Elizabeth City State University

36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 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	22	140	224 ?	?	?	242 ?	222 ?	141	152	119	38	13	0	0	0	0	0	0	1314 ?
2	0	0	0	0	0	0	49	?	?	?	?	?	?	?	?	?	131 ?	37	0	0	0	0	0	0	217 ?
3	0	0	0	0	0	0	49	?	?	?	747 ?	795	787	695	570	380	173	29	0	0	0	0	0	0	4224 ?
4	0	0	0	0	0	0	57	283 ?	367	587	711	763	773	724 ?	?	?	85 ?	28	0	0	0	0	0	0	4378 ?
5	0	0	0	0	0	0	53	?	?	?	?	?	?	?	?	?	85 ?	27	0	0	0	0	0	0	165 ?
6	0	0	0	0	0	0	39	105 ?	?	?	?	?	?	?	274 ?	198 ?	70 ?	22	0	0	0	0	0	0	708 ?
7	0	0	0	0	0	0	47	?	?	?	?	?	?	?	?	?	48 ?	14	0	0	0	0	0	0	108 ?
8	0	0	0	0	0	0	53	221 ?	249 ?	?	?	289 ?	322 ?	?	208 ?	167 ?	95 ?	16	0	0	0	0	0	0	1620 ?
9	0	0	0	0	0	0	14	51	125	243	442 ?	?	471 ?	456 ?	289 ?	172	54	12	0	0	0	0	0	0	2328 ?
10	0	0	0	0	0	0	20	68	86	126	97	98	77	75	110	57	14 ?	2	0	0	0	0	0	0	829
11	0	0	0	0	0	0	27	109	226	?	395	408	436	366	267	137	61	10	0	0	0	0	0	0	2444
12	0	0	0	0	0	0	22	122 ?	247	267	216 ?	?	?	?	?	?	82 ?	19	0	0	0	0	0	0	976 ?
13	0	0	0	0	0	0	31	?	?	?	256 ?	?	?	?	?	?	90 ?	21	0	0	0	0	0	0	398 ?
14	0	0	0	0	0	0	43	?	?	?	?	?	?	?	?	?	53 ?	14	0	0	0	0	0	0	111 ?
15	0	0	0	0	0	0	35	89 ?	183	257	383 ?	?	434 ?	472 ?	?	?	63 ?	14	0	0	0	0	0	0	1929 ?
16	0	0	0	0	0	0	35	70 ?	?	?	?	?	?	?	?	?	65 ?	8	0	0	0	0	0	0	178 ?
17	0	0	0	0	0	0	13	86	151	244	317	222	183	151	93	41	9 ?	2	0	0	0	0	0	0	1511
18	0	0	0	0	0	0	8	17 ?	?	52 ?	67	116	132	99	65	56	17 ?	11	0	0	0	0	0	0	640 ?
19	0	0	0	0	0	0	23	86 ?	176 ?	327 ?	348 ?	282 ?	310	280 ?	190 ?	?	74 ?	14	0	0	0	0	0	0	2109 ?
20	0	0	0	0	0	0	36	103 ?	?	?	?	?	?	?	?	?	66 ?	4	0	0	0	0	0	0	208 ?
21	0	0	0	0	0	0	31	94 ?	?	?	?	?	?	?	?	?	51 ?	5	0	0	0	0	0	0	180 ?
22	0	0	0	0	0	0	35	95 ?	?	?	?	?	?	?	?	?	62 ?	10	0	0	0	0	0	0	201 ?
23	0	0	0	0	0	0	28	89 ?	152 ?	?	247 ?	324	296	237	221	85	53	16	0	0	0	0	0	0	1749 ?
24	0	0	0	0	0	0	23	98	159	280	256	260	181	149	89	50	27	1	0	0	0	0	0	0	1573
25	0	0	0	0	0	0	17	55	170	245	268	290	219	108	70	32	25	7	0	0	0	0	0	0	1506
26	0	0	0	0	0	0	32	172	340	504	623	?	?	?	?	?	55 ?	5	0	0	0	0	0	0	1731 ?
27	0	0	0	0	0	0	28	153	334	490	603	659	658 ?	?	163 ?	101 ?	0 ?	0	0	0	0	0	0	0	3188 ?
28	0	0	0	0	0	0	27	109 ?	?	?	?	?	?	218 ?	198 ?	121 ?	61	6	0	0	0	0	0	0	739 ?
29	0	0	0	0	0	0	13	57	147 ?	?	?	?	406 ?	249	236	?	57 ?	8	0	0	0	0	0	0	1173 ?
30	0	0	0	0	0	0	24	90 ?	?	?	?	?	?	?	?	?	54 ?	2	0	0	0	0	0	0	169 ?
31	0	0	0	0	0	0	23	85 ?	?	?	?	?	?	?	?	?	52	0	0	0	0	0	0	0	159 ?
Avg	0	0	0	0	0	0	31	106	209	302	373	365	369	295	200	123	60	12	0	0	0	0	0	0	1250 ?
S D	0	0	0	0	0	0	13	55	82	155	204	229	217	208	123	91	34	9	0	0	0	0	0	0	1164
S/A	0	0	0	0	0	0	0.42	0.52	0.39	0.51	0.55	0.63	0.59	0.71	0.62	0.74	0.57	0.77	0	0	0	0	0	0	0.93
Min	0	0	0	0	0	0	8	17	86	52	67	98	77	75	65	32	0	0	0	0	0	0	0	0	108
Max	0	0	0	0	0	0	57	283	367	587	747	795	787	724	570	380	173	37	0	0	0	0	0	0	4378
n	0	0	0	0	0	0	293	188	147	133	141	135	145	140	145	137	240	145	0	0	0	0	0	0	1997

Daylight Data Recovery: 0.0% missing; 0.0% untested; 52.0% exceed the 15% QC threshold -- 4160 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.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University

36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 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	8	21 ?	?	?	16 ?	6 ?	5	2	2	0	0	0	0	0	0	0	0	61 ?
2	0	0	0	0	0	0	5	?	?	?	?	?	?	?	?	?	5 ?	2	0	0	0	0	0	0	11 ?
3	0	0	0	0	0	0	4	13 ?	?	?	875 ?	885	873	819	793	687	528	222	0	0	0	0	0	0	5699 ?
4	0	0	0	0	0	0	220	572 ?	719	798	829	788	745	675 ?	?	?	109 ?	37	0	0	0	0	0	0	5491 ?
5	0	0	0	0	0	0	38	?	?	?	?	?	?	?	?	?	5 ?	1	0	0	0	0	0	0	45 ?
6	0	0	0	0	0	0	5	11 ?	?	?	?	?	?	?	1 ?	2 ?	2 ?	0	0	0	0	0	0	0	22 ?
7	0	0	0	0	0	0	4	?	?	?	?	?	?	?	?	?	0 ?	0	0	0	0	0	0	0	4 ?
8	0	0	0	0	0	0	6	13 ?	8 ?	?	?	0 ?	4 ?	?	0 ?	2 ?	1 ?	0	0	0	0	0	0	0	34 ?
9	0	0	0	0	0	0	1	1	2	4	9 ?	?	7 ?	6 ?	3 ?	0	0	0	0	0	0	0	0	0	31 ?
10	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11	0	0	0	0	0	0	0	2	3	2 ?	2	2	3	1	0	0	0	0	0	0	0	0	0	0	15
12	0	0	0	0	0	0	0	3 ?	2	1	1 ?	?	?	?	?	?	4 ?	1	0	0	0	0	0	0	12 ?
13	0	0	0	0	0	0	3	?	?	?	3 ?	?	?	?	?	?	3 ?	1	0	0	0	0	0	0	10 ?
14	0	0	0	0	0	0	5	?	?	?	?	?	?	?	?	?	2 ?	1	0	0	0	0	0	0	8 ?
15	0	0	0	0	0	0	3	4 ?	5	4	10 ?	?	1 ?	1 ?	?	?	4 ?	0	0	0	0	0	0	0	32 ?
16	0	0	0	0	0	0	4	9 ?	?	?	?	?	?	?	?	?	3 ?	0	0	0	0	0	0	0	16 ?
17	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
18	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	4
19	0	0	0	0	0	0	0	2 ?	2 ?	2 ?	1 ?	0 ?	1	1 ?	0 ?	?	1 ?	0	0	0	0	0	0	0	10 ?
20	0	0	0	0	0	0	4	11 ?	?	?	?	?	?	?	?	?	6 ?	0	0	0	0	0	0	0	22 ?
21	0	0	0	0	0	0	3	7 ?	?	?	?	?	?	?	?	?	1 ?	0	0	0	0	0	0	0	10 ?
22	0	0	0	0	0	0	4	8 ?	?	?	?	?	?	?	?	?	3 ?	0	0	0	0	0	0	0	15 ?
23	0	0	0	0	0	0	2	5 ?	0 ?	?	0 ?	1	0	0	0	0	1	0	0	0	0	0	0	0	9 ?
24	0	0	0	0	0	0	0	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
25	0	0	0	0	0	0	1	0	1	2	2	1	0	0	0	1	1	1	0	0	0	0	0	0	11
26	0	0	0	0	0	0	2	10	6	5	5	6 ?	?	?	?	?	2 ?	0	0	0	0	0	0	0	35 ?
27	0	0	0	0	0	0	3	6	3	4	5	5	6 ?	?	0 ?	0	0	0	0	0	0	0	0	0	32 ?
28	0	0	0	0	0	0	2	4 ?	?	?	?	?	?	0 ?	0 ?	0 ?	1	0	0	0	0	0	0	0	6 ?
29	0	0	0	0	0	0	0	0	2 ?	?	?	?	0 ?	0	0	?	0 ?	0	0	0	0	0	0	0	3 ?
30	0	0	0	0	0	0	3	7 ?	?	?	?	?	?	?	?	?	1 ?	0	0	0	0	0	0	0	11 ?
31	0	0	0	0	0	0	3	7 ?	?	?	?	?	?	?	?	?	1	0	0	0	0	0	0	0	11 ?
Avg	0	0	0	0	0	0	10	27	46	63	109	122	103	101	50	50	22	9	0	0	0	0	0	0	377 ?
S D	0	0	0	0	0	0	39	111	173	221	290	303	277	264	198	183	96	40	0	0	0	0	0	0	1393
S/A	0	0	0	0	0	0	3.76	4.11	3.8	3.48	2.66	2.49	2.69	2.62	3.96	3.7	4.34	4.65	0	0	0	0	0	0	3.7
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	3
Max	0	0	0	0	0	0	220	572	719	798	875	885	873	819	793	687	528	222	0	0	0	0	0	0	5699
n	0	0	0	0	0	0	293	212	161	139	143	138	149	143	151	148	261	145	0	0	0	0	0	0	2091

Daylight Data Recovery: 0.0% missing; 0.0% untested; 49.7% exceed the 15% QC threshold -- 4160 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.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University

36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 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	23	146	175 ?	?	?	241 ?	171 ?	125	123	108	35	13	0	0	0	0	0	0	1161 ?
2	0	0	0	0	0	0	22	?	?	?	?	?	?	?	?	?	85 ?	17	0	0	0	0	0	0	124 ?
3	0	0	0	0	0	0	21	47 ?	?	?	76 ?	79	83	89	79	66	42	12	0	0	0	0	0	0	593 ?
4	0	0	0	0	0	0	24	56 ?	68	81	88	108	117	107 ?	?	?	36 ?	16	0	0	0	0	0	0	702 ?
5	0	0	0	0	0	0	25	?	?	?	?	?	?	?	?	?	31 ?	13	0	0	0	0	0	0	69 ?
6	0	0	0	0	0	0	24	53 ?	?	?	?	?	?	?	204 ?	157 ?	51 ?	22	0	0	0	0	0	0	510 ?
7	0	0	0	0	0	0	22	?	?	?	?	?	?	?	?	?	27 ?	9	0	0	0	0	0	0	58 ?
8	0	0	0	0	0	0	35	153 ?	173 ?	?	?	212 ?	275 ?	?	178 ?	124 ?	93 ?	16	0	0	0	0	0	0	1259 ?
9	0	0	0	0	0	0	14	51	125	240	343 ?	?	344 ?	364 ?	249 ?	165	54	12	0	0	0	0	0	0	1960 ?
10	0	0	0	0	0	0	22	68	86	126	97	98	72	75	110	54	14	2	0	0	0	0	0	0	822
11	0	0	0	0	0	0	24	99	213	319 ?	338	364	371	326	259	137	61	10	0	0	0	0	0	0	2523
12	0	0	0	0	0	0	22	108 ?	230	240	130 ?	?	?	?	?	?	28 ?	10	0	0	0	0	0	0	769 ?
13	0	0	0	0	0	0	16	?	?	?	142 ?	?	?	?	?	?	36 ?	10	0	0	0	0	0	0	204 ?
14	0	0	0	0	0	0	19	?	?	?	?	?	?	?	?	?	21 ?	7	0	0	0	0	0	0	47 ?
15	0	0	0	0	0	0	28	73 ?	182	257	327 ?	?	413 ?	403 ?	?	?	28 ?	9	0	0	0	0	0	0	1721 ?
16	0	0	0	0	0	0	25	38 ?	?	?	?	?	?	?	?	?	24 ?	4	0	0	0	0	0	0	92 ?
17	0	0	0	0	0	0	13	85	151	239	310	222	183	151	82	39	10	2	0	0	0	0	0	0	1486
18	0	0	0	0	0	0	8	15	26 ?	46	67	116	132	99	65	56	16	11	0	0	0	0	0	0	656
19	0	0	0	0	0	0	20	76 ?	161 ?	237 ?	306 ?	269 ?	289	259 ?	168 ?	?	42 ?	10	0	0	0	0	0	0	1837 ?
20	0	0	0	0	0	0	15	29 ?	?	?	?	?	?	?	?	?	14 ?	1	0	0	0	0	0	0	59 ?
21	0	0	0	0	0	0	18	35 ?	?	?	?	?	?	?	?	?	25 ?	3	0	0	0	0	0	0	81 ?
22	0	0	0	0	0	0	16	34 ?	?	?	?	?	?	?	?	?	18 ?	4	0	0	0	0	0	0	71 ?
23	0	0	0	0	0	0	20	57 ?	136 ?	?	249 ?	303	272	236	215	85	45	13	0	0	0	0	0	0	1631 ?
24	0	0	0	0	0	0	21	95	156	241	255	260	181	149	89	50	27	1	0	0	0	0	0	0	1525
25	0	0	0	0	0	0	19	55	167	232	262	279	216	108	70	32	25	7	0	0	0	0	0	0	1472
26	0	0	0	0	0	0	30	103 ?	?	?	?	545 ?	?	?	?	?	20 ?	4	0	0	0	0	0	0	702 ?
27	0	0	0	0	0	0	28	144	?	?	?	?	548 ?	?	136 ?	87 ?	0 ?	0	0	0	0	0	0	0	943 ?
28	0	0	0	0	0	0	28	111 ?	?	?	?	?	?	163 ?	178 ?	94 ?	34	5	0	0	0	0	0	0	614 ?
29	0	0	0	0	0	0	13	57	139 ?	?	?	?	356 ?	249	223	?	24 ?	8	0	0	0	0	0	0	1070 ?
30	0	0	0	0	0	0	13	32 ?	?	?	?	?	?	?	?	?	16 ?	2	0	0	0	0	0	0	63 ?
31	0	0	0	0	0	0	13	28 ?	?	?	?	?	?	?	?	?	16	0	0	0	0	0	0	0	56 ?
Avg	0	0	0	0	0	0	21	71	146	205	214	238	251	194	152	90	32	8	0	0	0	0	0	0	803 ?
S D	0	0	0	0	0	0	6	39	53	83	107	127	132	106	66	43	20	6	0	0	0	0	0	0	699
S/A	0	0	0	0	0	0	0.29	0.55	0.37	0.41	0.5	0.53	0.52	0.55	0.44	0.48	0.63	0.68	0	0	0	0	0	0	0.87
Min	0	0	0	0	0	0	8	15	26	46	67	79	72	75	65	32	0	0	0	0	0	0	0	0	47
Max	0	0	0	0	0	0	35	153	230	319	343	545	548	403	259	165	93	22	0	0	0	0	0	0	2523
n	0	0	0	0	0	0	279	202	131	115	120	126	147	143	151	144	256	145	0	0	0	0	0	0	1968

Daylight Data Recovery: 0.0% missing; 0.0% untested; 52.7% exceed the 15% QC threshold -- 4160 total daylight measurements.

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

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

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

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University

36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 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	18.5	18.1	17.8	17.5	18.1	18.4	18.2	18.6	20	21.9	23.3	23.8	25	23.1	21.9	20.8	20.3	18.7	17.8	17.8	17.2	17	16.3	15	19.4
2	13.9	12.9	12.2	11.6	11	10.4	10.3	11.7	13.8	16.3	17.7	19	19.4	20	20.1	20.5	20.1	18.7	16.8	15.8	14.3	13	12.6	12.3	15.2
3	12.5	12.4	12.2	12.5	12.5	12.3	12	13.6	16.3	18.2	19.7	21	22.1	22.5	23	23.4	23.1	21.3	19.1	17.8	16.8	15.9	15.6	15.2	17.1
4	15.3	15.3	14.4	14.2	13.6	13.1	13.1	15	17.9	20.1	22.3	23.5	23.8	23.7	24.1	24.4	23.5	21.6	19.9	19.3	18.5	17.9	17	16.5	18.7
5	16.3	16.1	15.1	15.1	14.8	14.5	15	16.4	19.4	21.5	23.5	24.5	24.8	25.4	25.1	24.8	24.2	22.8	20.7	19.5	19.3	18.6	17.5	16.4	19.6
6	16.3	16.4	15.9	15.3	14.4	14.5	14.5	16.8	19.8	22.3	24.3	25.8	25.9	26.5	25.5	22.7	21.6	20.2	19	18.2	17.9	17.2	16.6	16.2	19.3
7	15.9	15.5	16.5	16.1	15.1	14.6	14.3	15.5	17.3	18.5	18.8	19.3	19.5	19.9	19.7	18.9	17.7	16.1	15	14.6	14.7	14.6	14.5	13.9	16.5
8	13.4	12.1	10.7	11	10.6	10.2	11	14.3	16.7	18.2	19.9	20.8	21.2	22	21.6	21.6	21.1	20.3	20.3	20.2	19.9	19.5	19.2	19	17.3
9	18.8	18.7	18.8	19	19.3	19.4	19.5	20.2	21	22.4	24.8	26	26.3	26.4	26.5	25.5	24.1	22.8	22.4	22.2	21.9	21.7	21.4	21.3	22.1
10	20.8	20.5	20.1	19.9	20	20	19.9	19.9	20.1	20.7	21.6	22	21.9	21.6	21.4	21.5	21.1	20.4	20.2	20.2	20.2	20.1	20	20	20.6
11	20.2	20.3	20.1	19.7	19.4	19.3	19.3	19.7	20.6	21.8	22	22.1	22.3	22.3	21.7	21	20.3	19.7	19.1	18.9	18.8	18.7	18.7	18.6	20.2
12	18.4	18.2	18.3	18.3	18.3	18.3	18.2	18.9	20.4	20.9	21.6	23	23.2	23	22.8	22.1	21.2	19.9	18.5	17.6	17	16.9	16.5	16.3	19.5
13	16.3	16.2	15.7	15.5	15	14.3	13.9	15.6	18.5	20.2	21.7	23.5	24.6	25.6	25.9	26	25.1	23.1	20.8	19.6	18.6	17.7	16.4	15.8	19.4
14	14.6	13.9	13.5	13	12.8	12.3	12.3	14.7	18.7	22	24	25.6	27	27.1	26.1	25.6	24.7	22.9	20.8	19.8	19.4	18.9	18.3	17.6	19.4
15	17.4	17.1	16.8	16.5	16.1	15.6	15.6	17	19.2	21.1	23.5	27.2	27.8	27.7	27.9	27.1	26.1	24.3	22.4	21	20.3	19.9	19.8	19.4	21.1
16	19.1	18.5	17.9	17.9	17.8	17.3	16.9	18.5	21.5	24.2	26.9	28.2	28.8	29.1	29.6	29.8	29	26.5	24.8	24.2	23.8	23.3	22.9	22.3	23.3
17	21.6	21.1	20.8	20.4	20.2	19.6	19	18.9	18.6	18.5	18.8	18.3	17.7	16.8	16.6	15.6	14.6	13.6	12.7	12.1	12	12.3	12.6	12.8	16.9
18	12.9	12.9	12.8	12.4	12.3	12.3	12	12	11.5	11.5	12.1	13.1	14.2	14.4	14.3	13.8	13.6	13.7	13.6	13.3	13.3	12.9	13	13.1	13
19	12.7	12.1	11.8	11.6	11.3	11.3	11.4	11.8	12.8	13.8	13.9	14	14.3	14.5	14.1	14.3	14	12.9	11.8	10.7	9.6	9.2	8	6.9	12
20	6.2	5.8	5.3	4.9	4.5	4	3.7	5.5	9	12.4	13.9	14.9	16.1	16.9	17.4	17.8	17.8	15.1	12.3	11.4	10.2	9.4	9.2	8.7	10.5
21	8.8	8.5	8.6	8.3	8.7	9	9.3	10.4	12.2	14	16.3	18.1	19.6	20.8	21.9	22	21.1	19.2	17.9	17	16.1	14.8	13.4	11.8	14.5
22	11.4	10.9	9.5	7.2	5.8	5.1	4.7	5.8	8.6	10.7	11.7	12.7	13.3	13.6	14	14.1	13.4	12	10.7	10.2	9.8	9.1	8.8	8.5	10.1
23	8.4	8.5	8.2	8	8	8.2	8.1	9.3	10.7	13.3	14.1	14.2	14.9	14.2	14.6	14.3	13.8	12.9	11.8	10.9	10.7	9.8	9.5	10.7	11.1
24	11.4	11.3	11.4	11.5	12	12.2	12.3	13.1	14.7	16.3	17.1	17.4	17.4	17.2	17	17	16.9	16.5	16.8	17.1	17.4	17.2	16.9	16.6	15.2
25	16.8	16.7	16.8	17.4	17.8	17.3	17.9	18.6	19.7	20.8	21.1	22.2	22.8	22.4	20.9	20.9	21.6	21.8	21.4	20.8	20.4	19	18.1	17.5	19.6
26	15.8	15.3	15.1	14.5	13.4	12.3	11.7	12.5	14.8	16.2	17.3	18.2	18.8	19.8	20.1	18.9	17.5	15.6	14.2	12.8	12.8	12.8	12.5	12.4	15.2
27	12.3	11.8	11.5	10.8	10.4	10.4	10.3	12.3	14.5	15.9	17.2	18.7	20	19.7	16.4	15.2	13.1	8.8	6	4.9	4	3.8	3.5	3.5	11.5
28	4.3	3.7	3.1	3	2.9	3	3.2	4.5	6.2	8	9.9	11.2	12.4	12.8	12.8	12.8	11.9	10.5	9.4	8.5	7.8	7.2	6.6	5.7	7.6
29	5.1	4.3	4.1	3.7	3.8	3.8	4.2	4.2	5.5	7.7	9.4	10.8	11.5	11.5	11.2	11.3	11	9.6	7.7	6.7	7.3	6.6	5.9	5.5	7.2
30	5.2	4.7	4.8	3.8	3.4	1.9	1.5	4.2	6.6	8	9	9.9	10.6	11.1	11.6	11.8	11.3	9.7	8.3	7	6.5	4.4	3.7	3.5	6.8
31	2.4	1.8	1.1	1.6	2.3	2.2	2.1	3.6	6.7	9.8	13	15	16.1	16.9	16.9	16.5	15.7	13.6	11.9	10.9	10.1	10.2	9.7	9.3	9.1
Avg	13.6	13.3	12.9	12.7	12.4	12.2	12.1	13.3	15.3	17	18.4	19.5	20.1	20.3	20.1	19.7	19	17.6	16.3	15.5	15	14.5	14	13.6	15.8
S D	5.2	5.3	5.3	5.4	5.4	5.5	5.5	5.2	5	4.9	5	5.2	5.1	5.1	5	4.9	4.8	4.9	4.9	5.1	5.1	5.2	5.2	5.2	4.7
S/A	0.38	0.4	0.41	0.43	0.44	0.45	0.45	0.39	0.33	0.29	0.27	0.26	0.25	0.25	0.25	0.25	0.25	0.28	0.3	0.33	0.34	0.36	0.37	0.38	0.3
Min	2.4	1.8	1.1	1.6	2.3	1.9	1.5	3.6	5.5	7.7	9	9.9	10.6	11.1	11.2	11.3	11	8.8	6	4.9	4	3.8	3.5	3.5	6.8
Max	21.6	21.1	20.8	20.4	20.2	20	19.9	20.2	21.5	24.2	26.9	28.2	28.8	29.1	29.6	29.8	29	26.5	24.8	24.2	23.8	23.3	22.9	22.3	23.3
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University

36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 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	104.6 ?	?	?	?	?	?	?	?	103.6 ?	95	84.7	80.5	81.8	88.6	96.5	101.3	95.3	99.5 ?	103.8 ?	103.6	104.8 ?	102.3	101	104.1	97.1 ?
2	103.6	104.3	104.7 ?	?	?	?	104 ?	99.4	91.4	80.6	68.2	61.5	59.5	59.3	58.6	58	59	64.7	71.7	76.4	88.5	95.6	97.4	98.3	81.2 ?
3	99.9	100.7	103.4	104.2	?	104.8 ?	?	100.5	88.5	77.7	69.5	61.9	58.4	57.7	55.9	55.1	59.4	69.4	81	87	94.2	98	101	103.4	83.3 ?
4	104.5	103.3	?	105 ?	104.8 ?	?	?	101	91	79.4	67.6	59.3	58.5	62.1	60.2	58.4	63.3	72.9	84.2	87.7	89.8	92.3	97	99.6	83 ?
5	101.8	102.1	104 ?	?	?	?	?	102.5 ?	90.9	77.1	68.9	63.9	63.7	61.2	62.9	61.5	61.4	64.4	79.2	87	93.7	99.8	103.1 ?	?	81.5 ?
6	?	?	?	?	?	?	?	100.1 ?	89.9	80.7	73.1	68.5	67.1	63.7	77.2	88.8	85.1	86.3	92.4	96.8	95.6	98.9	102.4	104	86.5 ?
7	104.3	103.4 ?	96.9	93.1	96.8	97	97.7	93.7	87.3	80	70.7	62.3	60	58.1	54.5	60.3	64.4	73.4	83.6	89.1	88.4	88	87.3	90.7	82.5
8	93.8	100.1	103.9	104.5 ?	?	?	?	98.6	87.2	72.4	72	70.9	73.3	75.4	80.5	83.8	87.5	94.4	94.7	94.6	96.8	99	101.3	102.8	89.9 ?
9	103.1	103.9	104.2	104	103.9	104.4	104.9 ?	104.7	102.9	99.1	89.6	75.8	73.2	74	73.4	80.1	88.2	98.7	100.2	99.6	101.8	103.9	104.8 ?	?	95.6 ?
10	?	?	?	?	?	?	?	?	?	?	104.5 ?	103.2	103	103.4	104.7	104.6	104.8	104.7	104.8	105 ?	?	?	?	?	104.2 ?
11	?	?	104.7 ?	104.5	102.6	97.5	94	87.7	88	82.8	81.2	81.2	81.3	80.7	82.3	84.3	87.9	92.1	99.2	100.1	100.1	99.8	100.1	99	92.3 ?
12	99.4	100.1	100	99.1	98.1	97.3	97	96.5	94.3	93.4	90.8	84.5	81.9	78.7	74.4	76.9	82	90.9	98.2	101.5	103.7	104.6	?	?	92.9
13	?	105 ?	?	?	?	?	?	104.7 ?	100.3	92.8	79.7	67.8	60	52.6	51.2	51.2	58.1	69.1	79.4	84.3	87.7	90.5	96.2	98	79.4 ?
14	102	104.6	104.9 ?	?	?	?	?	103.6 ?	97.9	88.8	78.9	70.1	61	59.6	69.9	66.4	62.8	70.8	84.3	91	98.4	101.8	104.2	104.7 ?	86.3 ?
15	104.5 ?	104.1	104.2	104.4	104.2	104.9	103.5	98.3	90.6	82.6	76.8	62.2	60.9	57.3	57.3	63.4	70.2	76.4	89.3	97	100.2	102.6	102.6	103.5	88.4
16	103.5	103.5	104.7 ?	104.5 ?	104.1	104.7 ?	?	102.3 ?	95.4	84.2	67.6	60.7	58	51.3	50.8	50.2	52.8	62.6	69.8	72.6	74.4	77	79.1	81.9	78.9 ?
17	85.4	92.3	97.1	99.5	99.2	100.5	96.8	96.6	93.9	91.8	85.8	85.5	87.9	93.4	91.9	100	101.6	102.8	104.5 ?	?	?	?	?	?	95.1 ?
18	?	?	?	?	?	?	?	?	?	?	?	?	104.9 ?	104.9 ?	104.4	?	?	104.6 ?	103.8	102	100.9	103.3	99.7	96	102.4 ?
19	94.9	96.7	98.2	97.8	95.9	95.2	91.8	88.1	81.9	77.6	77.5	78.1	76.3	75.1	76.1	74.5	76.1	80.8	84.8	89.6	92.6	88.7	94.4	99.2	86.8
20	100.8	101.3	102.1	102.4	103.2	104.3	104.4	100.2	89.1	72.8	62.7	54.1	47.6	42.6	42.3	40.4	41.9	59.8	77	79	89.9	90.4	88.9	98.3	79
21	98	97.7	97.5	97.3	94.3	93.6	94.5	92.2	84.5	78.4	71.3	65.4	60	55.2	52.5	52.6	56.6	65.7	73.1	76.8	79.3	75.9	65.9	68.7	77
22	64.2	62.5	68.8	83.4	90.2	93.4	94.1	88.8	79.6	70.2	64.9	62.8	61.9	61.4	60	60.3	63.1	74.1	82.7	87.3	89.6	91.1	89.2	87.5	76.3
23	86.8	85.4	87.4	90.3	92.6	93.5	93.4	89.2	88.2	85.3	84.7	86.4	84	90.3	84.8	81.9	81.7	85.5	92	97.2	99	101.6	102.9	98.6	90.1
24	93.1	94	96.2	97.6	98.2	99.4	100.4	100.3	97.6	92.9	88.8	88.6	88.8	91.8	94.6	95.2	96.2	99.4	98	97.9	98.1	100	103.2	104.6 ?	96.5
25	?	?	?	104.7	102.8	104.2	102.6	101.5	97.5	95	97	94.5	93.6	95.8	104.3 ?	?	104.7	104.8 ?	?	?	?	?	?	104.7 ?	100.5 ?
26	102.5	101.9	98.2	96.2	99.8	104.2 ?	?	100.3 ?	88.9	81.8	71.1	66	62.4	62.4	62	69.9	75	82.2	88.5	97.6	100.3	103.1	?	?	86.4 ?
27	?	?	?	104.7 ?	104.6 ?	103.8	103.7	99.6	99	92.6	83.1	75.8	68.9	70.3	84.6	87.1	85	98.6	104.4 ?	?	?	?	?	?	91.6 ?
28	?	?	?	?	?	104.4 ?	102	97.2	91.3	84.2	75.1	67.9	57.3	57	55.8	51.4	56	61.8	62.7	63.8	66.2	69.2	71.3	75	72.1 ?
29	79.6	82.7	81.6	84	84.9	85.8	84.4	88	83.5	69.7	59	53.6	51	50.5	50.9	48.5	47.9	55.9	70.8	74.8	73	76.9	79	78.7	70.6
30	78	80.4	77.4	82	85.6	94	96.9	84.4	73.4	60.9	54	51.7	49.7	47.6	45.5	46.2	48.7	56.1	64.8	70.8	72.7	88.1	92.2	93.8	70.6
31	98.4	97	99.5	97.4	93.1	96.1	94.6	88.6	74.4	64.6	52.5	43.9	39.4	38.3	41.6	45.6	41.7	50	56.7	65.4	80.2	84.4	79.8	80.8	71
Avg	95.9	96.8	97.3	98.2	98	99.2	97.9	96.7	90.4	82.2	75.7	70.3	68.9	68.4	69.7	68.9	71.9	79.7	86	88.4	91.1	93.6	93.8	94.8	86.1 ?
S D	10.5	10.3	9.8	7.4	6.2	5.4	5.4	6	7.5	9.6	12	13.5	16	17.9	19.1	18.6	18.8	16.9	13.7	11.9	10.6	9.9	11	10.5	9.4
S/A	0.11	0.11	0.1	0.08	0.06	0.05	0.06	0.06	0.08	0.12	0.16	0.19	0.23	0.26	0.27	0.27	0.26	0.21	0.16	0.13	0.12	0.11	0.12	0.11	0.11
Min	64.2	62.5	68.8	82	84.9	85.8	84.4	84.4	73.4	60.9	52.5	43.9	39.4	38.3	41.6	40.4	41.7	50	56.7	63.8	66.2	69.2	65.9	68.7	70.6
Max	104.6	105	104.9	105	104.8	104.9	104.9	104.7	103.6	99.1	104.5	103.2	104.9	104.9	104.7	104.6	104.8	104.8	104.8	105	104.8	104.6	104.8	104.7	104.2
n	263	261	230	234	229	231	211	291	340	348	352	360	363	365	365	346	358	362	338	327	314	322	286	264	7365

Data Recovery: 0.0% missing; 0.0% untested; 17.5% 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

October 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	18.1	17.8	17.5	17.2	17.4	18	18.3	18.7	21	25.2	28.6	30.2	30	29.2	26	23.7	21.8	20.5	18.8	17.8	17.3	16.7	16.1	15.1	20.9
2	14	12.8	12	11.4	10.8	10.1	9.7	11.6	15.7	19.6	22.7	25	26	25.4	24.9	25.1	24.6	23.2	19.3	16.2	13.9	11.9	10.9	10.2	17
3	9.8	9.6	9.5	10	10.5	10.8	10.9	13	17.1	20.9	23.8	25.8	26.9	27.4	27.4	28.1	28.1	26.4	21.9	18.1	15.8	14.5	13.7	13.2	18
4	13.1	13.3	13.3	13	12.8	12.2	11.8	14.3	19	23.7	27.7	30.8	31.7	30.7	29.7	29.9	29.5	26.9	22.7	20	18.5	17.2	15.9	14.8	20.5
5	14.2	14	13.6	13.3	13	12.7	12.9	15.6	20.3	24.9	29	32.3	33.2	32.2	31.8	31	30	27.7	23.4	19.8	18.1	17.6	16.9	16	21.4
6	15.1	14.8	15	15	14.5	13.9	14	15.9	20.6	26.4	30.7	33.3	34.2	33.4	33	30.3	27.1	24.2	21	18.9	17.7	17	16.3	15.7	21.6
7	15.2	14.7	15	15.4	14.9	14.1	13.7	15.3	18.6	21.5	23.4	24.6	25.6	25.9	25.6	25.1	23.7	20	16.3	14.1	13.2	12.8	12.7	12.3	18.1
8	11.7	10.7	9.4	8.8	8.8	8.5	8.5	11	15.3	19.5	23.8	27.2	27.3	26.8	26.5	26.3	24.9	22.8	21	20.1	19.7	19.4	18.9	18.6	18.1
9	18.3	18.2	18.3	18.6	18.9	19.2	19.3	19.7	20.7	22.4	26.1	31.6	33	32.4	32.4	31	28.2	25.7	23.9	23	22.5	22.1	21.8	21.6	23.7
10	21.3	20.9	20.5	20.1	20	20.2	20.2	20.4	20.7	21.3	22	22.5	22.6	22.3	22	21.8	21.6	21.3	20.9	20.7	20.6	20.5	20.5	20.5	21.1
11	20.5	20.6	20.7	20.3	19.7	19.4	19.1	19.4	20.6	23	24.9	25.3	25.4	25.6	25.1	23.9	22.5	21.1	19.9	19.3	18.9	18.7	18.5	18.4	21.3
12	18.1	17.8	17.8	17.9	17.9	17.8	17.7	18.1	20.3	22.1	23.2	26.4	28.6	28.6	28.3	27.7	26.5	24.1	20.6	18.4	17.1	16.2	15.9	15.5	20.9
13	15.3	15.2	15	14.8	14.5	14.1	13.6	14.8	18.8	23.2	26.8	29.7	32	32.8	32.8	32.5	31.3	28.4	23.4	20.2	18.4	17	15.9	15.1	21.5
14	14.1	13.1	12.4	12	11.6	11.5	11.4	13.4	18.2	24	29.4	32.9	34.6	34.7	33.7	32	30.5	27.4	23.2	19.9	18.7	18.2	17.5	16.9	21.3
15	16.6	16.3	16	15.8	15.6	15.3	15	16.3	19.1	21.5	24.8	31.1	35	34.6	34.2	33.4	31.8	28.9	24.9	22.1	20.6	19.7	19.2	19	22.8
16	18.4	18	17.3	16.9	17	16.9	16.5	17.9	22.4	27.4	31.8	34.1	34.5	34.5	34.2	34.2	33.7	31.1	27.1	25	24.3	23.8	23.3	22.7	25.1
17	21.9	21.3	21	20.8	20.6	20.4	20	19.7	19.9	20.3	21.2	21.5	20.7	19.6	18.9	17.7	16.5	15.5	14.5	13.5	12.8	12.5	12.6	12.8	18.2
18	13	13.1	13.1	13	12.7	12.6	12.4	12.2	12.1	11.9	12.1	12.8	14	14.6	14.8	14.6	14.3	14	13.8	13.5	13.4	13.3	12.9	13	13.2
19	13.1	12.5	11.9	11.5	11.1	10.7	10.7	11.2	12.6	15	16.6	17.1	17.3	17.4	17.2	17.2	17.1	15.4	13	11.1	9.4	8.3	7.4	6.1	12.9
20	5.1	4.5	3.9	3.5	3.1	2.8	2.6	4.5	9.3	14.4	18.2	20.4	21.8	22.5	22.8	23.1	22.6	19.9	14.2	10.5	8.7	7.3	6.6	6.4	11.6
21	6.4	6.3	6.3	6.3	6.4	6.7	7.4	9.5	12.9	16.3	19.6	22.3	24	24.5	24.9	25.4	24.9	22.2	19.2	17.5	16.3	15.2	13.7	11.9	15.3
22	10.5	9.9	9.2	7.4	5.5	4.2	3.5	5.2	9.5	13.6	16	17.8	19	19.3	19.3	19.3	18.5	15.8	12.2	10	8.9	8.2	7.6	7.2	11.6
23	7	7	7.1	7	6.9	7	7.1	8.4	11	14.6	17.7	17.9	18.1	17.8	17.3	16.8	15.8	14.5	12.6	10.9	9.9	9.1	8.3	8.3	11.6
24	9	9.6	9.8	10	10.4	10.8	10.9	11.5	13.2	15.5	17.9	18.9	19.3	19.1	18.7	18.3	17.8	17.3	16.9	16.9	17.1	17.2	16.9	16.6	15
25	16.5	16.6	16.5	16.7	17.1	17.4	17.3	17.9	18.8	20.6	22	22.8	24.1	24.3	23.1	21.8	21.3	21.4	21.4	21.1	20.8	20.2	19.2	18.4	19.9
26	17.7	16.7	16	15.1	14	12.4	11.1	11.8	15.2	18.9	21.7	24.1	25.7	25.9	26.3	25.4	23.4	19.8	15.9	13.1	11.5	11.1	11	11.1	17.3
27	11.4	11.3	10.7	10.2	9.5	9	8.7	10.1	14.3	18.5	21.7	23.9	25.4	26.5	24.2	20.3	17	13.2	9.3	7	5.6	4.7	4.2	3.9	13.4
28	3.9	3.9	3.2	2.8	2.5	2.3	2.2	3.4	6.6	9.7	12.6	14.7	15.8	16.4	15.9	15.5	14.5	12.7	10.4	9	7.9	7.2	6.5	5.7	8.6
29	4.8	4	3.4	3	2.9	3.1	3.4	4	5.3	8.8	12.1	14.1	15.3	14.8	13.7	13.5	13.5	11.8	8.8	5.8	4.9	4.8	4.5	3.9	7.7
30	3.3	2.8	2.7	2.4	1.9	1	0	1.6	6.4	10.3	12.7	14.5	15.4	15.9	15.9	16	15.5	12.7	8.9	6.4	4.8	3.8	2	0.9	7.4
31	0.4	0	-0.5	-0.8	-0.4	0.1	0.2	2.2	7.4	12.4	17.3	21.6	23.6	24	23.2	22.1	20.8	17.4	13.2	10.7	9.4	8.6	8.6	8.3	10.4
Avg	12.8	12.5	12.2	11.9	11.7	11.5	11.3	12.5	15.6	18.9	21.9	24.1	25.2	25.1	24.6	24	22.9	20.8	17.8	15.8	14.7	14	13.4	12.9	17
S D	5.7	5.7	5.7	5.8	5.9	5.9	5.9	5.6	5.1	5.1	5.6	6.2	6.4	6.3	6.2	6.1	5.8	5.5	5.2	5.2	5.4	5.5	5.6	5.7	5
S/A	0.44	0.45	0.47	0.49	0.5	0.51	0.52	0.44	0.33	0.27	0.26	0.26	0.26	0.25	0.25	0.25	0.25	0.27	0.29	0.33	0.37	0.39	0.42	0.44	0.29
Min	0.4	0	-0.5	-0.8	-0.4	0.1	0	1.6	5.3	8.8	12.1	12.8	14	14.6	13.7	13.5	13.5	11.8	8.8	5.8	4.8	3.8	2	0.9	7.4
Max	21.9	21.3	21	20.8	20.6	20.4	20.2	20.4	22.4	27.4	31.8	34.1	35	34.7	34.2	34.2	33.7	31.1	27.1	25	24.3	23.8	23.3	22.7	25.1
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: 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

October 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	1.1	0.8	0.1	0.2	0.8	0.8	1.3	0.7	1.1	1.5	2.4	2.2	2.2	3	1.8	1.8	2.2	0.9	0.5	0.6	0.7	2.8	1.7	1.4	1.4
2	1.1	1.2	1.3	1.4	1.1	1.2	1.1	1.4	1.8	2	2.4	2	2.7	3	3	2.7	2.1	1.9	1.3	0.6	0	0.5	0.5	0.2	1.5
3	0.2	0.1	0.7	1.1	1	1	1	1.4	2.4	2.9	3.2	3.2	2.9	3	2.4	1.8	1.3	0.8	0.3	0	0	0.2	0	0.2	1.3
4	0.5	0.6	0.9	0.9	0.5	0.1	0	0.3	1.1	1.4	1.1	1.3	2	2.8	2.4	1.6	2	2	2	1.4	0.8	0.5	0.4	0.2	1.1
5	0.3	0	0	0.1	0	0	0	0.2	1	1.6	0.9	1.1	2.1	2	2.3	2.2	2	0.9	0.5	0.3	1.1	0.8	0.2	0	0.8
6	0	0.2	0.4	0.2	0.1	1	1	0.1	0.1	0.5	1.1	1.3	2.1	2.2	3.3	3.9	3.5	3	2	1.7	1.2	1.5	1.2	1.2	1.4
7	0.5	0.8	2	2.1	1.9	2.2	2.3	2.3	3	4	3.8	3.3	2.8	2.7	3.1	3.2	2.9	2	1.6	1.4	1.7	1.7	1.7	1	2.3
8	0.7	0	0.4	0.4	0	0	0.3	0.3	1.4	1.7	1.3	2.1	2.6	2.8	3.2	3.1	3.1	2.1	1.4	1.5	1.7	0.9	1.4	1.6	1.4
9	0.6	0.2	0.5	0.3	1.4	0.6	0.6	1.3	0.5	0.6	0.6	2.4	2.3	2	2.1	2.7	2.7	2.3	1.7	1.2	1.3	1	1.5	1.8	1.3
10	1.6	0.4	0	0	0.2	0.4	0.2	0.2	0.7	1	1.6	2.3	2.5	2.8	2.1	2	3.2	3	2.8	2.4	2.5	2.5	2.7	2.8	1.7
11	3.2	3.9	4	3.7	3.2	3.3	3.4	3.5	4	5.1	5.5	5.4	5	4.6	4.8	4.5	3.8	3.5	3.6	3.8	3.7	3.6	3.6	3.2	4
12	2.4	2.5	2.8	3	2.4	2.3	2.4	2.4	3.5	4.1	4.4	4.4	4	4.3	4.1	3.9	3.4	2.3	1.6	1.8	1	1	1.3	1.1	2.8
13	1.2	1.1	1.5	1	1.1	1.1	0.2	0.6	1.5	1.5	1.4	1	1	1.1	1.2	1.2	1.7	0.7	0.9	1	0.8	0.8	0.9	0.5	1
14	0.3	0.2	0.5	0.4	0.6	0.3	0.3	0.4	0.9	0.9	0.8	0.8	1.2	1.7	2.4	2.3	1.9	1.4	0.6	1.1	1.7	0.9	0.7	0.9	1
15	1.2	0.8	1.2	1.2	1.2	1.1	0.6	0.9	0.8	0.4	0.2	1	1.8	2.2	2.4	2.6	2	1.3	0.7	1.1	0.8	1.2	1.7	0.8	1.2
16	0.5	0.3	0	1	1.1	0.2	0	0.5	0.8	1.1	1.9	2.9	2.8	3.4	3	2.5	1.8	1.1	1.1	1.5	1.4	1.2	1.4	1.1	1.4
17	1.1	2.1	3	2.9	4	4	3.8	4.1	4.6	4.6	4.2	4.2	4.1	4	3.6	2.6	3.5	3.9	3.4	3.7	2.9	2.5	3.1	3.5	3.5
18	3.3	3	3.3	4	3.4	3	2.9	2.1	2.3	2.5	2.7	2.2	3.4	3.4	3.7	3.8	3.8	4.1	4.2	4.8	4.6	5	4.7	5.5	3.6
19	5.2	5	4.3	3.6	3.7	4.2	4.1	4.2	5.2	5.6	5.9	5.9	5.9	6.1	5.6	5.7	4.8	3	2.1	1.3	1.3	1.4	0.8	0.8	4
20	1	0.8	1.1	1.1	0.8	1.1	1.2	1.3	1.7	2.4	2.9	2.6	2.2	1.8	1.7	1.1	0.5	0.1	0.1	0.4	0	0.2	0.7	0.9	1.2
21	0.6	0.6	1	0.9	1.2	1.7	1.9	2.9	3.6	3.4	2.9	2.9	3.6	4.3	3.8	3.6	2.9	1.3	1.2	2	2.1	2.6	2.2	1.4	2.3
22	2.4	2.5	1.3	0.7	0.8	1.1	0.9	1.4	1.9	3.5	3.9	3.2	3.3	3.4	2.5	2.4	2.3	1.8	1.5	1.4	1.5	1.6	1.7	2	2
23	2.2	2.6	3.4	3.1	3.1	2.7	2.4	3.3	3.5	3.8	4	3.6	3.7	3.5	3.6	3.7	3.9	2.7	1.6	1	0.8	0.6	1.1	2.2	2.7
24	2.3	1.8	1.4	1.7	2.3	2.1	1.7	2	2.6	3.6	3.5	3.3	3.8	3.7	3.2	3.2	3.1	2.8	2.6	2.7	1.9	2	2.5	1.9	2.6
25	3.3	3.2	3.5	3.5	2.8	2.6	2.4	2.9	5	5.4	4.8	6	6.2	6.3	5.7	4.2	4.3	2.8	1.7	1.2	2.1	2.5	1.9	2.1	3.6
26	2.9	2.1	2.2	2.1	1.1	0.2	0	0.9	2.4	3	2.9	2	1.3	1.1	1.7	2.3	2	1.6	0.9	0.2	0.8	0.7	0.7	1	1.5
27	1.6	0.5	1	0.5	0.3	0.2	0.4	1.3	2.1	2.5	2.5	2.6	2.3	3.3	4.1	4.5	5.6	4.3	4.6	3.9	3.9	3	3	2.8	2.5
28	2.6	2.6	3	3	2.8	3.3	3.4	4.3	4.9	5	4.9	5.4	5.1	5.4	5.4	5.1	4.4	3.8	4.7	4.4	4.2	3.7	4	2.7	4.1
29	2.8	2.5	2.4	2.7	3.1	3.1	3	3.2	3.8	4.7	5.2	5.6	5.2	4.7	4.7	4.8	3	1.2	0.3	0.9	1.2	1.5	1.4	1.1	3
30	1	1.4	1.3	1.3	1	0.8	1.1	2.1	2.6	5	4.5	4.1	3.8	3.8	3.3	2.7	2.5	1.3	0.8	0.7	0.9	0.2	0.1	0.2	1.9
31	0.4	0.4	0.4	1	1	0.7	0.9	0.7	1.5	1.4	0.9	0.9	1	1.5	2	2	1.4	0.8	0.8	1.1	0.7	1.7	1.6	1.9	1.1
Avg	1.5	1.4	1.6	1.6	1.6	1.5	1.5	1.7	2.3	2.8	2.8	2.9	3.1	3.2	3.2	3	2.8	2.1	1.7	1.7	1.6	1.6	1.6	1.5	2.1
S D	1.2	1.3	1.3	1.2	1.2	1.3	1.2	1.3	1.4	1.6	1.6	1.6	1.4	1.3	1.2	1.2	1.1	1.1	1.3	1.3	1.2	1.2	1.1	1.2	1
S/A	0.8	0.9	0.81	0.78	0.76	0.84	0.85	0.76	0.62	0.58	0.57	0.53	0.45	0.41	0.37	0.39	0.4	0.54	0.75	0.76	0.74	0.72	0.71	0.76	0.49
Min	0	0	0	0	0	0	0	0.1	0.1	0.4	0.2	0.8	1	1.1	1.2	1.1	0.5	0.1	0.1	0	0	0.2	0	0	0.8
Max	5.2	5	4.3	4	4	4.2	4.1	4.3	5.2	5.6	5.9	6	6.2	6.3	5.7	5.7	5.6	4.3	4.7	4.8	4.6	5	4.7	5.5	4.1
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: 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

October 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	232	230	166	312	11	228	257	168	158	197	179	193	209	276	249	0	353	334	301	240	272	306	309	289	259
2	288	282	274	275	280	270	278	285	285	299	290	276	259	260	251	259	274	289	295	291	251	189	175	177	273
3	171	202	224	226	231	230	254	244	240	246	220	244	247	237	252	234	227	182	171	205	176	176	204	207	236
4	230	227	233	234	242	226	272	257	257	236	235	184	153	107	116	179	161	135	135	139	135	149	152	171	165
5	169	168	232	164	0	0	221	250	258	277	283	132	116	95	163	165	144	127	121	136	134	144	258	237	151
6	0	224	295	271	249	346	338	356	155	328	339	335	331	311	31	36	45	48	57	41	33	360	358	6	15
7	357	5	35	29	359	4	8	11	16	28	39	34	42	49	51	54	47	50	52	62	69	74	78	75	38
8	70	42	336	3	4	4	34	83	105	113	87	54	83	126	107	109	108	114	153	153	153	175	154	151	113
9	149	127	124	112	127	109	103	139	158	150	83	195	202	166	174	141	120	105	121	128	132	136	164	165	146
10	166	173	207	284	323	357	42	68	76	77	59	51	49	51	60	40	35	35	35	36	34	35	33	31	44
11	33	40	44	47	45	38	37	42	45	45	45	42	48	44	45	37	37	36	40	40	40	38	41	42	42
12	38	37	37	38	42	37	32	32	42	46	54	57	56	58	56	46	46	37	15	4	24	26	349	7	42
13	29	16	18	41	7	3	341	2	27	21	34	30	49	343	330	332	314	296	300	284	302	287	285	300	352
14	270	289	307	304	292	289	309	317	4	46	72	81	81	94	138	145	154	137	125	126	135	152	156	207	126
15	212	222	225	242	252	259	268	292	311	315	233	53	91	104	92	101	109	100	93	116	119	117	127	161	126
16	157	162	211	222	224	222	218	211	213	229	222	221	223	226	225	206	201	210	219	233	233	226	251	267	222
17	299	352	11	15	31	43	45	52	47	48	48	43	42	37	42	24	11	5	352	347	346	343	353	353	23
18	352	352	349	350	360	355	350	320	323	323	341	344	351	348	344	353	356	356	360	353	353	352	354	353	350
19	352	354	346	349	344	344	347	346	356	3	357	354	353	356	353	347	347	336	323	318	318	316	293	292	348
20	286	289	287	290	282	284	295	301	306	320	331	335	348	326	280	328	301	285	104	112	173	220	213	211	308
21	218	219	212	206	209	208	215	228	237	244	248	238	247	241	265	285	283	261	255	282	340	358	331	321	257
22	330	333	315	273	285	281	278	293	308	345	348	344	5	7	357	27	15	26	34	28	5	4	357	353	350
23	350	352	354	356	358	342	337	353	0	14	15	12	29	23	27	43	45	38	18	12	12	333	358	55	12
24	63	61	61	67	65	65	61	68	75	89	89	92	100	85	90	78	80	81	81	91	100	105	104	106	83
25	118	105	106	105	108	103	119	118	127	135	137	145	147	149	147	151	163	173	179	191	238	296	300	337	138
26	18	19	16	1	328	318	318	346	12	30	42	47	70	264	227	167	159	141	138	152	155	172	199	217	40
27	227	214	223	217	209	202	180	154	154	161	188	189	216	330	9	7	3	311	315	307	309	314	309	291	308
28	295	272	268	268	260	265	260	261	268	269	272	273	277	277	273	277	271	264	264	269	273	277	274	267	271
29	257	247	244	232	235	234	239	229	232	262	267	256	250	263	255	260	271	254	205	218	233	299	313	312	253
30	307	313	309	304	309	295	318	319	330	331	319	325	331	338	331	350	357	344	341	297	286	276	225	350	327
31	224	222	243	276	281	273	278	280	290	288	300	247	207	231	218	191	186	185	187	165	198	217	223	218	231
Avg	345	351	350	347	347	342	338	335	347	355	359	357	15	358	12	24	28	27	9	356	350	341	338	341	357
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University

36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 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	1.7	1.5	0.4	0.4	1.5	1.5	2.6	1.5	2.1	2.9	4.1	4.2	4.4	5.7	3.4	3.3	3.7	2	1.3	1.2	1.3	6	3.7	3	2.6
2	2.5	2.8	2.8	3.3	2.7	2.8	2.6	3.3	3.9	4.4	5	4.4	5.3	5.4	5.4	5	4	3.9	2.4	1.2	0	0.8	0.8	0.6	3.1
3	0.6	0.4	1.1	1.6	1.5	1.5	1.6	2.6	4.1	4.8	5.5	5.5	5.1	5.7	4.8	3.4	2.7	1.8	0.9	0.1	0.3	0.8	0.3	0.5	2.4
4	0.9	1	1.3	1.3	1	0.4	0.1	0.7	2.1	2.4	2.4	2.9	3.5	4.5	4.3	2.9	3.8	3.3	3.2	2.3	1.4	0.9	0.8	0.7	2
5	0.9	0.2	0.1	0.3	0	0	0.1	0.7	2	2.9	2.1	2.6	3.6	3.7	4.1	3.8	3.2	1.6	1	0.6	1.6	1.4	0.4	0.2	1.5
6	0	0.4	1	0.6	0.3	1.6	2	0.5	0.5	1.5	2.5	3.1	4.1	4.8	5.7	7	5.9	4.9	3.3	3.1	2.2	2.5	2	2.1	2.6
7	1.1	1.8	3.6	3.7	3.3	3.5	3.9	4	5.7	6.8	6.4	5.9	5.3	4.8	5.5	5.2	4.8	3.4	2.9	2.4	3	2.7	2.7	1.7	3.9
8	1.3	0.2	0.6	0.9	0.2	0.1	0.8	0.9	2.4	2.8	2.6	3.4	4.2	4.7	5.1	5	5	3.3	2.6	2.7	3	2	2.4	2.6	2.5
9	1.3	0.5	0.9	0.6	2.1	1.2	1.1	2.1	1.3	1.4	1.5	4.1	4.7	3.4	3.6	4.2	4.5	3.6	2.6	2.1	2.2	2	2.7	3.6	2.4
10	3	1.4	0.4	0.1	1	1.3	0.7	0.9	1.8	2.1	3.4	4.4	4.6	4.7	3.6	3.6	5.4	5.2	4.8	4.2	4.6	4.2	5	5.4	3.2
11	5.7	6.5	7.1	6.3	5.6	6.2	5.7	6.3	7.2	8.6	9	9	8.5	8	8.1	7.6	6.4	6.2	6.3	6.3	6	6	5.8	5.3	6.8
12	4.2	4.3	4.7	5	4.2	4.1	4.1	4.5	6.1	7.3	8	7.4	7	7.5	7.2	6.7	5.9	4.2	3.2	3.1	1.9	1.9	2.4	2	4.9
13	2.1	1.9	2.3	2.1	1.8	1.9	0.7	1.6	2.8	3	2.6	2.4	2.1	2.4	2.6	2.6	3.2	1.5	1.8	1.7	1.6	1.7	1.9	1.2	2.1
14	0.6	0.6	1	0.9	1.3	1.1	0.9	1.5	1.8	1.9	1.7	2	2.5	3.2	4.1	3.8	3.1	2.1	1.2	1.6	2.5	1.6	1.4	1.6	1.8
15	2	1.3	1.7	1.9	1.9	1.7	1.5	2	1.9	1.2	0.9	2	3	3.5	3.7	3.9	3.2	2	1.1	1.8	1.4	1.9	2.5	1.8	2.1
16	1.2	0.9	0.4	1.5	1.7	0.4	0.2	1.2	1.7	2.1	3.6	4.9	4.8	5.7	5.3	4.4	3.3	1.9	1.7	2.2	1.9	1.7	2	1.8	2.4
17	2	3.8	5.3	5.2	6.7	6.8	6.4	6.9	8	7.8	7.3	7.2	7.1	7	6.5	4.8	5.6	6.6	6.2	6.3	5.1	4.9	5.5	6.1	6
18	6	5.6	6	7.2	6.4	5.8	5.2	4.4	5	5.1	5.1	4.4	5.9	6	6.8	6.5	6.6	7.1	7.2	8.3	7.8	8.3	8.5	9.5	6.4
19	9	8.6	7.6	6.3	6.3	7.2	7.2	7.3	9.2	10	10	10.3	10.4	10.4	9.8	9.9	8.5	5.5	3.8	2.3	2.7	2.5	1.8	1.6	7
20	1.9	1.8	2.2	2.1	2	2.5	2.7	2.9	3.5	5	5.2	5	4.3	3.8	3.4	2.6	1.4	0.3	0.3	0.9	0.3	0.6	1.3	1.4	2.4
21	1.1	1	1.7	1.3	1.9	2.9	3.2	4.5	5.6	5.4	5	5	6.1	7.6	7.1	7.2	5.8	2.3	1.9	3.8	3.8	4.8	3.7	2.8	4
22	4.6	4.7	2.7	1.5	1.7	2.3	2.1	3.1	4.4	6.4	7.1	5.9	6.3	6.2	5.1	4.8	4.3	3.3	2.8	3	2.8	2.9	3.1	3.6	3.9
23	4	4.6	5.8	5.3	5.3	4.7	4.5	5.7	5.7	6.5	7	6.4	6.4	6.4	6.3	6.4	6.6	4.7	2.8	2	1.7	1.1	1.6	3.7	4.8
24	4.2	3.2	2.5	2.9	4	3.6	3	3.3	4.2	6.1	6.1	5.7	6.8	6	5.6	5.4	5	4.7	4.8	4.7	3.2	3.4	4.5	3.5	4.4
25	5.9	5.3	6.2	6.3	5	4.3	4.3	5.1	8	9.2	8.5	10.5	11	10.7	9.9	7.4	7.8	5.5	3.9	2.9	4.1	4.9	4.1	4.2	6.5
26	5.1	3.8	3.7	3.6	2.3	0.7	0.3	2.1	4.6	5.4	5.3	3.7	2.7	2.4	3.3	4.4	3.5	2.4	1.6	0.6	1.6	1.6	1.5	1.7	2.8
27	2.4	1.3	1.9	1.1	0.9	0.9	1.1	2.3	3.2	4.3	4.6	4.6	4.2	5.9	7	7.5	10	8.4	9	8.2	7.6	6.2	6.4	6.4	4.8
28	5.6	4.9	6	5.3	4.6	5.6	6.1	7.6	9.1	8.9	9.6	10.1	9.6	10.3	9.8	9.9	8.2	7	7.8	7.5	8	6.9	7.2	4.8	7.5
29	5.1	4.2	4.2	4.2	4.9	4.9	5	5	6.5	8.6	9.4	9.3	8.7	8.2	8.1	8.5	5.3	2.1	0.8	1.4	1.8	2.8	2.6	2.1	5.2
30	2	2.6	2.4	2.6	2.1	1.9	2.3	4	5.3	8.3	9	7.9	7.2	7.2	6.1	5.1	4.4	2.4	1.5	1.3	1.7	0.5	0.4	0.5	3.7
31	0.9	0.9	0.9	1.7	1.8	1.4	1.7	1.6	3.1	3	2.1	2.3	2.4	3	3.6	3.8	2.9	1.8	1.6	2	1.6	2.4	2.4	2.9	2.2
Avg	2.9	2.6	2.9	2.8	2.8	2.7	2.7	3.2	4.3	5	5.2	5.4	5.5	5.8	5.6	5.4	5	3.7	3.1	3	2.9	3	3	2.9	3.8
S D	2.2	2.1	2.2	2.1	2	2.1	2	2.1	2.4	2.6	2.7	2.5	2.3	2.2	2	2	1.9	2	2.2	2.2	2.1	2.1	2.1	2.1	1.8
S/A	0.75	0.81	0.78	0.75	0.71	0.76	0.76	0.64	0.56	0.53	0.52	0.47	0.42	0.39	0.36	0.37	0.39	0.54	0.72	0.75	0.75	0.7	0.7	0.73	0.46
Min	0	0.2	0.1	0.1	0	0	0.1	0.5	0.5	1.2	0.9	2	2.1	2.4	2.6	2.6	1.4	0.3	0.3	0.1	0	0.5	0.3	0.2	1.5
Max	9	8.6	7.6	7.2	6.7	7.2	7.2	7.6	9.2	10	10	10.5	11	10.7	9.9	9.9	10	8.4	9	8.3	8	8.3	8.5	9.5	7.5
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: 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

October 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	1006	1006	1005	1005	1005	1005	1005	1005	1005	1005	1005	1004	1003	1001	1001	1001	1001	1002	1002	1003	1003	1004	1005	1005	1004
2	1005	1006	1006	1006	1007	1007	1008	1009	1009	1010	1009	1009	1009	1008	1008	1009	1009	1010	1010	1011	1011	1012	1012	1012	1009
3	1012	1012	1012	1012	1013	1013	1014	1014	1015	1015	1016	1016	1015	1015	1014	1015	1015	1015	1016	1016	1016	1017	1017	1018	1015
4	1018	1018	1018	1018	1019	1019	1020	1020	1021	1021	1021	1021	1020	1020	1019	1020	1020	1020	1020	1021	1021	1021	1021	1021	1020
5	1022	1022	1022	1022	1022	1022	1023	1023	1024	1024	1024	1023	1022	1021	1021	1021	1021	1021	1021	1021	1021	1022	1022	1021	1022
6	1021	1021	1021	1021	1021	1021	1022	1022	1022	1022	1022	1022	1021	1021	1021	1021	1022	1022	1022	1022	1023	1023	1024	1024	1022
7	1024	1024	1024	1024	1024	1025	1025	1026	1026	1026	1026	1026	1025	1024	1024	1023	1023	1023	1023	1023	1023	1023	1023	1022	1024
8	1022	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1020	1019	1018	1018	1017	1017	1016	1016	1016	1016	1016	1016	1015	1019
9	1015	1015	1015	1015	1014	1014	1015	1016	1016	1016	1016	1016	1015	1014	1014	1014	1014	1014	1015	1015	1016	1016	1016	1016	1015
10	1016	1016	1016	1016	1016	1017	1017	1018	1019	1019	1020	1020	1019	1019	1019	1019	1020	1020	1020	1020	1021	1021	1021	1021	1019
11	1021	1021	1021	1021	1022	1022	1023	1023	1024	1024	1025	1025	1025	1025	1025	1025	1025	1025	1025	1026	1026	1026	1026	1026	1024
12	1026	1026	1026	1026	1026	1027	1027	1028	1029	1029	1029	1029	1029	1028	1029	1029	1029	1029	1029	1029	1029	1029	1029	1029	1028
13	1028	1028	1028	1028	1028	1028	1028	1028	1029	1029	1028	1028	1027	1026	1025	1024	1024	1024	1024	1024	1023	1023	1023	1023	1026
14	1023	1023	1022	1022	1022	1022	1022	1023	1023	1023	1023	1022	1021	1020	1019	1019	1019	1019	1019	1019	1019	1019	1019	1018	1021
15	1018	1018	1017	1017	1017	1018	1018	1019	1019	1019	1019	1018	1018	1017	1017	1016	1016	1016	1016	1017	1017	1017	1016	1016	1017
16	1016	1015	1015	1015	1015	1015	1015	1016	1016	1016	1015	1014	1013	1013	1012	1012	1012	1012	1012	1013	1013	1013	1013	1013	1014
17	1013	1013	1013	1013	1014	1014	1015	1015	1016	1016	1016	1016	1015	1014	1014	1014	1014	1014	1015	1015	1015	1015	1014	1014	1014
18	1013	1013	1013	1013	1013	1013	1013	1013	1014	1015	1014	1014	1014	1014	1014	1014	1014	1014	1015	1016	1016	1016	1016	1016	1014
19	1016	1016	1015	1016	1017	1017	1018	1019	1019	1020	1020	1021	1020	1020	1021	1021	1021	1022	1022	1022	1023	1023	1023	1023	1020
20	1023	1023	1023	1023	1023	1024	1024	1024	1024	1024	1024	1023	1022	1021	1021	1021	1020	1020	1020	1020	1020	1020	1020	1019	1022
21	1019	1019	1018	1018	1018	1017	1017	1017	1017	1017	1017	1016	1015	1014	1014	1014	1014	1015	1015	1016	1017	1018	1019	1019	1017
22	1019	1019	1020	1020	1021	1022	1022	1023	1024	1024	1024	1024	1024	1023	1024	1024	1025	1025	1026	1027	1027	1028	1028	1028	1024
23	1029	1029	1029	1029	1029	1030	1030	1031	1031	1032	1032	1032	1032	1031	1031	1031	1031	1031	1031	1031	1031	1032	1031	1031	1031
24	1030	1030	1029	1029	1028	1028	1028	1028	1028	1028	1027	1027	1026	1024	1024	1023	1022	1022	1021	1021	1021	1021	1020	1019	1025
25	1018	1017	1016	1015	1015	1014	1014	1014	1014	1013	1012	1011	1010	1009	1008	1007	1007	1007	1007	1008	1008	1009	1010	1010	1011
26	1010	1011	1011	1011	1011	1011	1012	1013	1014	1014	1014	1013	1013	1012	1012	1012	1012	1012	1013	1013	1013	1013	1013	1013	1012
27	1013	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1011	1010	1009	1009	1008	1008	1010	1011	1012	1011	1011	1011	1011	1011
28	1010	1010	1010	1009	1009	1009	1009	1010	1010	1010	1010	1009	1009	1008	1009	1009	1010	1011	1012	1013	1014	1014	1015	1015	1011
29	1014	1014	1014	1014	1014	1014	1014	1015	1015	1015	1015	1014	1013	1013	1014	1014	1015	1016	1016	1017	1018	1019	1020	1020	1015
30	1021	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1030	1029	1029	1029	1029	1030	1030	1031	1031	1032	1032	1032	1032	1028
31	1032	1032	1032	1032	1033	1033	1033	1034	1034	1034	1033	1033	1031	1030	1030	1029	1029	1029	1029	1029	1028	1028	1028	1027	1031
Avg	1019	1018	1018	1018	1018	1019	1019	1020	1020	1020	1020	1020	1019	1018	1018	1018	1018	1018	1019	1019	1019	1019	1019	1019	1019
S D	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Min	1005	1006	1005	1005	1005	1005	1005	1005	1005	1005	1005	1004	1003	1001	1001	1001	1001	1002	1002	1003	1003	1004	1005	1005	1004
Max	1032	1032	1032	1032	1033	1033	1033	1034	1034	1034	1033	1033	1032	1031	1031	1031	1031	1031	1031	1031	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	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

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

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

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

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

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

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