

December 2008

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	0	46	109	?	?	?	?	?	?	112 ?	42	0	0	0	0	0	0	0	308 ?
2	0	0	0	0	0	0	0	18	51	72	86	88	108	142 ?	?	103 ?	31	0	0	0	0	0	0	0	700 ?
3	0	0	0	0	0	0	0	87	?	?	473 ?	533 ?	?	?	?	107 ?	36	0	0	0	0	0	0	0	1236 ?
4	0	0	0	0	0	0	0	50	?	?	?	349 ?	340 ?	272 ?	189 ?	63 ?	21	0	0	0	0	0	0	0	1285 ?
5	0	0	0	0	0	0	0	13	60	58	79	149	175	178	126	69	10	0	0	0	0	0	0	0	916
6	0	0	0	0	0	0	0	34	?	?	?	?	?	?	184 ?	98	17	0	0	0	0	0	0	0	333 ?
7	0	0	0	0	0	0	0	41	?	?	?	?	?	?	?	112 ?	41	0	0	0	0	0	0	0	194 ?
8	0	0	0	0	0	0	0	42	116 ?	?	288 ?	331 ?	263	212 ?	307 ?	100 ?	31	0	0	0	0	0	0	0	1691 ?
9	0	0	0	0	0	0	0	37	110 ?	?	?	146 ?	107	212	160	118	24	0	0	0	0	0	0	0	913 ?
10	0	0	0	0	0	0	0	13	50	168	214 ?	248	226	258	172	70	20	0	0	0	0	0	0	0	1438
11	0	0	0	0	0	0	0	5	16 ?	48	57	133	171	82 ?	33 ?	9 ?	3	0	0	0	0	0	0	0	555 ?
12	0	0	0	0	0	0	0	8	51	89	168 ?	240 ?	?	175 ?	?	75 ?	24	0	0	0	0	0	0	0	830 ?
13	0	0	0	0	0	0	0	37	107 ?	?	?	517 ?	?	?	331 ?	165 ?	34	0	0	0	0	0	0	0	1191 ?
14	0	0	0	0	0	0	0	30	42 ?	371 ?	423 ?	?	?	?	?	89	33	0	0	0	0	0	0	0	987 ?
15	0	0	0	0	0	0	0	33	132 ?	?	185 ?	359 ?	311 ?	370 ?	239 ?	77	21	0	0	0	0	0	0	0	1727 ?
16	0	0	0	0	0	0	0	28	21	40	59	124	96	76	38	27	11	0	0	0	0	0	0	0	519
17	0	0	0	0	0	0	0	16	41	73	109	203	163	124	102	80	21	0	0	0	0	0	0	0	932
18	0	0	0	0	0	0	0	20	77	179	236 ?	487 ?	251	254 ?	166	95	35	0	0	0	0	0	0	0	1800 ?
19	0	0	0	0	0	0	0	13	47	66	85	71	106	111	131	76	25	0	0	0	0	0	0	0	730
20	0	0	0	0	0	0	0	22	92	128	127	143	132	126	68	23	5	0	0	0	0	0	0	0	865
21	0	0	0	0	0	0	0	7	58	62	73 ?	134	190 ?	205 ?	227 ?	153 ?	33	0	0	0	0	0	0	0	1143 ?
22	0	0	0	0	0	0	0	34	162 ?	343 ?	463	526	532	470	368	194	46	0	0	0	0	0	0	0	3137 ?
23	0	0	0	0	0	0	0	23	107 ?	317	445	511	511	454	343	180	41	0	0	0	0	0	0	0	2932
24	0	0	0	0	0	0	0	14	70	121	160	275	279	180	99	89	34	0	0	0	0	0	0	0	1320
25	0	0	0	0	0	0	0	7	41	68	148	204	208	253 ?	323	182	44	0	0	0	0	0	0	0	1478
26	0	0	0	0	0	0	0	33	161 ?	318	406 ?	367 ?	299	182	91	34	7	0	0	0	0	0	0	0	1899 ?
27	0	0	0	0	0	0	0	13	73	152	210	267	267	299	317	166	43	0	0	0	0	0	0	0	1807
28	0	0	0	0	0	0	0	14	52	160	412 ?	481	420 ?	413 ?	329 ?	89 ?	38	0	0	0	0	0	0	0	2407 ?
29	0	0	0	0	0	0	0	3	23	41	83	107	143	250 ?	344	190	45	0	0	0	0	0	0	0	1229
30	0	0	0	0	0	0	0	32	160	322	449	424	476	321 ?	294 ?	212 ?	46	0	0	0	0	0	0	0	2736 ?
31	0	0	0	0	0	0	0	32	103 ?	?	?	?	530 ?	477	365	191 ?	46	0	0	0	0	0	0	0	1743 ?
Avg	0	0	0	0	0	0	0	26	79	152	227	285	263	244	214	108	29	0	0	0	0	0	0	0	1322 ?
S D	0	0	0	0	0	0	0	17	43	113	151	156	140	118	111	55	13	0	0	0	0	0	0	0	747
S/A	0	0	0	0	0	0	0	0.66	0.55	0.74	0.67	0.55	0.53	0.49	0.52	0.51	0.45	0	0	0	0	0	0	0	0.56
Min	0	0	0	0	0	0	0	3	16	40	57	71	96	76	33	9	3	0	0	0	0	0	0	0	194
Max	0	0	0	0	0	0	0	87	162	371	473	533	532	477	368	212	46	0	0	0	0	0	0	0	3137
n	0	0	0	0	0	0	1	321	244	234	220	258	254	222	220	277	301	0	0	0	0	0	0	0	2564

Daylight Data Recovery: 0.0% missing; 0.0% untested; 28.8% exceed the 15% QC threshold -- 3599 total daylight measurements.

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

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

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

December 2008

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	0	0	0	0	0	0?
2	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?
3	0	0	0	0	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	0	0	0	0	0	0	0	0?
5	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
6	0	0	0	0	0	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	0	0	0	0?
8	0	0	0	0	0	0	0	0	0?	?	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	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	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	1	0	0	0	0	0	0	0	0	0	0	2
12	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0?
14	0	0	0	0	0	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	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	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	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	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	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	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	1	0	0	0	0?	0?	0?	0?	0	0	0	0	0	0	0	0	0	1?
22	0	0	0	0	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	0	0	0	0?
24	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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?
26	0	0	0	0	0	0	0	0	0?	?	?	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	0	0	0	0	0	0	0	0?
28	0	0	0	0	0	0	0	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	1	1	0	0	0?	?	?	0?	0	0	0	0	0	0	0	0	2?
30	0	0	0	0	0	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	0	0	0	0?
Avg	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 D	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	1
S/A	0	0	0	0	0	0	0	1.29	1.91	2.19	3.51	3.76	3.32	4.02	3.66	4.9	0	0	0	0	0	0	0	0	0	1.56
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	0	0
Max	0	0	0	0	0	0	0	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
n	0	0	0	0	0	0	1	321	238	191	165	200	208	184	154	201	259	0	0	0	0	0	0	0	2128	

Daylight Data Recovery: 0.0% missing; 0.0% untested; 40.9% exceed the 15% QC threshold -- 3599 total daylight measurements.

Instrument: Eppley NIP Serial Number: 23398E6 Calibration Factor: 7.1447 μV/W/m² Calibration Date: 07/2007

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

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

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

December 2008

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	36	92	?	?	?	?	?	?	32 ?	17	0	0	0	0	0	0	0	178 ?
2	0	0	0	0	0	0	0	18	51	72	86	88	108	134 ?	?	34 ?	15	0	0	0	0	0	0	0	606 ?
3	0	0	0	0	0	0	0	21	?	?	55 ?	57 ?	?	?	?	27 ?	12	0	0	0	0	0	0	0	172 ?
4	0	0	0	0	0	0	0	20	?	?	?	287 ?	275 ?	209 ?	130 ?	63 ?	21	0	0	0	0	0	0	0	1006 ?
5	0	0	0	0	0	0	0	14	60	58	79	149	175	178	126	69	10	0	0	0	0	0	0	0	917
6	0	0	0	0	0	0	0	18	?	?	?	?	?	?	140 ?	84	17	0	0	0	0	0	0	0	260 ?
7	0	0	0	0	0	0	0	18	?	?	?	?	?	?	?	30 ?	15	0	0	0	0	0	0	0	62 ?
8	0	0	0	0	0	0	0	24	34 ?	?	260 ?	288 ?	239	177 ?	47 ?	34 ?	14	0	0	0	0	0	0	0	1118 ?
9	0	0	0	0	0	0	0	20	40 ?	?	?	146 ?	107	211	160	111	24	0	0	0	0	0	0	0	818 ?
10	0	0	0	0	0	0	0	14	50	154	204 ?	237	209	232	168	70	20	0	0	0	0	0	0	0	1359
11	0	0	0	0	0	0	0	5	14	43	57	133	171	67 ?	27 ?	11 ?	3	0	0	0	0	0	0	0	531 ?
12	0	0	0	0	0	0	0	7	51	86	149 ?	225 ?	?	182 ?	?	46 ?	16	0	0	0	0	0	0	0	762 ?
13	0	0	0	0	0	0	0	17	34 ?	?	?	70 ?	?	?	49 ?	34 ?	12	0	0	0	0	0	0	0	215 ?
14	0	0	0	0	0	0	0	17	30 ?	63 ?	66 ?	?	?	?	?	73	31	0	0	0	0	0	0	0	280 ?
15	0	0	0	0	0	0	0	21	83 ?	124 ?	148 ?	298 ?	269 ?	132 ?	110 ?	76	21	0	0	0	0	0	0	0	1281 ?
16	0	0	0	0	0	0	0	28	20	40	59	124	96	76	38	27	11	0	0	0	0	0	0	0	518
17	0	0	0	0	0	0	0	17	41	73	109	203	163	124	102	80	21	0	0	0	0	0	0	0	933
18	0	0	0	0	0	0	0	22	77	165	209 ?	83 ?	241	234 ?	158	95	35	0	0	0	0	0	0	0	1318 ?
19	0	0	0	0	0	0	0	14	47	66	85	71	106	111	131	76	25	0	0	0	0	0	0	0	731
20	0	0	0	0	0	0	0	24	91	128	127	143	132	126	68	23	5	0	0	0	0	0	0	0	866
21	0	0	0	0	0	0	0	8	54	62	55	124	185 ?	174 ?	162 ?	37 ?	14	0	0	0	0	0	0	0	875 ?
22	0	0	0	0	0	0	0	16	38 ?	54 ?	59	62	61	56	51	38	16	0	0	0	0	0	0	0	452 ?
23	0	0	0	0	0	0	0	25	44 ?	55	54	58	57	56	49	36	16	0	0	0	0	0	0	0	450
24	0	0	0	0	0	0	0	14	70	121	160	272	265	178	99	81	33	0	0	0	0	0	0	0	1294
25	0	0	0	0	0	0	0	7	41	68	147	203	207	199 ?	64	60	16	0	0	0	0	0	0	0	1012
26	0	0	0	0	0	0	0	19	48 ?	68	108 ?	323 ?	276	181	91	32	7	0	0	0	0	0	0	0	1153 ?
27	0	0	0	0	0	0	0	13	73	152	210	265	266	268	100	61	26	0	0	0	0	0	0	0	1433
28	0	0	0	0	0	0	0	14	52	151	98 ?	108	162 ?	85 ?	61 ?	78 ?	36	0	0	0	0	0	0	0	846 ?
29	0	0	0	0	0	0	0	3	23	41	83	107	141	179 ?	53	35	16	0	0	0	0	0	0	0	681
30	0	0	0	0	0	0	0	13	31	42	53	103	111	260 ?	238 ?	103 ?	14	0	0	0	0	0	0	0	968 ?
31	0	0	0	0	0	0	0	15	29 ?	?	?	?	65 ?	60	61	44 ?	23	0	0	0	0	0	0	0	297 ?
Avg	0	0	0	0	0	0	0	17	49	86	113	163	170	155	99	55	18	0	0	0	0	0	0	0	755 ?
S D	0	0	0	0	0	0	0	7	21	42	60	86	73	65	52	26	8	0	0	0	0	0	0	0	396
S/A	0	0	0	0	0	0	0	0.41	0.43	0.49	0.53	0.53	0.43	0.42	0.53	0.48	0.45	0	0	0	0	0	0	0	0.53
Min	0	0	0	0	0	0	0	3	14	40	53	57	57	56	27	11	3	0	0	0	0	0	0	0	62
Max	0	0	0	0	0	0	0	36	92	165	260	323	276	268	238	111	36	0	0	0	0	0	0	0	1433
n	0	0	0	0	0	0	1	302	253	238	224	260	256	226	225	282	300	0	0	0	0	0	0	0	2578

Daylight Data Recovery: 0.0% missing; 0.0% untested; 28.4% 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 2008

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	15.5	15.7	14.7	13.5	12.3	11.2	10.2	10.3	11.1	12.3	14	14.9	15	14.5	13.8	13.1	11.8	10.5	9.7	8.9	8.3	7.4	6.6	6.2	11.7
2	6.1	5.6	4.8	4.7	4.5	4	3.5	3.6	4	4.7	5.2	5.3	5.5	5.7	6.5	7.3	6.7	5.9	5.1	4.2	3.9	3.3	2.6	2.1	4.8
3	1.4	0.7	1	-0.2	-1.2	-1.1	-0.6	0.2	1.7	4.8	6.6	7.8	9	9.7	10	9.5	8.8	7.1	6	5.2	4.7	4.7	4.6	4.1	4.4
4	4.3	4.5	4.2	4	4	3.8	3.8	4	5.8	8.3	10.1	11	11.8	12.6	13.3	13.7	12.8	12.1	11.4	10.6	9.9	10.1	10.5	11.1	8.7
5	11.1	10.8	10.6	10.2	7.9	6.7	6	5.8	5.8	6	6.1	6.2	6.5	6.7	6.4	6.1	5.7	5.4	5.2	5	4.2	3.9	3.1	2.5	6.4
6	2	1.5	1.4	1.1	0.5	0.5	0.5	1.1	4.6	6.6	7.7	8.8	9.6	9.9	9.9	9.8	9.3	8.7	8.4	8	7.9	8	7.3	6	5.8
7	5.1	4.2	3.4	3	2.5	2.2	1.7	1.4	2.3	3.8	4.9	5.6	5.9	5.6	5.6	5.1	4.3	3	2.1	1.2	0.2	-0.7	-1	-1.7	2.9
8	-1.9	-1.7	-1.5	-2	-2.3	-2.9	-3.5	-3.2	-1.1	1.4	2.7	3.7	3.6	4.4	5.4	5.5	5	3.8	2.9	2.8	3.2	3.3	3.5	3.7	1.5
9	3.5	3.9	4.3	4.3	4.5	5.1	5.4	5.9	9	12.5	15.1	14.8	14.3	14.7	15	15.1	15.2	15.3	15.7	15.1	14.7	15.3	15.4	15.8	11.3
10	16.2	16.5	16.2	16.8	17.4	17.5	18.1	18.2	16.7	17.8	19.1	19.1	19.3	19.8	20.1	19.7	19.1	18.4	18	18.4	18.5	18.5	18.7	18.5	18.2
11	18.3	18.2	18.3	18.4	18.1	18	17.7	18	18.2	18.9	19.3	19.6	20.8	20.9	20	19.6	19.6	19.9	20.2	20.2	20.2	20.1	19.5	19	19.2
12	17.2	15.6	14.6	14.5	14.9	14.9	14.5	13.9	9.5	8.2	8.8	9.5	10.5	11.5	11.6	11.2	10.4	9.3	8.5	8.2	7.3	6.5	6.1	5.4	10.9
13	4.5	4.2	4	3.8	3.4	3	2.5	2.1	2.7	3.6	4.2	5.5	5.9	6.2	6.7	6.1	5.3	4	3.2	2.6	2.3	2.2	2	1.8	3.8
14	1.6	1.6	1.1	1.7	2.2	2.7	2.5	2.9	4.5	7.9	9.3	11.8	13.2	14.2	14.1	13.5	13.1	12.5	11.9	12.3	13.8	13.6	14.3	14.1	8.8
15	15.1	14.8	14.5	14.4	15	16	16.3	16.8	17.6	18.1	18.2	19.3	19.9	20.4	20.7	19.8	18.9	18.2	17.5	16.9	16	15.4	15	14.6	17.1
16	14.2	14.3	14.3	14.5	14.5	14.3	13.9	12.6	10.6	9	8.7	8.6	8.5	8	7.9	8	8.4	8.9	9.4	9.4	9.3	9.3	9.2	9.3	10.6
17	9.2	8.9	8.9	8.7	8.6	8.6	8.6	8.7	9	9.4	10.1	11.7	13.4	14.3	15.3	16	16.2	16	16.1	15.9	16	16.2	16	15.8	12.4
18	15.3	14.8	13.4	11.6	10.6	10.2	10	9.9	9.9	10.3	11.2	12.2	11.7	11.2	10.8	10.3	9.5	8.9	8.6	8.7	9	9.3	9.3	9.4	10.7
19	9.2	9.2	9	8.9	9.1	9.4	9.6	9.8	10.3	10.8	11.5	11.9	12.8	14	15.8	16.8	17	17.5	18.8	19.7	20	19.5	19	18.5	13.7
20	18	17.8	17.4	16.7	16.2	15.8	15.1	13.6	12.3	12.1	11.6	11.3	10.7	9.9	9.4	8.9	8.2	7.9	7.9	8	8.1	7.7	7.1	6.8	11.6
21	7.2	7.6	7.9	8.9	10.1	11.3	11.8	12.6	13.6	15.2	15.1	11.4	9.7	9.4	10.3	11.3	10.6	9.7	9.3	7.8	6.4	5	4.1	3.3	9.6
22	2.5	1.5	0.9	0.2	-0.8	-1.6	-2.5	-3.1	-3.2	-3.1	-2.3	-1.9	-1.2	-0.2	0.1	0.3	-0.2	-1.2	-1.8	-2	-2.6	-2.8	-3.3	-3.4	-1.3
23	-3.7	-4.3	-4.6	-4	-3.2	-3.1	-3.1	-2.8	-1.7	-0.4	0.9	2.3	3.1	3.9	4.5	5	4.2	3.3	2.7	2.7	1.9	1.8	2.2	3	0.4
24	3.8	4.3	5.6	7	7.9	9.3	11	12	13.6	15.5	15.8	17.2	16.8	17.9	17.6	17.9	17.4	16.4	15.9	16.2	16.6	16.9	17.3	17.4	13.6
25	17.1	17.4	17.9	18.1	18.9	17.7	16.2	15.7	15.1	15.2	15.3	15.8	15.6	15.5	13.8	13	11.6	9.8	8.8	8.1	7.6	7.3	6.5	5.9	13.5
26	5.5	5.2	5	4.8	4.2	3.9	3.4	3.4	5	8	10.4	11.7	12	12	11.6	11	10.1	8.8	8.2	8.2	8.4	8.7	9	9.3	7.8
27	9.6	9.9	10.1	9.9	9.6	9.5	9.6	9.6	9.9	10.6	11.5	12.7	14.3	15.9	17.1	18.2	16.5	14.8	13.5	13	12.2	12.3	12.6	13.1	12.3
28	13.6	14.2	15.2	16.2	16.2	16.4	16.9	17.1	17.2	17.6	19.4	21	22.2	22.9	23.5	23.1	21.9	21.1	20.6	19.5	18.6	18	17.5	17.2	18.6
29	16.4	14	12.6	12.7	13	12.3	11.4	8.9	7.6	7.9	8.2	8.7	9.4	10.1	11.1	11.6	10.5	9.1	7.9	7.1	6.8	6.6	6.3	6.3	9.9
30	6.7	6.8	7	6.7	6.4	6.2	5.3	5.1	6.3	8.5	11.1	12.8	13.4	14	14.5	15	14.2	12	10.9	10.4	9.5	8.9	8.7	8.4	9.5
31	8.5	8.9	9.5	10.2	9.6	9.7	9.6	10	10.9	12.1	13.4	14.7	13.8	11.7	10.3	8.8	7.2	5.7	4.7	3.8	2.6	1.5	0.4	-0.6	8.2
Avg	8.8	8.6	8.4	8.4	8.2	8.1	7.9	7.9	8.3	9.5	10.4	11.1	11.5	11.8	12	11.9	11.3	10.4	9.9	9.6	9.2	9	8.7	8.5	9.6
S D	6.3	6.3	6.2	6.3	6.4	6.4	6.5	6.4	5.7	5.5	5.4	5.4	5.4	5.4	5.4	5.3	5.4	5.5	5.8	5.9	6.1	6.2	6.4	6.5	5.2
S/A	0.72	0.73	0.74	0.75	0.78	0.79	0.82	0.81	0.69	0.58	0.52	0.48	0.47	0.46	0.45	0.45	0.48	0.53	0.58	0.62	0.66	0.7	0.73	0.76	0.54
Min	-3.7	-4.3	-4.6	-4	-3.2	-3.1	-3.5	-3.2	-3.2	-3.1	-2.3	-1.9	-1.2	-0.2	0.1	0.3	-0.2	-1.2	-1.8	-2	-2.6	-2.8	-3.3	-3.4	-1.3
Max	18.3	18.2	18.3	18.4	18.9	18	18.1	18.2	18.2	18.9	19.4	21	22.2	22.9	23.5	23.1	21.9	21.1	20.6	20.2	20.2	20.1	19.5	19	19.2
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 HMP-35C Serial Number: P0520031 Calibration Factor: 1.00 deg C/mV Calibration Date: 03/1988

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

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

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

December 2008

Relative Humidity (Roof)
Hourly and Daily Averages
Instrument: CSI HMP-35C
Percent

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily	
1	103.8	99.8	80.4	72.8	79.1	78.2	85	88	88.1	84.8	76.9	69.4	57.3	49.8	43.8	47	52.2	54.4	59.4	65	66.7	71.7	75.3	75.7	71.9	
2	73.3	73.7	77.3	78.9	82.2	85.8	88.7	89.6	91.5	89.6	87.2	87.6	86.1	87.3	82.7	73.3	73.9	78.6	84	87.6	87.6	88	89.1	90.2	83.9	
3	93.3	97	95.1	99.3	104.1 ?	?	103.1	96.8	90.4	78.7	71.7	60.3	55.4	55.2	55.4	58.3	63.3	71.7	79.5	87.7	90.6	89	91.1	96.1	81.9	
4	98.1	97.9	98.7	98.9	99.2	99	98.6	97.6	90.3	76.6	67.8	62.3	59.8	57.1	52.6	51.7	55.2	57.9	61.5	64.2	68.2	69.4	70.1	67.5	75.8	
5	67.6	69.8	75.5	86.6	99.8 ?	104.4 ?	102	99	93.4	89.2	82.3	80.3	78.3	74.4	72.9	71.7	73.5	77.4	79.1	81.5	81.5	83.5	85.8	88.5	83.2	
6	89.5	91.5	92.8	93.6	96.2	95.8	99.3	97.5	84.1	76.2	75.6	69.1	66.1	64.2	66.7	68.2	73.1	78.2	82.4	80.4	80.1	82.1	92.9	89.8	82.7	
7	96.2	104.1	?	?	?	?	104.6 ?	101.4	94.8	82.4	66.7	54	50.9	48.2	41.6	41.5	43.4	48.2	49.7	53.9	58.5	61.1	59.6	61.9	66.1 ?	
8	63.1	61.6	59.2	60.4	59.2	64.3	73.7	78.3	72.4	65.7	63.5	57.9	56	53.8	47.3	47.2	52.6	62.4	70.4	78.5	85.5	83.5	78.4	77.8	65.5	
9	77.1	73.9	73.3	78	94.1	81.2	80.7	92.5	90.8	82.8	75.5	77.5	80.5	81.3	84.6	90.8	94	94.6	94.6	98.7	100.6	98.5	101	99.1	87.3	
10	94.2	92.9	96.5	98.5	98.3	99.7	99.1	100.3	?	?	103.4	102.5	101.9	100.7	100.7	102	103.9 ?	?	?	?	?	?	?	?	99.6 ?	
11	?	?	?	?	?	?	?	?	?	?	?	?	102.4 ?	102.3	103.8 ?	?	?	104.9 ?	103.9	103.5	104	104.1	104.1	103.1	103.6 ?	
12	103.6	104.6 ?	104.6 ?	104.2	102.6	98.9	94.9	94.9	99.5	98.8	92.2	84.2	78.6	74.4	70.1	67.9	69.1	75.5	78.8	81.3	85.7	85.7	84.2	85.3	88.3	
13	84.9	82.3	79.5	74.9	71.5	73.7	76	76.7	74.3	70.3	63.9	59.3	57.2	55.6	54.9	57.8	61.2	72.6	80.6	84.4	86.1	88.4	89.6	92.9	73.7	
14	94.6	98.9	101.2	103.5	102.1	98.2	97.9	95.7	92.5	86.4	88.5	86.3	87	86.7	89.6	93.3	94.5	97.8	100	96.1	87.6	88.5	88.7	90.2	93.6	
15	86.3	86.9	88.2	90.4	90.1	89.8	90	89.3	86.5	88.4	91.7	87.1	85.5	85.7	87.2	90.5	92	96.4	100	100.2	101.9	103.5	?	?	91.3	
16	?	?	?	?	?	?	?	?	?	?	?	103.3 ?	103	103.6	?	?	?	?	?	?	?	?	?	?	?	103.3 ?
17	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	104.1	103.4	103.8	103.7	104.4 ?	?	105 ?	?	?	104.1 ?	
18	?	?	?	?	?	?	104.3 ?	103.9	103.8	101	98.1	94.5	86	88.1	89.3	89.9	94.3	97.3	99.9	101.2	100.7	100.2	99.5	100	100.6	97.5 ?
19	102.1	102.4	103.5	?	?	104.8 ?	104.2	104.6	104.6	?	?	?	?	?	104.7 ?	104.4	104.6 ?	103 ?	96.3	89.8	88.1	90.1	91.3	92.7	99.5 ?	
20	94.8	96	97.2	99.3	101.7	103.3	104.2 ?	104.3 ?	99.6	93.6	96.9	99.2	96	94.8	97.7	97.1	96	97.7	98.1	97.8	98.9	101.8	?	?	98.4 ?	
21	?	?	?	?	?	?	?	?	103.3	102.7	104.4	103.9 ?	103 ?	97.9	87.4	79.6	81.8	80.3	76.5	79.2	69.5	62.1	55.3	55.4	83.9 ?	
22	56.6	57	51.9	48.6	48.7	53	57.7	56.4	50.5	46.3	45.3	44.3	43	41.2	39.3	39.4	42.6	48.8	53.7	53.6	60	60.6	64.4	65.2	51.2	
23	65.2	68.3	71.9	71.4	75.3	80.9	86.8	87.2	82.9	78.4	76.1	72	69	66.2	65	66.4	73.4	78.1	86.9	93.4	95.7	98.8	100.9	102.8	79.7	
24	104.3 ?	?	?	103.8 ?	102.4	99.2	94.8	93.3	92.3	90.2	91.5	85.5	88.3	85.5	87.8	87	92.8	97.5	100.6	102.1	102.4	102.8	102.6	102.4	95.9 ?	
25	102.7	102.9	102.2	101.9	99.7	103 ?	?	101.6 ?	97.6	95.6	90.6	73.3	70.2	68.3	73.2	73.6	78.5	86.4	89.6	92.1	94.6	93.9	97.8	99.4	90.8	
26	101.8	102.3	102.5	102.6	103.1	104.3	104.6	103.7	99.7	94.5	89.8	84.4	83.6	84	86.1	90.7	95.5	102.2	?	?	?	?	?	?	96.4 ?	
27	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	102.8 ?	100.9	97.7	101.8	?	?	?	?	?	?	100.8 ?
28	?	?	?	?	?	?	?	?	?	?	?	100.6 ?	94.9	85.5	82.2	77.2	76.5	79.2	81.3	83.3	91.6	98.1	100	102	?	88.6 ?
29	102.7 ?	101.4	103.9	104.8	94.3	82.9	79	96	103.6	102.1	101	100.2	83.1	73.9	69.9	68.6	74.2	84	92.8	97.5	100	101.8	100.9	97.1	92.3	
30	91	83.7	73.2	73.3	73.9	73.5	77.1	76.3	70.7	67.2	58.8	53.7	48.9	44	40	40	53.7	62	61.8	61.2	72.2	81.1	86.1	90.4	67.2	
31	93.6	92	88	84.3	86.9	85.8	84.3	80	74.8	68.4	62	47.8	41.8	38.1	36.3	34.9	35.2	37.7	40.6	46.7	51.8	51.4	46.6	48	60.7	
Avg	89.2	88.7	87.1	87.7	89.3	89.7	91.3	92.2	89.2	83.6	81.5	77.3	75.2	74.1	72.7	73	76.3	79.8	81.8	84.2	85.2	86.9	85.7	85.7	85.8 ?	
S D	14.4	14.7	15.3	16	15.5	14.4	12.5	11.4	12.7	13.5	15.7	17.9	18.9	20.2	21.5	21.6	20.6	19	17.8	16.7	15.2	15.4	16.3	16.1	13.8	
S/A	0.16	0.17	0.18	0.18	0.17	0.16	0.14	0.12	0.14	0.16	0.19	0.23	0.25	0.27	0.3	0.3	0.27	0.24	0.22	0.2	0.18	0.18	0.19	0.19	0.16	
Min	56.6	57	51.9	48.6	48.7	53	57.7	56.4	50.5	46.3	45.3	44.3	41.8	38.1	36.3	34.9	35.2	37.7	40.6	46.7	51.8	51.4	46.6	48	51.2	
Max	104.3	104.6	104.6	104.8	104.1	104.8	104.6	104.6	104.6	104.6	102.7	104.4	103.9	103	103.6	104.7	104.4	104.6	104.9	103.9	104.4	104	105	104.1	103.1	104.1
n	275	272	260	259	254	248	272	287	299	288	307	317	324	344	336	348	341	321	322	319	312	320	288	276	7197	

Data Recovery: 0.0% missing; 0.0% untested; 19.4% failed QC -- 8928 total measurements.

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

December 2008

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	15.4	15.6	15.6	14.8	13.7	12.5	10.8	9.9	10.7	12.6	16	18.3	19	18.5	17.5	16.4	15.1	12.6	10.6	9.4	8.4	7.6	6.5	5.7	13
2	5.3	5	4.5	4	4.1	3.6	2.9	2.6	3.1	4.1	5.1	5.8	6.2	6.5	7.8	9.6	9.5	7	5.3	3.5	2.6	2.1	1.3	0.8	4.7
3	0.1	-0.6	-1	-1.2	-2.3	-3.1	-3.1	-2.3	1	6.2	11.6	14.3	15.1	15.7	15.2	14.4	12.9	9.3	6.3	4.6	3.5	2.8	2.5	2.1	5.2
4	1.9	2	2.3	2.5	2.5	2.5	2.3	2.5	5.1	9.3	12.9	14.5	14.6	15.3	15.4	15.6	14.7	12.9	11.6	10.6	9.6	9.4	9.9	10.4	8.8
5	10.9	11	10.9	10.6	10	8.5	7.4	6.6	6.4	6.6	6.9	7.2	7.9	8.4	8.8	8.4	7.6	6.6	6	5.4	4.5	3.3	2.2	1.4	7.2
6	0.9	0.4	-0.1	-0.5	-1.1	-1.8	-2	-1.7	1.3	7.9	11.9	13.9	15.2	15.4	14.5	13	11.3	9.7	8.6	8.2	7.9	7.8	7.5	6.8	6.5
7	6.1	5.1	4	3.3	2.5	2	1.5	0.9	2.3	5.4	8.2	9.8	10.6	10.3	9.5	8.7	7.5	4.7	2.1	0.5	-0.6	-1.6	-2.5	-3.2	4.1
8	-3.9	-4.1	-3.9	-3.7	-4	-4.6	-5.3	-5.5	-2.3	3.3	7.3	9.7	9.9	9.1	9.8	10	9	5.8	3.6	2.4	2	1.9	2	2.1	2.1
9	1.9	1.6	1.9	2.2	2.6	2.9	3.4	3.9	6.6	11.6	16	18.3	17.1	16.4	16.6	16.7	16.3	15.9	15.7	15.5	14.8	14.3	14.7	15.1	10.9
10	15.6	16.1	16.4	16.5	17	17.4	17.7	18.2	18	17.8	20	21.2	21.5	22	22.4	21.9	20.8	19.6	18.7	18.4	18.7	18.9	19	19.2	18.9
11	19	18.8	18.6	18.7	18.7	18.6	18.3	18.2	18.4	18.7	19.4	19.8	20.6	21.6	20.9	20.1	19.9	19.9	19.9	19.9	19.9	20	19.8	19.4	19.5
12	18.6	17.2	15.9	14.7	14.5	14.4	14.1	14.2	13.1	11	10.9	12.4	13.4	15.4	15.5	15.2	13.4	10.5	7.9	7.5	7.5	6.8	6.1	5.8	12.3
13	5.1	4.7	4.2	3.9	3.7	3.4	2.5	1.3	2.7	5.9	8.4	10.6	12.5	13	12.5	11.8	10.1	6.1	3.4	1.9	0.8	0.1	-0.1	-0.3	5.3
14	-0.3	-0.5	-0.9	-0.5	0	0.7	1	1	2.7	8.1	13	15.7	17.5	18.5	18.6	17.3	15.2	13.5	12.2	11.6	11.9	12.8	13.2	13.5	9
15	13.8	14.3	14.2	14	13.7	14.3	15.1	15.5	17	19.4	21.5	22.2	22.9	23.6	24.3	23.5	21.5	19.8	18.7	17.6	16.6	15.7	15.1	14.6	17.9
16	14.1	13.8	13.9	14.1	14.2	14.2	14	13.8	13.1	11.2	10.2	9.7	9.8	9.6	9.3	8.9	8.7	8.9	9.2	9.5	9.7	9.7	9.7	9.7	11.2
17	9.7	9.6	9.5	9.4	9.3	9.2	9.2	9.2	9.4	9.7	10.3	11.5	13.4	14.7	15.5	16.4	16.9	16.8	16.6	16.5	16.2	16.2	16.3	16.2	12.8
18	16	15.6	15	13.7	12.4	11.4	10.6	10.2	10.4	11.1	12.6	16	17.2	15.6	14.8	13.6	12.2	10.8	9.3	8.9	9.3	9.6	9.6	9.7	12.3
19	9.8	9.8	9.8	9.6	9.5	9.6	9.8	10	10.4	11	11.8	12.5	13	14	15.3	16.7	17.1	17	17.3	18.3	19	19.4	19.1	18.6	13.7
20	18.2	17.8	17.4	16.9	16.4	16	15.4	15	14.1	13.7	13.6	13.4	13.1	12.5	11.7	10.8	9.9	9.1	8.6	8.4	8.4	8.4	7.8	7.3	12.7
21	7.2	7.5	7.8	8.3	9.1	10.2	11.2	11.8	12.4	13.7	14.9	14.2	12.6	12.2	12.5	13.4	13.2	10.8	9.2	8.3	6.6	5	3.8	2.9	10
22	2.2	1.2	0.4	-0.2	-0.8	-1.7	-2.6	-3.4	-2.5	-0.5	1.4	2.9	3.7	4.2	4.1	3.7	3	0.4	-2	-3.2	-4	-4.6	-5.1	-5.5	-0.4
23	-6.1	-6.6	-6.9	-7.1	-6	-4.8	-4.4	-4.2	-2.9	1	4.9	8	10	10.5	10.2	9.8	8.7	5.5	3	1.9	1.1	0.5	0.3	0.6	1.1
24	1.4	2.2	3.1	4.2	5.3	6.6	8.4	10.1	11.7	13.9	15.6	17.3	18.7	19.7	19.7	19.3	18.9	17.6	16.4	15.9	16	16.3	16.7	17.1	13
25	17.3	17.2	17.6	17.9	18.4	18.4	17.5	16.5	15.7	15.5	16	17.2	18	18.2	18.5	17.8	16.1	12.8	9.8	8.1	7	6.3	5.6	4.8	14.5
26	4.2	3.8	3.6	3.4	3.1	2.7	2.4	2.2	3.9	8.5	13	15.7	16.2	16.3	15.1	13.7	12.3	10.9	9.4	8.8	8.7	8.8	9	9.3	8.5
27	9.7	10.1	10.4	10.7	10.5	10.2	10.1	10.2	10.3	11.4	13	14.8	17.3	19.1	21	22.1	21.6	18.3	15.5	13.8	13.1	12.8	12.8	13	13.8
28	13.5	14	14.5	15.5	16.2	16.4	16.8	17.2	17.5	17.9	19.8	23	24.8	25.6	26	25.7	24.2	22.6	21.5	20.8	19.7	19.1	18.5	17.9	19.5
29	17.4	16	14.1	13.1	12.9	12.7	12.3	11.3	9.1	8.2	8.1	8.4	9.2	10.6	13.3	15.2	15.1	11.7	8.4	6.7	5.8	5.5	5.2	4.9	10.6
30	5.1	5.3	5.4	5.4	5.2	5	4.7	4.1	5.9	9.7	13.7	17.2	18.4	18.7	18.1	18.1	17.8	14.8	11.3	9.6	8.3	7.5	7	6.8	10.1
31	6.5	6.6	7.1	7.9	8.6	8.6	8.6	8.6	10.3	12.9	15.2	17.1	18.1	17.2	15.4	13.4	11.3	8	5.6	4	2.9	1.8	0.8	-0.3	9
Avg	8.3	8.1	7.9	7.8	7.7	7.6	7.4	7.3	8.2	10.2	12.4	13.9	14.8	15.1	15.2	14.9	13.9	11.9	10.3	9.5	8.9	8.5	8.2	8	10.3
S D	7.1	7.1	7.1	7	7	7	7.1	7.1	6.2	4.9	4.7	4.8	4.9	5	5	4.9	4.9	5.3	5.8	6.2	6.4	6.7	6.9	7.1	5.2
S/A	0.86	0.88	0.9	0.9	0.91	0.92	0.95	0.97	0.76	0.48	0.38	0.35	0.33	0.33	0.33	0.33	0.36	0.45	0.56	0.65	0.72	0.79	0.84	0.89	0.5
Min	-6.1	-6.6	-6.9	-7.1	-6	-4.8	-5.3	-5.5	-2.9	-0.5	1.4	2.9	3.7	4.2	4.1	3.7	3	0.4	-2	-3.2	-4	-4.6	-5.1	-5.5	-0.4
Max	19	18.8	18.6	18.7	18.7	18.6	18.3	18.2	18.4	19.4	21.5	23	24.8	25.6	26	25.7	24.2	22.6	21.5	20.8	19.9	20	19.8	19.4	19.5
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

December 2008

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	4.8	5.6	6	5.2	4.4	3.5	1.6	2	2.8	4.3	5.1	6.2	8.7	8.8	9.2	6.9	7.2	5.8	5.7	4.9	4.5	3.3	3.1	3.7	5.1
2	3.8	3	2.9	2.2	1.1	1	1.1	1	1.6	1.9	2.4	2.8	3.4	3.8	3.6	2	1.5	0.4	0.3	1.2	1.5	1	1.2	1.1	1.9
3	0.9	1.1	1.1	0.3	0	0.3	1.1	1.7	1.5	0.8	1.3	2.2	2	1.8	2	2.4	1.4	1.3	1.1	1.2	1.2	1.2	0.8	0.9	1.2
4	1.2	1.5	2	1.9	1.8	1.8	1.8	1.9	2.4	3.2	4.4	4.4	4.6	4.8	4.2	3.2	2.1	1.7	1.7	1.4	1.3	1.4	1.1	2.1	2.4
5	1.4	1.3	1.3	2	3.6	4.2	3.2	2.9	3.2	3.2	3.5	3.2	3.2	2.6	2.9	2.3	1.7	1.1	0.9	0.8	0.7	0.8	1.1	1.3	2.2
6	1.3	1	0.6	0.3	0.1	0.4	0.6	0.2	0	1.4	2.5	2.8	2.9	3.2	2.8	2	0.4	0	0.5	0.8	0.9	1.1	1.1	1.8	1.2
7	1.6	0.4	0.9	1.5	2.7	2.9	2.5	3.2	3.2	3.8	5.1	5	4.6	5.1	5.2	4.5	3.5	2.2	1.7	1.5	1.9	1.5	1.3	1	2.8
8	1.3	1.5	1.9	1.4	0.9	0.2	0.3	0.2	0.6	1.9	1.3	1.1	1.4	1.3	1.5	1.3	1	1.2	1.4	1.6	1.3	1.3	1.7	1.2	1.2
9	0.8	1.2	1.1	1.7	1.2	1.3	1.4	1.7	2.6	3.5	3.8	4	3.8	4.4	3.5	3	2.9	2.8	3.1	2.7	2.2	2.7	3.3	3	2.6
10	2.7	2.4	2.1	3.3	3.4	3.8	4.4	4	1.8	2.5	3.9	4.2	3.6	2.9	2.6	2.6	2.4	2.9	3.2	3.6	3.2	3.1	2.9	2.5	3.1
11	2.5	2	1.6	1.7	1.9	3.2	3	1.9	1.6	2.9	2.4	2.3	3.6	4.2	4.6	3.5	4.7	5.3	6.5	5.4	6.4	6.3	5.5	4.1	3.6
12	5	3.4	3	2.2	4.2	5.1	5.2	7	5.8	4.3	3.7	3.7	3.2	2.7	3.6	2.8	1.9	0.9	0.4	2.6	2.2	2.2	2.1	2.1	3.3
13	2.5	2.5	2.3	2.8	2.4	2.2	1.7	1	1.9	3.1	3	1.8	1.8	1.7	1.4	1.6	1.2	1.6	1.4	1.5	0.9	1.1	1	0.4	1.8
14	0.1	0	0.5	0.4	1	0.7	1.1	1	0.8	1.2	2.2	2.7	3	2.7	3.1	2.3	3	1.7	2.3	2.6	3.4	3.9	3.8	3.3	2
15	3.8	3.5	3.1	2.2	2.4	3.2	3	3.9	3.1	4.3	4.3	4.8	5	4.5	3.8	3.2	2.9	2.7	3.1	2.2	1.6	2.9	2.5	1.5	3.2
16	1.1	0.6	0.5	1	1.2	0.5	0.6	0.4	5.1	4.1	5.6	5.5	6	5.3	4	3.1	2.8	2.3	2.8	2.8	3.1	2.6	1.5	0.8	2.6
17	0.4	0.2	0.1	0.2	0.1	0.4	1	0.6	0.9	2.4	2.4	2.6	3.6	4.4	3.8	2.6	1.7	2.6	2.1	2.7	2.5	2.1	1.2	0.9	1.7
18	1.6	1.4	2	3.3	3.8	2.4	1.1	1.9	2.9	3.1	3.2	3.4	3.6	3.1	2.9	3.1	2.5	1.5	1.7	0.7	0.9	0.5	0.4	0.9	2.2
19	0.6	1	1.2	1.2	1.2	1	1.8	2.1	2.4	2.8	2.4	2.8	3.3	3.6	4.3	4	3.4	3.5	5	6.4	6.8	5.8	5.9	6.1	3.3
20	5.5	4.9	3.9	3.5	3.3	3.1	2	3	3.8	3.4	3.6	3.6	4.2	4.5	4.5	4	4.5	4.3	3.6	3.6	3.5	3.8	2.9	0.8	3.6
21	0.8	0.8	0.2	1.4	1.7	1.9	2.1	3.3	2.8	4.4	4.9	4	3.7	3.4	3.1	2.9	2.5	2.3	2.8	2.4	2	2.6	3.1	3.5	2.6
22	3.1	3.2	4.3	5.3	4.8	4.1	3.3	3.1	4.3	4.9	4.3	4.8	4.2	3.7	4.4	3.6	2.6	1.7	1.7	1.3	1.3	1.1	1.2	1	3.2
23	0.8	1.1	0.8	2.4	2	1.9	1.7	1.6	1.9	2.4	2.2	1.8	1.8	2	1.8	1.4	1.4	1	1.4	0.6	0.9	0.7	0.8	1.2	1.5
24	1.2	1.3	1.6	1.7	1.9	1.5	1.7	3.4	3.4	3.7	4.4	4	3.7	3.8	2.6	3.8	4.2	3.8	4.2	4.7	5.2	5.4	6	6.9	3.5
25	6	6.2	6.7	6.2	6.5	3.5	2.5	2	1.6	0.8	0.8	2.1	2.4	2.6	3.6	3.6	3.1	2.7	2.3	2.1	1.9	1.6	1.1	1.1	3
26	1.1	1.4	1.3	1.3	1.2	1.4	1.2	1.6	1.4	2	2.4	3.3	2.3	2.2	2.2	2.4	2.9	2.2	1.9	0.8	0.9	0.5	0.4	0.5	1.6
27	0.2	0	0.2	0.4	0.3	0	0	0	0.1	0.1	0.4	0.1	0.7	0.7	1.4	1.3	0.8	1	1	0.8	1.9	0.2	0.5	0.4	0.5
28	0.8	0.9	1.8	2.9	2.4	2.9	3.9	4	2.9	4	5	6.1	7	7.7	7.6	5.2	3.8	3.1	2.5	2.9	3.6	3.2	3.2	4.4	3.8
29	2.8	1.7	0.3	0.8	1.7	2	2	2.5	1.3	1.3	0.7	0.4	1.6	1.7	1.2	0.7	1.3	0.8	1.3	1	2.2	2	1.7	2.2	1.5
30	3.2	2.9	3	3.1	3.4	3.3	2.5	1.6	1.8	2.3	2.3	1.4	2.3	2.4	2.4	2.1	1.7	1.4	1.7	1.3	1.5	1.5	2	1.8	2.2
31	2.2	2.6	3.4	5.3	5	4.9	4.3	5.1	6.3	6.3	6.9	8.4	7.5	6.9	7.3	6.3	5.4	5.5	4.7	3.8	5.2	5	5.3	4.3	5.3
Avg	2.1	2	2	2.2	2.3	2.2	2.1	2.2	2.4	2.9	3.2	3.4	3.6	3.6	3.6	3	2.7	2.3	2.4	2.3	2.5	2.3	2.3	2.2	2.6
S D	1.6	1.5	1.6	1.6	1.6	1.5	1.3	1.5	1.5	1.4	1.6	1.8	1.8	1.8	1.4	1.5	1.5	1.5	1.5	1.5	1.7	1.6	1.6	1.7	1.1
S/A	0.78	0.79	0.81	0.71	0.69	0.66	0.61	0.68	0.62	0.47	0.48	0.52	0.49	0.5	0.51	0.46	0.55	0.64	0.65	0.66	0.67	0.7	0.72	0.78	0.43
Min	0.1	0	0.1	0.2	0	0	0	0	0	0.1	0.4	0.1	0.7	0.7	1.2	0.7	0.4	0	0.3	0.6	0.7	0.2	0.4	0.4	0.5
Max	6	6.2	6.7	6.2	6.5	5.1	5.2	7	6.3	6.3	6.9	8.4	8.7	8.8	9.2	6.9	7.2	5.8	6.5	6.4	6.8	6.3	6	6.9	5.3
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

December 2008

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	202	228	234	239	230	228	213	198	186	209	200	212	221	224	230	238	229	240	230	230	235	228	226	228	225
2	233	239	237	245	202	196	224	209	229	214	225	229	221	223	227	250	255	245	227	229	261	274	271	265	233
3	249	250	262	249	195	225	246	251	260	288	245	247	255	232	214	177	178	154	144	157	173	177	184	175	218
4	192	190	204	202	207	204	199	206	205	205	228	227	224	228	218	221	220	237	231	222	214	211	204	221	217
5	224	233	274	317	7	4	6	12	26	24	20	27	11	6	350	350	348	23	37	353	37	2	348	4	4
6	6	34	11	14	343	3	34	19	34	74	97	100	85	108	110	109	128	108	358	6	343	285	261	292	74
7	291	301	264	273	271	271	275	270	274	288	296	297	290	289	288	292	291	293	281	278	276	283	285	287	285
8	301	329	1	335	323	317	310	340	324	23	31	120	146	182	181	157	160	136	129	110	126	132	132	127	111
9	108	138	129	106	107	110	111	115	122	127	140	126	123	123	122	126	141	143	149	145	156	146	163	132	132
10	165	160	149	161	167	165	170	186	188	182	191	184	192	190	176	175	175	165	169	173	181	182	187	182	176
11	180	184	184	175	168	168	168	186	210	191	182	160	171	155	167	154	161	155	156	166	163	177	172	179	169
12	203	191	194	186	195	200	211	229	281	296	293	299	314	327	335	333	327	15	33	37	27	9	342	329	267
13	324	330	326	330	329	332	327	326	330	358	357	342	1	358	6	52	59	72	67	57	63	56	56	51	358
14	253	251	13	32	87	330	29	55	54	65	108	113	117	108	95	109	121	120	118	126	126	124	128	142	111
15	154	157	147	155	169	155	160	149	164	158	167	164	172	174	168	172	166	170	165	183	183	166	165	165	164
16	157	179	155	159	164	165	151	38	357	27	34	35	37	39	32	31	42	41	17	22	40	16	42	17	34
17	288	299	271	276	252	256	249	247	232	222	218	208	217	227	232	239	240	236	232	228	240	268	269	274	234
18	310	332	39	44	43	55	44	38	47	51	50	35	29	43	51	38	52	75	74	85	91	183	20	13	43
19	57	42	42	48	71	74	83	120	121	131	138	151	175	188	199	196	194	202	212	227	231	230	233	232	198
20	233	239	241	242	247	252	326	37	47	51	44	51	47	50	43	41	50	42	52	63	62	67	76	53	42
21	78	15	97	121	154	177	166	157	182	197	235	282	292	285	280	277	269	263	272	294	293	294	276	270	253
22	273	283	291	293	285	286	292	289	281	285	292	290	290	294	296	298	293	281	270	272	269	266	262	295	287
23	294	285	308	344	357	7	29	9	16	25	45	55	73	88	116	94	96	120	105	84	51	69	81	84	45
24	92	120	152	169	169	176	178	156	173	174	170	177	167	176	174	179	178	188	181	187	190	189	194	196	178
25	195	197	199	208	223	262	277	290	290	290	306	326	342	25	61	68	65	59	53	50	45	40	22	23	221
26	22	28	28	18	352	360	348	7	15	29	57	82	75	62	64	35	46	39	51	53	51	48	41	51	41
27	358	9	332	296	298	333	290	297	36	171	227	200	260	247	230	183	110	156	162	111	124	149	148	194	176
28	203	210	184	197	190	199	199	198	191	200	200	202	214	215	215	207	203	214	198	191	195	197	205	224	204
29	275	303	241	334	63	53	35	28	48	70	79	30	37	26	67	115	134	162	190	196	207	201	212	219	68
30	225	235	259	261	262	262	265	271	266	268	282	272	241	252	248	251	180	191	199	184	176	160	160	168	239
31	182	183	183	208	198	203	208	225	233	245	262	273	293	296	302	302	303	300	298	306	320	322	312	328	271
Avg	218	222	222	231	220	223	218	210	246	218	222	223	229	222	225	219	186	187	180	188	192	199	202	218	216
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.

December 2008

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	8	8.9	9.5	8.6	6.9	5.4	3	3.8	4.8	7.6	8.4	11.1	14.6	13.6	15.3	10.7	11.2	9.5	9.1	8	6.7	5.1	4.7	5.7	8.3
2	6.2	4.8	4.5	3.8	1.9	1.6	1.7	1.7	2.6	3.1	3.8	4.1	5.6	6.1	6	3.5	2.4	0.8	0.6	1.7	2.2	1.8	1.9	1.6	3.1
3	1.3	1.4	1.6	0.6	0.3	0.6	1.6	2.4	2.4	1.9	2.6	4.1	4.2	3.7	3.7	4.2	2.6	2.1	1.8	2	2.2	2.2	1.8	1.9	2.2
4	2.4	2.8	3	3	2.9	2.7	2.7	3.1	3.9	5.4	6.8	7.3	7.3	7.8	6.7	5	3.4	2.7	2.4	2.1	2	2.2	1.8	3.4	3.9
5	2.1	2.1	2.4	3.8	6.1	7.1	5.7	4.7	5.5	5.6	6.2	5.2	5.4	4.4	4.7	3.9	3	2.1	1.6	1.7	1.5	1.4	1.8	2.1	3.8
6	2.1	1.8	1.1	0.6	0.3	0.8	1	0.5	0.2	2.5	4	4.5	4.7	5.2	4.6	3.2	1	0.2	1	1.5	1.8	2.3	2.3	3.8	2.1
7	3.6	1.4	1.7	3	5.1	5.2	4.8	5.7	6	7.6	10	9.9	9.6	9.9	9.9	8.7	6.9	4.3	3.5	2.9	3.5	2.8	2.7	1.8	5.4
8	2.7	2.5	3.2	2.6	1.9	0.7	0.9	0.7	1.3	3.3	2.8	2.2	2.6	2.7	3	2.7	1.9	2	2.2	2.4	2.1	2.1	2.8	2	2.2
9	1.3	1.9	1.7	2.4	1.9	1.8	2	2.3	4	5.6	6.5	6.2	5.9	6.7	5.6	4.9	5.1	4.7	5	4.3	3.7	4.6	5.4	5.1	4.1
10	4.6	4.3	3.5	5.5	5.6	6.3	7.5	7.1	3.4	4.5	6.7	7.3	6.5	5.5	4.7	4.6	4.5	4.5	5.3	6	5.9	5.3	5.2	4.4	5.4
11	4.5	3.8	3.2	3.4	3.7	5.9	5.5	3.8	3	5.3	4.6	4.3	6.3	7	7.7	6.2	7.8	8.5	11.2	9.3	11.1	10.8	9.3	7.1	6.4
12	8.2	5.9	5.6	4.1	7	8.2	8.2	11.3	11.1	8.6	7.4	7.1	5.9	5.4	6.6	5.4	3.6	1.5	0.9	4.6	4.1	3.9	3.8	4	5.9
13	5	4.8	4.4	5.3	4.6	3.9	3.2	2	3.9	5	5.1	3.8	3.7	3.5	2.9	3.1	2.2	2.9	2.5	2.3	1.7	1.7	1.6	0.9	3.3
14	0.4	0.1	1	0.8	1.6	1.3	1.6	1.6	1.4	2.2	3.7	4.4	5.1	4.6	5	3.7	4.8	2.9	4	4.1	5.2	6.1	6.1	5.6	3.2
15	6.2	5.7	5	3.8	4.4	5.5	5.4	6.5	5.1	7.1	7.3	8	8.7	7.7	6.7	5.3	4.8	4.4	5.1	3.8	3.2	4.9	4.2	2.7	5.5
16	1.9	1.5	1.1	1.7	2.1	1.4	1.6	1	8.2	7.3	9.3	9.3	10.2	8.9	6.6	6	5.1	4.3	5.1	4.8	5.1	4.4	3.2	2	4.7
17	1.5	1	0.5	0.8	0.5	1.3	2.1	1.5	1.9	3.6	3.7	4.4	6	6.9	6.1	4.5	3.1	4.6	3.8	4.1	4.3	4.1	2.9	2.5	3.2
18	3.8	3.3	3.7	5.4	6.6	4.3	2.4	3.7	5.1	5.3	5.3	5.7	6	5	4.8	4.8	4	2.5	2.8	1.6	1.9	1.3	1	1.7	3.8
19	1.3	1.7	2.2	2.1	2.4	1.8	3	3.5	3.9	4.6	4.1	4.6	5.5	6	6.9	6.4	5.6	5.4	7.4	9.4	10.3	8.9	8.8	9.1	5.2
20	7.9	7.5	6.2	5.3	5	4.8	3.3	4.7	5.9	5.5	5.9	6	6.9	7	6.9	6.5	7.6	6.7	5.9	6	6.1	6.4	5.1	2	5.9
21	2.2	2.1	0.8	3	3.5	3.8	3.9	6	5.2	7.4	8.1	7.7	7.3	6.9	6.5	5.8	4.1	4	4.8	4.6	4	5	5.9	6.3	5
22	6	6.3	8.4	10.7	9.8	8.1	7.1	5.9	8.4	9.4	8.8	9	8	7.8	9	7.1	5.4	3.4	3.1	2.5	2.3	1.9	1.9	1.8	6.3
23	1.5	1.8	1.5	4.1	3.7	3.3	3.2	3	3.3	4	3.7	3.3	3.3	3.9	3.6	2.7	2.5	1.5	2.3	1.2	1.3	1.1	1.2	1.8	2.6
24	1.8	1.9	2.5	2.7	3.1	2.5	2.9	5.3	5.4	6.3	7	6.7	6.6	6.1	4.3	6.4	7.2	6.4	6.8	8.1	9	9	9.9	11.2	5.8
25	9.6	10.1	10.6	10	9.8	6.1	5.1	4.8	3.6	2.5	2.4	4.2	4.2	4.4	5.8	5.7	5	4.2	3.6	3.2	3	2.5	1.8	1.6	5.2
26	1.6	2	2	2	2	2.2	1.9	2.6	2.4	3.5	4.4	5.4	3.8	3.9	3.6	4	4.6	3.7	3.2	1.9	2	1.6	1.2	1.4	2.8
27	0.9	0.1	1	1.4	1.2	0.2	0.3	0.3	0.5	0.7	1.2	0.9	1.9	1.8	2.6	2.4	1.3	1.7	1.8	1.3	3	0.7	1.4	1.3	1.2
28	1.7	1.8	3.4	5	4.4	4.8	6.2	6.5	5.6	7	8.1	9.7	10.8	11.9	11.7	8.1	5.8	4.4	3.6	4.7	5.7	5.2	4.8	6.8	6.2
29	5.3	4	0.8	2.1	3.1	3.6	3.6	4.3	2.7	2.7	1.8	1.4	3.1	3.2	2.5	1.6	1.9	1.5	2.3	2	3.3	3	2.8	3.3	2.7
30	4.6	4.2	4.6	4.6	5.1	4.7	3.8	2.5	3.2	4.3	4.4	3	3.9	4.2	4	3.8	2.9	2.4	2.8	2.2	2.6	2.4	3.2	2.9	3.6
31	3.7	4.6	5.5	8	7.5	7.8	6.2	7.9	9.7	10.3	11.7	14.5	15.4	13.8	14.4	13.4	11.6	10.8	8.9	8.4	10.1	9.1	10.3	8.2	9.7
Avg	3.7	3.4	3.4	3.9	4	3.8	3.6	3.9	4.3	5.1	5.7	6	6.4	6.3	6.2	5.3	4.6	3.9	4	4	4.2	4	3.9	3.7	4.5
S D	2.5	2.4	2.6	2.6	2.6	2.4	2.1	2.5	2.5	2.3	2.6	3	3.1	2.9	3.1	2.5	2.5	2.5	2.5	2.5	2.7	2.7	2.7	2.6	1.9
S/A	0.68	0.72	0.75	0.67	0.64	0.63	0.58	0.63	0.59	0.45	0.45	0.5	0.49	0.46	0.5	0.47	0.55	0.63	0.63	0.63	0.65	0.66	0.69	0.7	0.42
Min	0.4	0.1	0.5	0.6	0.3	0.2	0.3	0.3	0.2	0.7	1.2	0.9	1.9	1.8	2.5	1.6	1	0.2	0.6	1.2	1.3	0.7	1	0.9	1.2
Max	9.6	10.1	10.6	10.7	9.8	8.2	8.2	11.3	11.1	10.3	11.7	14.5	15.4	13.8	15.3	13.4	11.6	10.8	11.2	9.4	11.1	10.8	10.3	11.2	9.7
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 2008

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	996	997	998	999	1000	1001	1002	1003	1003	1004	1004	1003	1003	1003	1004	1005	1007	1009	1011	1012	1013	1014	1014	1015	1005
2	1015	1016	1016	1016	1017	1018	1018	1019	1020	1020	1020	1020	1019	1019	1019	1019	1020	1020	1021	1022	1022	1023	1023	1023	1019
3	1023	1023	1024	1024	1024	1025	1026	1026	1027	1027	1027	1026	1025	1025	1024	1024	1024	1024	1025	1025	1025	1025	1025	1024	1025
4	1024	1023	1023	1022	1022	1022	1022	1022	1022	1022	1022	1022	1021	1020	1019	1018	1018	1019	1019	1019	1019	1020	1019	1019	1021
5	1019	1019	1020	1020	1020	1021	1021	1022	1022	1023	1023	1022	1022	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021
6	1021	1020	1020	1020	1020	1019	1019	1019	1019	1019	1019	1018	1016	1015	1014	1013	1013	1013	1013	1012	1012	1011	1010	1010	1016
7	1009	1008	1007	1007	1007	1008	1008	1010	1011	1012	1012	1012	1013	1013	1014	1015	1016	1018	1019	1020	1022	1022	1023	1024	1014
8	1024	1024	1024	1024	1025	1026	1027	1027	1028	1029	1029	1029	1028	1028	1027	1028	1028	1028	1029	1029	1029	1029	1029	1029	1027
9	1029	1029	1029	1028	1028	1028	1028	1028	1029	1028	1028	1027	1025	1024	1023	1023	1023	1022	1022	1022	1022	1022	1021	1020	1025
10	1020	1019	1019	1018	1018	1018	1018	1018	1017	1017	1017	1016	1016	1015	1015	1014	1014	1014	1014	1014	1014	1014	1014	1014	1016
11	1013	1012	1012	1011	1011	1011	1011	1011	1011	1011	1010	1009	1008	1006	1005	1004	1004	1003	1002	1002	1001	1000	1000	998	1007
12	997	997	997	997	996	997	998	999	1002	1005	1006	1006	1007	1007	1008	1009	1010	1011	1012	1014	1015	1016	1017	1017	1006
13	1018	1019	1020	1021	1022	1022	1023	1024	1026	1026	1026	1027	1027	1027	1027	1027	1027	1029	1030	1030	1030	1031	1031	1031	1026
14	1031	1031	1032	1032	1031	1032	1032	1032	1032	1033	1033	1032	1031	1030	1030	1030	1030	1030	1030	1030	1030	1030	1029	1029	1031
15	1029	1029	1029	1029	1028	1028	1029	1029	1029	1030	1029	1028	1027	1027	1027	1027	1026	1026	1026	1026	1026	1026	1025	1025	1027
16	1024	1024	1025	1025	1024	1024	1025	1025	1027	1027	1028	1027	1027	1026	1026	1026	1025	1025	1025	1025	1024	1024	1023	1023	1025
17	1022	1021	1021	1021	1021	1020	1021	1021	1021	1021	1021	1020	1019	1018	1018	1018	1019	1019	1020	1020	1020	1020	1020	1020	1020
18	1020	1020	1020	1021	1022	1022	1023	1023	1024	1025	1025	1024	1024	1024	1023	1023	1023	1023	1023	1023	1023	1023	1023	1023	1023
19	1022	1022	1022	1021	1021	1021	1020	1019	1019	1018	1017	1015	1013	1011	1010	1008	1007	1007	1007	1007	1008	1008	1008	1008	1014
20	1008	1008	1009	1009	1009	1010	1011	1012	1012	1013	1014	1013	1012	1012	1012	1013	1013	1014	1014	1013	1013	1013	1013	1012	1012
21	1010	1010	1009	1007	1005	1005	1004	1002	1001	1001	1001	1001	1001	1001	1002	1002	1003	1004	1004	1005	1006	1007	1007	1008	1005
22	1009	1010	1011	1013	1014	1016	1018	1019	1021	1022	1023	1023	1023	1024	1024	1025	1027	1028	1029	1030	1031	1032	1033	1033	1022
23	1034	1034	1035	1035	1036	1036	1036	1037	1038	1039	1038	1038	1037	1036	1036	1035	1035	1035	1035	1035	1034	1034	1033	1032	1036
24	1031	1030	1030	1030	1029	1029	1029	1029	1029	1029	1028	1027	1026	1025	1024	1023	1022	1022	1022	1021	1020	1020	1019	1019	1025
25	1018	1017	1017	1017	1017	1018	1020	1021	1022	1022	1023	1023	1023	1023	1023	1024	1024	1025	1026	1027	1028	1028	1029	1029	1023
26	1029	1029	1029	1029	1030	1030	1030	1031	1031	1032	1031	1031	1030	1030	1029	1030	1030	1030	1030	1030	1030	1029	1029	1028	1030
27	1028	1027	1027	1027	1027	1027	1027	1027	1027	1027	1027	1027	1026	1025	1025	1025	1024	1024	1024	1024	1024	1024	1024	1023	1026
28	1023	1022	1022	1022	1021	1021	1021	1021	1021	1021	1020	1019	1017	1016	1016	1015	1015	1016	1016	1016	1016	1016	1016	1016	1019
29	1016	1016	1016	1016	1016	1016	1017	1018	1018	1018	1018	1017	1016	1015	1015	1015	1015	1015	1015	1015	1015	1014	1014	1013	1016
30	1012	1012	1012	1012	1013	1014	1014	1015	1015	1015	1015	1015	1015	1014	1014	1014	1014	1014	1013	1014	1013	1013	1012	1011	1013
31	1008	1007	1005	1004	1003	1002	1001	1001	1001	1001	1001	1001	1002	1004	1006	1008	1010	1012	1014	1015	1017	1018	1019	1020	1008
Avg	1019	1019	1019	1019	1019	1019	1019	1020	1020	1021	1021	1020	1019	1019	1019	1019	1019	1019	1020	1020	1020	1020	1020	1020	1019
S D	9	9	9	9	9	10	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8
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	996	997	997	997	996	997	998	999	1001	1001	1001	1001	1001	1001	1002	1002	1003	1004	1003	1002	1002	1001	1000	1000	1005
Max	1034	1034	1035	1035	1036	1036	1036	1037	1038	1039	1038	1038	1037	1036	1036	1035	1035	1035	1035	1035	1035	1034	1034	1033	1036
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

December 2008

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