	0	0	0	0.3	0.3	0.6	0.9	1	0.5	0.1	0.4	0	0	0	0	0	0	0	0.4
Max	5.3	6.5	5.5	5.9	4.2	3.8	3.8	6	5.8	5	6.1	7.2	7.2	6.8	6.9	7.1	6.4	6.7	5.5	4.7	5	4.9	5.8	5.7	4.7
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

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

**December 2006**

**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	234	231	222	224	219	223	231	230	234	233	235	234	238	241	235	235	238	247	240	252	260	271	275	278	241
2	295	328	345	335	339	342	333	343	30	60	75	69	75	59	56	76	67	88	101	93	82	76	61	60	37
3	60	55	68	68	67	51	63	54	93	113	114	112	111	110	109	102	97	88	71	70	87	62	54	34	85
4	2	2	11	5	9	2	12	6	5	6	18	33	20	10	6	10	19	27	55	42	16	237	282	308	11
5	227	276	278	280	297	289	297	284	301	337	341	348	358	358	360	349	351	120	124	128	122	136	137	169	327
6	164	154	167	177	197	203	224	223	198	197	198	209	210	225	220	209	186	188	200	203	215	227	233	232	204
7	233	233	249	260	268	263	278	279	283	306	307	314	319	316	320	322	339	346	347	353	5	355	5	16	320
8	6	16	7	15	8	4	353	350	349	2	7	6	8	16	345	344	344	346	316	310	308	300	293	295	358
9	286	283	277	293	299	302	323	328	314	273	275	276	269	293	298	295	300	276	273	266	264	246	257	255	285
10	259	268	269	279	278	274	270	276	290	286	287	277	270	258	276	264	264	249	252	246	257	261	252	288	271
11	263	257	271	276	265	254	222	256	249	273	299	273	274	276	282	254	152	36	178	196	188	209	0	36	266
12	62	53	47	38	39	69	71	72	77	111	125	152	149	133	145	161	126	112	105	116	128	138	128	126	126
13	124	131	131	124	96	305	119	106	127	156	204	179	248	223	262	248	155	140	183	157	202	189	203	244	177
14	0	223	273	313	318	322	356	48	212	134	168	182	139	207	212	206	154	197	212	262	257	251	232	257	220
15	278	291	293	270	244	260	255	254	266	276	279	286	285	296	306	296	279	268	287	268	276	282	304	317	286
16	320	311	318	321	323	344	332	5	19	62	104	110	132	172	150	163	172	163	192	156	135	176	207	215	143
17	216	225	196	203	315	315	209	212	217	229	240	247	253	251	253	266	234	243	247	249	241	252	250	264	244
18	265	275	275	277	277	278	279	276	281	284	300	298	298	308	304	312	290	298	288	277	287	294	300	309	290
19	304	352	61	89	76	79	71	81	79	89	89	86	86	82	89	92	85	75	61	46	46	50	38	30	75
20	43	32	50	69	73	53	34	38	51	60	84	75	70	77	120	125	129	124	129	137	0	339	0	0	75
21	328	340	359	322	317	293	298	285	275	273	288	314	328	306	294	279	278	301	203	0	214	208	0	151	296
22	127	159	163	144	139	138	139	132	137	146	147	136	143	149	165	171	175	174	176	179	187	193	197	205	171
23	213	213	223	221	221	264	243	270	248	276	272	284	289	285	299	292	283	279	274	311	337	315	319	297	266
24	284	295	301	285	306	316	319	319	317	334	10	43	89	113	111	93	104	85	91	80	81	88	81	164	41
25	57	79	77	78	96	111	116	118	124	116	118	119	139	151	163	166	201	208	234	231	238	239	245	237	175
26	238	233	250	264	265	260	295	303	292	289	284	274	281	285	295	294	297	297	284	282	284	287	307	318	286
27	326	14	8	3	352	325	319	320	336	341	349	359	330	325	304	316	319	337	331	305	294	263	269	282	331
28	297	282	308	263	282	295	58	184	305	301	217	224	280	282	267	193	167	181	178	205	0	79	201	50	242
29	68	138	268	38	0	321	323	322	0	2	43	27	71	104	116	124	125	120	111	102	107	85	72	72	99
30	60	22	28	25	29	25	31	20	24	29	40	69	336	322	296	313	310	273	286	8	274	256	282	99	338
31	88	75	74	116	120	122	129	123	112	119	130	140	136	139	145	144	134	131	130	138	149	161	179	192	144
Avg	288	304	314	322	310	310	320	314	308	320	307	293	284	283	274	257	221	220	226	232	245	257	268	285	284
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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



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

**December 2006**

**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	6	5.3	4.3	5.2	5.4	4.9	5	5.4	7	8.4	10.3	11.9	12.2	10.7	10.9	11.9	10.5	9	7.4	7.4	7.5	8.1	8.1	7.5	7.9
2	6.8	6	4.7	4	3.5	3.6	2.8	1.8	3.2	5.1	4.9	4.2	3.6	4.5	4.9	3.6	3.1	2.4	1.6	2.8	2.6	2.3	3.1	3.4	3.7
3	3.4	3.3	2.7	3.3	2.8	3.5	2.5	2.7	3	5.6	6.5	6.4	6	6.5	6.1	5.4	5	4.6	4.4	4	4.3	3.7	4.4	5.2	4.4
4	6	7.8	8.2	7.6	7.5	7	6.7	5.3	5	6.1	7.5	7.6	7.3	7.2	5.9	6.5	4.6	2.7	1.8	0.9	0.3	0.6	0.8	0.7	5.1
5	1	1.6	2.1	2.3	2.6	3.3	3.4	2.5	3.3	5.1	5.3	5.6	6	4.5	3.5	3.3	2	2.3	3	2.9	1.8	1.2	1.2	1.1	3
6	1.4	2.4	1.9	1.8	2	1.8	0.9	0.6	2.4	4.5	6	6.5	6.3	4.8	4.6	3.8	1.8	1.8	2.9	3.1	3.1	2.8	2.4	2.9	3
7	4	4.4	3.2	3.5	4.2	3.6	3.8	4	4	4.8	5.6	7.2	6.4	6.3	7.2	5.6	6	5.8	5.3	6.3	9.7	8.1	9.5	10.8	5.8
8	11	12.1	11.7	11	8.7	7.8	6.8	6.5	7	7.5	8.4	8.2	8.5	7.7	7.1	6.9	5.1	3.6	2.8	2.1	2.1	1.4	1.8	1.9	6.6
9	1.8	1.7	1.3	1.7	1.7	2	2.4	2	2.2	2.1	3.4	4.3	3.9	5.1	5.1	4.7	2.5	1.4	1.4	1.3	1.9	1.6	2.5	2.6	2.5
10	3	2.7	3.1	3.7	3.7	3.1	3.5	3.7	4.9	5.5	5.5	5.4	5.8	5.2	5.5	4	2.4	2	2.9	2.5	1.9	1.8	2.2	2.2	3.6
11	2.1	1	1.6	2.2	1.6	1	0.9	1	1.3	1.8	2.1	2	3.3	3.7	3.2	2	1.3	0	0.1	0.6	1.2	0.2	0	0.2	1.4
12	0.3	0	0.1	0.7	0.6	1.1	2	1.2	1.5	3.2	4	4.5	4.2	3.8	3.8	3.4	3.3	2	1.9	2.2	3.3	2.3	2	1.8	2.2
13	1.2	2.2	1.8	1	0.2	1.1	0.8	0.3	0.1	1	1.4	2.7	3	2.7	1.6	0.5	0.8	0.5	1.1	0.4	0.5	0.6	0.5	0.4	1.1
14	0	0.2	0.8	2	1.4	1.4	1.3	0.8	0.6	0.9	1.9	2.2	2.9	3.5	3.8	2	0.8	1.1	1.7	2	2.2	2	2.1	2.1	1.7
15	3.3	4.4	3.4	1.7	2.5	2.4	1.6	1.6	1.7	3.6	4.3	5.1	5.8	6.4	6.4	5.2	3.7	3	2.2	3	4.3	4	4.4	3.9	3.7
16	3.1	3.1	2.5	2.2	2.7	1.9	1.7	1.3	1	3.4	3.6	3.9	3.6	3.1	2.4	4.1	2.7	1.8	1.1	1.6	1.1	0.7	1.8	1.3	2.3
17	0.5	0.7	1	0.3	0.1	0.1	1.2	1.8	2.1	4	3.9	4.3	4.6	4	4	3.3	2.8	2.9	2.5	2.7	2.7	2.6	2.4	2.9	2.4
18	3.4	3.5	3.9	4.5	4.2	4.2	4.2	3.8	4.6	5.5	7.5	7.5	7	7.6	6.2	5.6	2.7	2.6	2.7	3	3.6	3.2	3.2	3.4	4.5
19	2.7	3.8	4.4	5.3	3.7	3.5	3.5	3.4	4.2	5.8	6	5	4.8	4.7	4.4	3.8	4	2.8	2.8	1.9	1.3	1.7	1.5	0.9	3.6
20	1.1	1.2	1.7	3.4	3.5	2.8	2.7	3.6	5.4	4.9	5.1	5.1	3.4	3	2.9	3.1	2.9	3.2	1.6	0.6	0	0.1	0	0	2.5
21	0	0.1	0	1.1	0.2	0.1	0.1	0.5	0.9	1.1	2.2	2.7	2.4	2.6	3	1.4	0.9	0.7	0.2	0	1	0.1	0	0	0.9
22	0.4	0.5	1.4	1.7	1.8	2.7	3.5	2.5	3	3.9	2.9	2	3	4.5	4.2	4.5	5.9	5.9	7.3	7.5	8.1	8.3	9	7.8	4.3
23	7	9	5.2	4	3.2	3	2.5	3.5	3.3	4.3	3.9	5.5	5.4	5.7	5.8	5.7	4.1	2.9	2.7	3.2	3.2	1.7	1.5	1.3	4.1
24	1.5	1.5	1.7	1.3	2.4	2.5	2.7	2.3	2.7	3.3	4.1	5.4	4.7	3.7	3.2	4.1	3.2	2	1.8	1.5	2.8	2.4	1.8	1	2.6
25	0.8	1.5	2	2.5	2.6	3.5	4.6	4.8	4.7	4.2	3.6	4.1	6.4	6.9	9.6	9.9	9.6	11.3	9.2	7.6	8	7.8	5.9	4.6	5.7
26	3.7	3.7	4.6	5.3	5.5	4.6	6.5	9.6	9.6	8	9	9.9	10.7	11	10.2	9.9	7.3	7.3	5.9	4.7	5.2	6.4	6.7	6.4	7.2
27	6.6	4.9	4.2	6.7	4.2	3.4	4.1	5.5	5.8	6.1	6.1	5.6	6.2	6.5	6.9	6	3.8	2	1.2	1.6	1.5	0.7	1.2	1.7	4.3
28	1.8	1.1	0.4	0.4	0.3	1.2	0.4	0.1	0.7	1.2	2	2.9	3	2.9	2.8	2.4	2.4	1.4	1.8	1	0	0.4	0.1	0.1	1.3
29	0.1	0.5	0.1	0	0	0.2	0	0	0.8	1.4	1.1	1.7	2.2	2.3	3.2	3.4	3.4	2.6	2.2	2.2	1.4	1.7	1.9	1.8	1.4
30	0.6	0.9	1.2	0.9	0.8	0.4	1.3	1.1	1.1	1.6	1.9	2.7	3.1	4.3	3.7	2.3	1.2	1.6	2.4	0.2	0.3	0.3	0.1	0.8	1.4
31	0.3	0.1	0.3	0.5	1	0.1	0.6	1.2	3.1	3.4	4.8	4.8	5.2	5.1	5.2	5.1	5.2	4.1	4.5	3.6	3.9	4.5	5.9	6.6	3.3
Avg	2.7	2.9	2.8	3	2.7	2.6	2.7	2.7	3.2	4.1	4.7	5.1	5.2	5.2	5.1	4.6	3.7	3.1	2.9	2.7	2.9	2.7	2.9	2.8	3.5
SD	2.6	2.8	2.5	2.4	2.1	1.9	1.9	2.2	2.2	2.1	2.3	2.4	2.3	2.1	2.3	2.5	2.3	2.5	2.1	2.1	2.5	2.5	2.7	2.7	1.8
S/A	0.96	0.96	0.9	0.82	0.77	0.71	0.7	0.8	0.69	0.51	0.49	0.47	0.45	0.42	0.44	0.54	0.63	0.78	0.73	0.77	0.86	0.94	0.94	0.94	0.52
Min	0	0	0	0	0	0.1	0	0	0.1	0.9	1.1	1.7	2.2	2.3	1.6	0.5	0.8	0	0.1	0	0	0.1	0	0	0.9
Max	11	12.1	11.7	11	8.7	7.8	6.8	9.6	9.6	8.4	10.3	11.9	12.2	11	10.9	11.9	10.5	11.3	9.2	7.6	9.7	8.3	9.5	10.8	7.9
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.

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 2006**

**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	1017	1017	1017	1016	1015	1015	1015	1015	1014	1014	1013	1012	1010	1009	1008	1008	1008	1009	1009	1010	1010	1011	1011	1012	1012	
2	1013	1014	1015	1016	1017	1017	1018	1019	1021	1022	1023	1023	1023	1023	1023	1023	1024	1025	1025	1026	1026	1027	1027	1027	1021	
3	1027	1027	1027	1027	1027	1028	1028	1028	1029	1028	1028	1027	1026	1025	1023	1023	1022	1021	1021	1020	1019	1018	1016	1015	1024	
4	1014	1015	1015	1015	1016	1017	1018	1019	1020	1021	1022	1022	1021	1021	1021	1022	1023	1023	1023	1023	1024	1023	1024	1024	1020	
5	1023	1023	1022	1022	1022	1023	1023	1024	1025	1025	1025	1025	1024	1024	1024	1024	1025	1026	1026	1027	1027	1028	1028	1027	1025	
6	1027	1027	1027	1027	1027	1027	1027	1027	1027	1027	1027	1027	1026	1024	1024	1022	1022	1021	1021	1020	1020	1019	1019	1019	1018	1024
7	1017	1017	1016	1016	1015	1015	1015	1015	1015	1015	1014	1013	1012	1012	1012	1012	1012	1013	1013	1015	1016	1017	1018	1019	1015	
8	1021	1022	1023	1024	1025	1026	1027	1027	1028	1029	1029	1028	1028	1028	1028	1028	1029	1029	1030	1030	1030	1030	1030	1031	1027	
9	1031	1031	1031	1030	1030	1031	1031	1032	1032	1033	1033	1032	1031	1030	1030	1030	1030	1030	1031	1031	1031	1031	1031	1030	1031	
10	1030	1030	1030	1030	1030	1030	1030	1030	1031	1031	1031	1030	1029	1029	1028	1028	1028	1028	1029	1029	1029	1029	1028	1028	1029	
11	1028	1028	1028	1028	1028	1028	1029	1029	1030	1030	1030	1029	1029	1028	1028	1028	1028	1028	1029	1029	1029	1029	1029	1029	1029	
12	1029	1029	1029	1029	1029	1029	1029	1030	1030	1030	1030	1030	1029	1029	1028	1028	1028	1028	1028	1028	1027	1027	1027	1026	1029	
13	1026	1025	1025	1024	1024	1024	1024	1024	1024	1024	1023	1022	1021	1020	1020	1020	1020	1020	1020	1019	1019	1019	1018	1022		
14	1018	1018	1018	1017	1017	1017	1017	1017	1018	1018	1018	1018	1017	1016	1015	1015	1015	1015	1015	1015	1014	1014	1014	1013	1016	
15	1013	1012	1012	1012	1011	1011	1011	1010	1010	1011	1011	1009	1008	1008	1007	1007	1008	1008	1009	1010	1010	1011	1011	1012	1010	
16	1012	1013	1013	1014	1014	1015	1017	1018	1019	1020	1020	1020	1019	1019	1019	1020	1021	1021	1021	1022	1022	1023	1023	1023	1019	
17	1023	1023	1023	1023	1023	1023	1024	1024	1024	1024	1024	1023	1022	1021	1021	1021	1021	1021	1022	1022	1022	1022	1022	1021	1022	
18	1021	1021	1021	1020	1020	1021	1021	1021	1022	1022	1022	1021	1020	1019	1019	1019	1020	1020	1020	1020	1020	1020	1020	1020	1020	
19	1019	1020	1020	1020	1021	1021	1022	1022	1023	1023	1023	1022	1022	1022	1021	1022	1023	1024	1024	1025	1025	1025	1026	1026	1023	
20	1026	1027	1028	1028	1028	1028	1028	1029	1030	1031	1031	1030	1029	1029	1028	1028	1028	1029	1029	1029	1029	1029	1029	1028	1029	
21	1027	1027	1027	1027	1027	1027	1027	1027	1027	1028	1028	1027	1026	1026	1025	1025	1026	1026	1026	1026	1026	1026	1026	1025	1026	
22	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1023	1022	1021	1020	1020	1019	1019	1017	1017	1016	1015	1014	1013	1021	
23	1012	1011	1011	1011	1010	1010	1010	1010	1011	1012	1012	1011	1010	1009	1010	1010	1011	1012	1012	1013	1014	1014	1014	1014	1011	
24	1014	1014	1014	1014	1014	1015	1016	1017	1017	1018	1019	1019	1019	1019	1019	1020	1021	1022	1023	1023	1023	1023	1024	1023	1019	
25	1023	1023	1022	1021	1020	1020	1020	1019	1019	1019	1018	1015	1012	1010	1008	1005	1005	1004	1004	1003	1003	1003	1003	1002	1013	
26	1001	1000	1000	1000	999	1000	1000	1000	1001	1001	1002	1001	1000	1000	1000	1000	1001	1002	1002	1002	1003	1004	1004	1004	1001	
27	1005	1006	1007	1008	1009	1010	1012	1013	1015	1016	1016	1016	1016	1016	1017	1018	1019	1020	1021	1022	1023	1023	1024	1016		
28	1024	1025	1025	1026	1026	1027	1027	1028	1029	1030	1030	1029	1028	1028	1028	1028	1028	1028	1029	1029	1029	1030	1030	1030	1028	
29	1030	1030	1030	1030	1030	1030	1031	1031	1032	1033	1033	1032	1032	1031	1031	1031	1031	1032	1032	1032	1032	1032	1032	1032	1031	
30	1031	1030	1031	1030	1030	1029	1029	1030	1030	1031	1031	1030	1029	1028	1027	1027	1027	1027	1027	1028	1027	1027	1027	1027	1029	
31	1027	1027	1027	1027	1026	1027	1027	1027	1028	1028	1028	1027	1026	1025	1025	1025	1025	1024	1024	1023	1022	1022	1021	1020	1025	
Avg	1021	1021	1021	1021	1021	1021	1022	1022	1023	1023	1023	1022	1021	1021	1021	1021	1021	1021	1021	1021	1022	1022	1022	1021	1022	
S D	8	8	8	8	8	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	7		
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
Min	1001	1000	1000	1000	999	1000	1000	1000	1001	1001	1002	1001	1000	1000	1000	1000	1001	1002	1002	1002	1003	1003	1003	1002	1001	
Max	1031	1031	1031	1030	1030	1031	1031	1032	1032	1033	1033	1032	1032	1031	1031	1031	1031	1032	1032	1032	1032	1032	1032	1032	1031	
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928		

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**December 2006**

**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	12.6	12.6	12.6	12.6	12.6	12.9	13	13.2	13.3	13.3	13.2	13.4	13.3	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.9
2	12.6	12.6	12.6	12.6	12.6	12.5	12.5	13.4	13.7	13.6	13.6	13.5	13.5	13.5	13.5	13.6	13.3	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13
3	12.6	12.6	12.6	12.6	12.5	12.5	12.5	13.3	13.8	13.7	13.6	13.6	13.5	13.5	13.5	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13
4	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.6	13.3	13.7	13.7	13.7	13.7	13.7	13.7	13.3	12.8	12.7	12.7	12.6	12.6	12.6	12.6	12.9
5	12.6	12.5	12.5	12.5	12.5	12.5	12.5	13.4	13.9	13.8	13.8	13.7	13.7	13.7	13.7	13.7	13.3	12.8	12.7	12.7	12.7	12.7	12.6	12.6	13
6	12.6	12.6	12.6	12.6	12.5	12.5	12.5	13.4	13.8	13.7	13.7	13.6	13.6	13.6	13.6	13.5	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	13
7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13.2	13.6	13.6	13.5	13.5	13.5	13.5	13.6	13	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.9
8	12.6	12.6	12.5	12.5	12.5	12.4	12.4	13.6	14.1	14	14	13.9	13.9	13.9	13.9	13.9	13.5	12.8	12.7	12.7	12.6	12.6	12.6	12.6	13.1
9	12.6	12.5	12.5	12.4	12.4	12.4	12.4	13.5	14	14	13.9	13.8	13.8	13.8	13.8	13.8	13.4	12.8	12.7	12.7	12.7	12.7	12.6	12.6	13.1
10	12.6	12.6	12.6	12.6	12.5	12.5	12.5	13.3	13.9	13.8	13.7	13.7	13.6	13.6	13.6	13.6	13.3	12.8	12.7	12.7	12.7	12.7	12.7	12.6	13
11	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.5	13.3	13.8	13.7	13.7	13.6	13.5	13.5	13.5	13.2	12.8	12.7	12.7	12.7	12.7	12.6	12.6	13
12	12.6	12.6	12.6	12.5	12.5	12.5	12.5	13.3	13.8	13.7	13.6	13.5	13.5	13.4	13.4	13.5	13.2	12.8	12.7	12.7	12.7	12.7	12.7	12.7	13
13	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.5	12.8	13.2	13.5	13.5	13.5	13.5	13.4	13.1	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.9
14	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.8	13.5	13.7	13.6	13.5	13.4	13.4	13.4	13.3	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.9
15	12.6	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.7	13.3	13.6	13.6	13.5	13.5	13.5	13.5	13.1	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
16	12.6	12.6	12.6	12.6	12.5	12.5	12.5	13.2	13.8	13.7	13.6	13.5	13.5	13.5	13.5	13.5	13.3	12.8	12.7	12.7	12.7	12.6	12.6	12.6	13
17	12.6	12.6	12.6	12.5	12.5	12.5	12.5	13.1	13.8	13.7	13.6	13.5	13.5	13.4	13.4	13.5	13.1	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13
18	12.7	12.6	12.6	12.6	12.6	12.6	12.5	12.8	13.6	13.6	13.5	13.4	13.4	13.4	13.3	13.4	13.1	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
19	12.7	12.6	12.6	12.6	12.6	12.6	12.5	12.7	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	12.9	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13
20	12.6	12.5	12.5	12.5	12.5	12.5	12.4	13.1	13.9	13.8	13.7	13.7	13.6	13.6	13.6	13.7	13.3	12.8	12.7	12.7	12.7	12.6	12.6	12.6	13
21	12.6	12.6	12.6	12.5	12.5	12.5	12.4	12.4	13.1	13.7	13.7	13.6	13.6	13.6	13.5	13	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
22	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.6	12.7	12.9	12.9	13.1	13.1	12.8	12.8	12.7	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.7
23	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6	13	12.9	13.1	13	13.3	13	12.8	12.7	12.7	12.7	12.6	12.6	12.6	12.7
24	12.6	12.5	12.5	12.5	12.5	12.4	12.4	12.9	13.6	13.7	13.6	13.5	13.5	13.5	13.5	13.5	13.2	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.9
25	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.7	12.8	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6
26	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6	12.8	13	13.1	13.1	13.4	13.5	13.5	13	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.8
27	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.8	13.7	13.7	13.6	13.6	13.6	13.6	13.6	13.4	12.8	12.7	12.7	12.6	12.6	12.6	12.6	13
28	12.6	12.6	12.6	12.6	12.5	12.5	12.5	13.1	13.9	13.8	13.7	13.6	13.5	13.5	13.5	13.5	13.4	12.8	12.7	12.7	12.7	12.7	12.6	12.6	13
29	12.6	12.6	12.6	12.6	12.5	12.5	12.5	13	13.8	13.7	13.6	13.5	13.5	13.4	13.4	13.5	13.2	12.8	12.7	12.7	12.7	12.6	12.6	12.6	13
30	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.5	13.3	13.8	13.7	13.6	13.5	13.5	13.5	13.5	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.9
31	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.8	13.2	13.6	13.5	13.5	13.5	13.5	13.3	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.9
Avg	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.9	13.4	13.5	13.5	13.5	13.5	13.5	13.5	13.4	13.1	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.9
SD	0	0	0	0	0	0.1	0.1	0.4	0.5	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.1	0	0	0	0	0	0	0	0.1
StA	0	0	0	0	0	0	0	0.03	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0	0	0	0	0	0	0	0	0.01
Min	12.5	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.5	12.5	12.6	12.7	12.8	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6
Max	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13.6	14.1	14	14	13.9	13.9	13.9	13.9	13.9	13.5	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13.1
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

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