

March 2009

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	3	21	46 ?	95	85	75	66 ?	66 ?	56 ?	?	23 ?	11	0	0	0	0	0	0	549 ?
2	0	0	0	0	0	0	6	47	44	103	161	227	177	186	186	168	76	38	0	0	0	0	0	0	1419
3	0	0	0	0	0	0	18	79 ?	?	?	?	?	?	?	?	?	?	51	0	0	0	0	0	0	148 ?
4	0	0	0	0	0	0	21	82 ?	?	?	?	?	?	?	?	?	?	45	0	0	0	0	0	0	148 ?
5	0	0	0	0	0	0	22	84 ?	?	?	?	?	?	?	?	?	?	47	0	0	0	0	0	0	152 ?
6	0	0	0	0	0	0	18	74 ?	?	?	?	?	?	?	?	?	131 ?	63	0	0	0	0	0	0	287 ?
7	0	0	0	0	0	0	20	76 ?	?	?	?	?	?	?	?	?	?	44	0	0	0	0	0	0	141 ?
8	0	0	0	0	0	0	11	77 ?	154 ?	?	?	401 ?	?	393 ?	377 ?	?	?	47	0	0	0	0	0	0	1460 ?
9	0	0	0	0	0	0	29	92 ?	?	?	?	?	?	?	?	?	?	32 ?	0	0	0	0	0	0	153 ?
10	0	0	0	0	0	0	21	122 ?	237 ?	370 ?	513 ?	419	459	491 ?	333	257 ?	89 ?	47	3	0	0	0	0	0	3360 ?
11	0	0	0	0	0	0	15	70	108	334 ?	435 ?	?	?	477 ?	430 ?	289 ?	188 ?	37	3	0	0	0	0	0	2387 ?
12	0	0	0	0	0	0	25	112 ?	209 ?	407 ?	262	541 ?	374	239	281	135	96	36	3	0	0	0	0	0	2720 ?
13	0	0	0	0	0	0	3	12 ?	32 ?	?	?	61 ?	61 ?	85 ?	61 ?	?	24 ?	4 ?	1	0	0	0	0	0	344 ?
14	0	0	0	0	0	0	7	54	108	106	130	129	124	162	76	61	28 ?	3 ?	0	0	0	0	0	0	988
15	0	0	0	0	0	0	5	27	50	98	149	166	131	137	149	72	32 ?	8	0	0	0	0	0	0	1024
16	0	0	0	0	0	0	8	49	133	165	124	137	236	193	116	95	58	12	1	0	0	0	0	0	1328
17	0	0	0	0	0	0	8	49	53	98	142	163	220	190	285	244	112	44	5	0	0	0	0	0	1613
18	0	0	0	0	0	0	28	128	272	345 ?	?	?	?	?	?	?	?	58 ?	7	0	0	0	0	0	838 ?
19	0	0	0	0	0	0	38	?	?	?	?	?	?	?	?	?	141 ?	7 ?	0	0	0	0	0	0	186 ?
20	0	0	0	0	0	0	22	155	?	190 ?	302 ?	243 ?	250 ?	339 ?	177 ?	253 ?	?	54 ?	8	0	0	0	0	0	1993 ?
21	0	0	0	0	0	0	46	?	?	?	?	?	?	?	?	?	?	53 ?	5	0	0	0	0	0	105 ?
22	0	0	0	0	0	0	47	?	?	?	?	?	?	?	?	?	?	61 ?	10	0	0	0	0	0	117 ?
23	0	0	0	0	0	0	41	?	?	?	?	?	?	?	?	?	?	66 ?	7	0	0	0	0	0	115 ?
24	0	0	0	0	0	0	47	?	?	?	?	?	?	?	?	?	?	57 ?	6	0	0	0	0	0	110 ?
25	0	0	0	0	0	0	62	?	227	247	253	252	154	110	109	48	27 ?	17	2	0	0	0	0	0	1508 ?
26	0	0	0	0	0	0	7	45	87	157	112	125	205	240	86 ?	86	53 ?	22	3	0	0	0	0	0	1228
27	0	0	0	0	0	1	12	33 ?	68 ?	213	165	262	195	103	63 ?	52	45	17	2	0	0	0	0	0	1232 ?
28	0	0	0	0	0	2	26	130	325	448	756	651	785	709	436	175	60 ?	23 ?	1	0	0	0	0	0	4528
29	0	0	0	0	0	0	31	82	191	321	159	446	736 ?	?	?	?	?	69 ?	13	0	0	0	0	0	2049 ?
30	0	0	0	0	0	5	52 ?	?	?	?	?	?	?	?	?	?	?	84 ?	12	0	0	0	0	0	154 ?
31	0	0	0	0	0	3	54 ?	?	?	?	?	?	?	?	?	?	107 ?	55	6	0	0	0	0	0	226 ?
Avg	0	0	0	0	0	0	24	74	138	231	250	269	278	257	201	149	76	39	3	0	0	0	0	0	1052 ?
S D	0	0	0	0	0	1	17	37	91	123	186	174	222	179	136	88	48	22	4	0	0	0	0	0	1096
S/A	0	0	0	0	0	3.03	0.69	0.51	0.66	0.53	0.74	0.65	0.8	0.7	0.67	0.59	0.63	0.56	1.19	0	0	0	0	0	1.04
Min	0	0	0	0	0	0	3	12	32	95	85	61	61	66	56	48	23	3	0	0	0	0	0	0	105
Max	0	0	0	0	0	5	62	155	325	448	756	651	785	709	436	289	188	84	13	0	0	0	0	0	4528
n	0	0	0	0	0	6	275	200	166	152	161	162	151	147	147	127	121	302	59	0	0	0	0	0	2183

Daylight Data Recovery: 0.0% missing; 0.0% untested; 50.8% exceed the 15% QC threshold -- 4441 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.

March 2009

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	1	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	5
3	0	0	0	0	0	0	2	7?	?	?	?	?	?	?	?	?	?	1	0	0	0	0	0	0	9?
4	0	0	0	0	0	0	3	9?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	12?
5	0	0	0	0	0	0	3	12?	?	?	?	?	?	?	?	?	?	1	0	0	0	0	0	0	15?
6	0	0	0	0	0	0	2	9?	?	?	?	?	?	?	?	?	0?	1	0	0	0	0	0	0	11?
7	0	0	0	0	0	0	1	5?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	6?
8	0	0	0	0	0	0	0	3?	0?	?	?	0?	0?	2?	1?	?	?	0	0	0	0	0	0	0	7?
9	0	0	0	0	0	0	2	7?	?	?	?	?	?	?	?	?	?	1?	0	0	0	0	0	0	10?
10	0	0	0	0	0	0	1	5	4?	7?	5?	2	2	3?	1	0?	0?	0	0	0	0	0	0	0	32?
11	0	0	0	0	0	0	0	1	1	6?	5?	?	?	4?	2?	1?	1?	0	0	0	0	0	0	0	21?
12	0	0	0	0	0	0	0	2?	1?	3?	0	5?	1	0	2	0	0	0	0	0	0	0	0	0	14?
13	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
14	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	5
15	0	0	0	0	0	0	0	0	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	6
16	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	7
17	0	0	0	0	0	0	0	0	0	1	0	1	2	1	2	1	0	0	0	0	0	0	0	0	8
18	0	0	0	0	0	0	1	3	8	14?	?	?	?	?	?	?	?	3?	0	0	0	0	0	0	28?
19	0	0	0	0	0	0	4	13?	?	?	?	?	?	?	?	5?	1?	0	0	0	0	0	0	0	24?
20	0	0	0	0	0	0	1	6	9?	0?	3?	0?	1?	3?	2?	2?	?	1?	0	0	0	0	0	0	28?
21	0	0	0	0	0	0	5	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	5?
22	0	0	0	0	0	0	8	?	?	?	?	?	?	?	?	?	?	2?	0	0	0	0	0	0	10?
23	0	0	0	0	0	0	4	?	?	?	?	?	?	?	?	?	?	3?	0	0	0	0	0	0	7?
24	0	0	0	0	0	0	5	?	?	?	?	?	?	?	?	?	?	3?	0	0	0	0	0	0	8?
25	0	0	0	0	0	0	8	?	2	1	2	1	0	0	1	0	0	0	0	0	0	0	0	0	15
26	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	6
27	0	0	0	0	0	0	0	0	0	9	1	2	1	0	0	0	0	0	0	0	0	0	0	0	15
28	0	0	0	0	0	0	0	15	186	259	601	294	401	428	152	1	0	0	0	0	0	0	0	0	2337
29	0	0	0	0	0	0	0	0	12	19	1	89	325?	?	?	?	?	105?	14	0	0	0	0	0	565?
30	0	0	0	0	0	1	14?	?	?	?	?	?	?	?	?	?	?	6?	0	0	0	0	0	0	21?
31	0	0	0	0	0	0	6?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	6?
Avg	0	0	0	0	0	0	2	4	13	19	39	25	46	28	10	1	0	4	0	0	0	0	0	0	105?
S D	0	0	0	0	0	0	3	5	43	62	150	75	124	107	38	1	0	19	3	0	0	0	0	0	426
S/A	0	0	0	0	0	4.13	1.39	1.12	3.45	3.28	3.85	3.01	2.69	3.83	3.69	1.76	2.1	4.5	5.38	0	0	0	0	0	4.07
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Max	0	0	0	0	0	1	14	15	186	259	601	294	401	428	152	5	1	105	14	0	0	0	0	0	2337
n	0	0	0	0	0	6	277	223	185	169	177	170	168	160	168	157	167	314	59	0	0	0	0	0	2402

Daylight Data Recovery: 0.0% missing; 0.0% untested; 45.9% exceed the 15% QC threshold -- 4441 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

March 2009

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	3	21	38	95	85	70	50	60	48	24 ?	20 ?	11	0	0	0	0	0	0	526
2	0	0	0	0	0	0	6	43	42	103	161	227	177	186	185	165	75	37	0	0	0	0	0	0	1407
3	0	0	0	0	0	0	14	32 ?	?	?	?	?	?	?	?	?	?	19	0	0	0	0	0	0	65 ?
4	0	0	0	0	0	0	14	32 ?	?	?	?	?	?	?	?	?	?	17	0	0	0	0	0	0	64 ?
5	0	0	0	0	0	0	13	35 ?	?	?	?	?	?	?	?	?	?	22	0	0	0	0	0	0	71 ?
6	0	0	0	0	0	0	15	37 ?	?	?	?	?	?	?	?	?	?	101 ?	45	0	0	0	0	0	198 ?
7	0	0	0	0	0	0	19	47 ?	?	?	?	?	?	?	?	?	?	?	34	0	0	0	0	0	101 ?
8	0	0	0	0	0	0	10	49 ?	125 ?	?	?	304 ?	438 ?	285 ?	317 ?	?	?	?	38	0	0	0	0	0	1566 ?
9	0	0	0	0	0	0	18	38 ?	?	?	?	?	?	?	?	?	?	?	14 ?	0	0	0	0	0	70 ?
10	0	0	0	0	0	0	20	106	207 ?	286 ?	445 ?	394	401	448 ?	309	248 ?	68 ?	39	2	0	0	0	0	0	2974 ?
11	0	0	0	0	0	0	17	69	108	282 ?	397 ?	?	?	364 ?	342 ?	226 ?	139 ?	36	3	0	0	0	0	0	1983 ?
12	0	0	0	0	0	0	28	96 ?	189 ?	297 ?	262	486 ?	357	239	280	135	96	36	3	0	0	0	0	0	2503 ?
13	0	0	0	0	0	0	3	12	27	31 ?	36	55	51	52	47 ?	29 ?	21 ?	4 ?	1	0	0	0	0	0	370 ?
14	0	0	0	0	0	0	7	54	108	106	130	129	124	162	76	61	24	4 ?	0	0	0	0	0	0	985
15	0	0	0	0	0	0	5	25	50	98	149	166	131	137	149	68	30	9	0	0	0	0	0	0	1017
16	0	0	0	0	0	0	8	49	133	165	124	137	236	193	116	95	58	12	1	0	0	0	0	0	1328
17	0	0	0	0	0	0	9	49	53	98	142	163	220	190	275	235	112	44	5	0	0	0	0	0	1595
18	0	0	0	0	0	0	30	126	265	290 ?	?	?	?	?	?	?	?	23 ?	6	0	0	0	0	0	739 ?
19	0	0	0	0	0	0	26	81 ?	?	?	?	?	?	?	?	?	224 ?	114 ?	8	0	0	0	0	0	454 ?
20	0	0	0	0	0	0	24	130	229 ?	182 ?	227 ?	232 ?	218 ?	287 ?	172 ?	207 ?	?	34 ?	7	0	0	0	0	0	1950 ?
21	0	0	0	0	0	0	23	?	?	?	?	?	?	?	?	?	?	?	47 ?	5	0	0	0	0	75 ?
22	0	0	0	0	0	0	28	?	?	?	?	?	?	?	?	?	?	?	31 ?	9	0	0	0	0	67 ?
23	0	0	0	0	0	0	27	?	?	?	?	?	?	?	?	?	?	?	24 ?	6	0	0	0	0	57 ?
24	0	0	0	0	0	0	23	?	?	?	?	?	?	?	?	?	?	?	29 ?	6	0	0	0	0	57 ?
25	0	0	0	0	0	0	45 ?	?	226	246	253	252	154	110	109	48	26	17	2	0	0	0	0	0	1487
26	0	0	0	0	0	0	7	45	87	157	112	125	205	240	77	81	34	21	3	0	0	0	0	0	1194
27	0	0	0	0	0	?	12	33 ?	53	194	145	262	195	103	58	51	45	17	2	0	0	0	0	0	1170
28	0	0	0	0	0	?	26	123	223	268	254	367	379	301	291	175	49 ?	21	1	0	0	0	0	0	2479
29	0	0	0	0	0	0	31	82	183	306	159	343	380 ?	?	?	?	?	32 ?	12	0	0	0	0	0	1528 ?
30	0	0	0	0	0	5	23 ?	?	?	?	?	?	?	?	?	?	?	?	41 ?	8	0	0	0	0	77 ?
31	0	0	0	0	0	5 ?	24 ?	?	?	?	?	?	?	?	?	?	?	82 ?	55	6	0	0	0	0	171 ?
Avg	0	0	0	0	0	0	18	59	130	189	193	232	232	210	178	129	64	26	3	0	0	0	0	0	914 ?
S D	0	0	0	0	0	1	10	35	79	90	109	123	124	109	108	81	38	14	3	0	0	0	0	0	865
S/A	0	0	0	0	0	3.74	0.55	0.59	0.61	0.48	0.57	0.53	0.53	0.52	0.61	0.63	0.59	0.51	1.12	0	0	0	0	0	0.95
Min	0	0	0	0	0	0	3	12	27	31	36	55	50	52	47	24	20	4	0	0	0	0	0	0	57
Max	0	0	0	0	0	5	45	130	265	306	445	486	438	448	342	248	139	55	12	0	0	0	0	0	2974
n	0	0	0	0	0	3	261	217	181	164	176	170	167	159	161	141	151	310	59	0	0	0	0	0	2322

Daylight Data Recovery: 0.0% missing; 0.0% untested; 47.7% exceed the 15% QC threshold -- 4441 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.

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

March 2009

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	5.1	4.7	4.2	3.7	3.4	3.4	3.4	3.4	3.7	4.5	4.6	4.8	4.9	4.9	4.8	4.4	4.1	4.6	4.9	5.1	4.6	3.2	2.8	2.9	4.2
2	2.7	2.7	2.9	2.2	1.2	0.9	0.2	-0.9	-2.4	-2.8	-2.3	-2	-1.9	-2.2	-2.2	-2.4	-2.8	-2.6	-2.8	-2.9	-2.9	-3.4	-3.8	-4.1	-1.3
3	-4.6	-5.1	-5.6	-6	-6.4	-6.7	-7.1	-7	-6.5	-5.7	-4.9	-4.3	-3.2	-2.6	-1.7	-1.1	-0.8	-1.3	-2.3	-2.9	-3.4	-4	-4.8	-5	-4.3
4	-5.4	-5.5	-5.8	-5.9	-5.8	-5.9	-6.2	-4.9	-2.1	-0.2	1.2	2.3	3.4	4.2	4.7	5.6	5.4	4.8	2.3	1	0.4	0.4	-0.2	-0.1	-0.5
5	0	-0.2	-0.3	-0.5	-0.6	-0.3	-0.3	1.2	3.4	6	7.8	9.1	10.4	11.3	12.1	12	10.4	10.2	8.6	7.2	6.3	5.9	5.6	4.9	5.4
6	4.8	4.9	4.6	4.8	5.2	5.4	5.4	7	10.3	13.1	15.3	17	18.4	19.4	20	20.5	20.5	19.9	17.9	15.6	14.4	13.8	13.5	13.4	12.7
7	12.8	12.5	12.2	11.7	11.5	11.4	11.2	11.7	14.1	15.9	18.2	20.6	22.5	22.7	22.9	23.2	23.4	22.9	19.9	17.4	17.2	17	16.5	16.3	16.9
8	15.7	15.4	15.6	15.5	15.1	15.4	15.3	15.2	16.8	18.7	20.3	21.7	22.9	24	24.8	25.5	25.5	24.5	23.1	21.6	18.9	18.8	18.5	17.7	19.4
9	17	16.2	16.1	16.8	16.8	17.1	17.5	18.1	19.8	21.6	23.2	24.5	25.6	26.2	26.8	27.1	27.1	24	18.1	16.3	15	13.6	12.2	10.9	19.5
10	9.9	9.1	8.5	8	7.6	7	6.5	7	8.8	10.1	11	11.4	11.7	12	12.3	12.2	11.6	10.6	8.8	8	8	8.4	8.8	9.2	9.4
11	9.8	10.9	11.6	12.6	13.1	13.7	14	14.5	16.3	18.2	20.3	21.8	23.2	24.6	25.8	26.4	25	23.6	21.8	20.9	20	19.4	19	19.4	18.6
12	18.1	15.2	13.3	12	11	10.1	9.4	9.2	9.5	9.4	8.7	8.3	8.1	7.5	7.9	7.5	6.9	6.6	6	5.8	5.7	5.6	5.6	5.6	8.9
13	5.9	5.9	6	6.1	6.1	6.1	5.3	4.9	4.2	4	3.9	4.2	4.7	4.7	4.9	5	4.9	4.8	4.6	4.7	4.8	4.8	4.7	4.6	5
14	4.6	4.6	4.5	4.3	4.5	4.6	4.6	4.6	5	5.4	5.9	6.1	5.7	5.7	5.9	5.6	5.5	5.3	5	4.8	4.9	5.2	5.6	5.9	5.2
15	6	6.3	6.4	6.4	6.1	5.8	5.8	6.1	6.4	6.8	7.5	8.5	9.1	9.4	9.8	9.9	9.4	8.6	8.8	8.4	7.9	7.5	7.3	7.3	7.6
16	7.1	7.2	7.2	7.3	7.3	7.3	7.5	7.6	7.8	8.1	8.6	8.8	9.1	9.6	9.8	9.5	9.2	8	7.7	7.8	7.9	8	7.9	7.7	8.1
17	7.7	7.7	7.4	7.2	7.1	7	6.9	6.9	7	6.9	7.1	7.2	8	8.7	9	9.3	8.8	8.3	7.9	7.3	6.9	5.9	5.3	4.8	7.3
18	4.5	3.8	2.7	2.8	2.5	2	1.9	2.2	3.7	6.6	9.8	11.9	13.2	14.5	15	16	16.4	15.9	12.8	10.8	10	9.9	9.5	9.1	8.6
19	8.8	8.9	8.9	8.8	8.8	8.6	9.1	10.9	13.7	15.5	17.1	18.8	20	20.7	21.5	21.8	20	12.3	10.8	9.5	8.5	7.4	7.2	7.4	12.7
20	7.4	7.3	7.3	7.2	7.1	6.8	7	7.4	8.5	9.7	10.2	10.1	9.5	10.1	9.8	9.3	8.7	7.7	6.5	5.6	5.1	4.8	4.5	4	7.6
21	3.2	3	2.8	2.6	2.6	2.4	2.5	4	5.8	6.9	7.8	8.2	8.2	8.8	8.8	8.4	7.9	6.5	5.5	5	4.9	4.6	4.8	4.5	5.4
22	4.1	3.1	2.2	1.6	1.4	1.2	1.3	3.7	7.5	9.2	11	12.3	13.5	13.7	13.1	13	12.6	12.2	10.3	8.8	8.6	8.4	7.6	7.2	7.8
23	7.1	6.9	6.7	6.4	6.2	5.9	6	6.7	7.4	7.7	8.3	8.8	9	9.1	9.7	10.3	10.4	9.3	7	5.7	5.1	4.6	4.6	4.2	7.2
24	3.4	3.1	2.8	2.6	2.1	1.5	1.5	2.3	3.6	4.8	5.6	6.5	7	7.8	8.1	7.7	7.5	6.6	4.9	3.7	3.3	3.1	2.6	2.3	4.3
25	1.2	1.9	1.1	0.7	0.2	0.5	1.8	4.5	5.8	7.3	7.8	8.2	8.2	8	7.9	7.6	7.5	7.3	7.1	7.2	7.3	7.4	7.7	8.1	5.5
26	8.5	8.8	8.9	8.8	8.9	9.6	10.2	10.8	11.8	13	13.9	14.3	14.9	16	16.1	15.5	15.4	15.2	15.1	15.4	15.9	16.2	16.2	16	13.1
27	15.6	15.8	15.8	15.7	16.1	16.1	16	16.1	16	15.9	13.1	11.7	11.8	11.1	10.4	10	9.7	9.8	10	10.3	10.8	11.5	12.4	12.8	13.1
28	13.2	13.2	14.5	16.2	16.7	16.7	16.8	17.2	18.6	19.8	21.1	22	23	23.7	24.2	23	20.8	17.4	15.3	15	15.2	15.4	16.4	19	18.1
29	19.6	19.9	19.4	18.6	18.3	18	17.7	18	18.9	20	19.9	20.2	22.4	23.9	25.3	25.8	25.3	24.3	22.4	21.2	19.4	16.9	14.8	13.2	20.1
30	11.8	10.8	10.1	9.4	8.9	8.5	8.3	9.4	10.8	11.9	12.5	13.6	14.9	16	16.5	17.1	17.4	16.7	14.8	13.9	13.2	12.6	12.3	11.9	12.6
31	10.9	9.7	9.4	9.2	8.9	8.8	9.2	10.4	11.2	11.8	12.3	12.9	13.5	13.9	13.8	13.8	12.8	11	9.4	8.9	9	8.9	9	9.4	10.8
Avg	7.6	7.4	7.1	7	6.8	6.7	6.7	7.4	8.6	9.7	10.5	11.3	12	12.5	12.8	12.9	12.5	11.5	10.1	9.3	8.8	8.4	8.2	8.1	9.3
S/D	6.1	5.9	6	6.1	6.2	6.3	6.3	6.2	6.4	6.6	6.8	7.1	7.4	7.7	7.9	8	7.9	7.3	6.7	6.3	6.1	6	6	6.1	6.2
S/A	0.79	0.8	0.84	0.87	0.91	0.93	0.94	0.84	0.74	0.68	0.64	0.63	0.62	0.62	0.62	0.62	0.63	0.64	0.66	0.69	0.69	0.71	0.73	0.75	0.66
Min	-5.4	-5.5	-5.8	-6	-6.4	-6.7	-7.1	-7	-6.5	-5.7	-4.9	-4.3	-3.2	-2.6	-2.2	-2.4	-2.8	-2.6	-2.8	-2.9	-3.4	-4	-4.8	-5	-4.3
Max	19.6	19.9	19.4	18.6	18.3	18	17.7	18.1	19.8	21.6	23.2	24.5	25.6	26.2	26.8	27.1	27.1	24.5	23.1	21.6	20	19.4	19	19.4	20.1
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 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

March 2009

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	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	104.5 ?	104.8	104.9 ?	104.8 ?	104.1	101.1	99.2	103.3 ?	
2	99.8	100.2	100.3	103.3	?	104.8 ?	104.3	101.5	95	89	88.5	89.3	91.7	91.1	89.2	88.9	93.6	86.3	83.7	82.1	82.1	79.5	78.2	72	91.1	
3	69.2	68.3	69.4	72.8	75.4	76	76.2	72.7	67.7	65.3	60.5	59.5	57	55.2	52.1	50.4	50.6	52.5	56.4	61.6	65.3	70.2	80.4	82.8	65.3	
4	85.8	86.6	86.7	85.7	85.3	88.4	91.4	84.2	67.2	60.1	51	40.4	37.7	36.9	37.8	36.8	37.6	39.5	60.1	79.8	87.7	89.8	89	91.3	68.2	
5	94.2	96.6	98.1	99.8	100.6	99.9	100	94.8	84	68.6	58.5	54	48.3	46.1	43.4	45.8	64.1	60	62.8	63.9	73.1	80	84.4	88.6	75.4	
6	91.6	94.7	98.1	99.6	97.7	97.4	98.5	97.5	91.7	83.5	76.9	70	65.3	62.2	60.2	57.8	56.3	58.6	65.9	80.9	88.7	92.6	94.5	93.4	82.2	
7	94.1	94.1	94.1	96.1	97	97.6	98.5	97.9	91.6	86.6	80.2	71.4	64.2	63.3	62.4	61.6	60.2	62.8	76.9	84.7	90.1	92.5	94.3	94.5	83.6	
8	94.9	93.3	90.3	89.7	91	88.8	88.5	90.1	84.7	78.6	73.4	69.1	65.6	60.5	55.8	52.2	52.3	56.5	57.5	62	79.5	82.8	85.3	87.8	76.3	
9	89.5	91.3	91	86.9	86.6	84.5	82.8	80.7	74.6	63.9	48.8	39.3	34.7	31.5	29.3	28.8	29.7	39.9	57.6	61.3	64	71.8	79.1	83.7	63.8	
10	87.4	93.5	98.8	101.7	103.1	104.2 ?	?	?	100.2	92.4	87.4	84.6	82.8	81.7	80.5	81.4	85.1	90.2	99.2	102.9	104.4 ?	?	?	?	92.7 ?	
11	?	?	?	104.5 ?	104	103.2	103.7	103.9	101.1	97.3	93.5	90.5	86.3	80.7	72.3	63.6	76.5	83.2	89.4	90.7	92	93.8	95.5	81.7	90.8 ?	
12	57.7	43.2	40	39.2	41.2	44.7	47.6	49.4	50.1	51	60.2	63.4	56.5	58.1	55	56.6	62.2	67	71.1	72.9	76.4	77.5	78.6	79.4	58.3	
13	79.2	79.3	79.7	76.5	80.6	80	90.9	93.2	101	103.9 ?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	86.4 ?	
14	?	?	?	?	?	?	104.8	103.8	101.3	97.9	96.1	95.6	102	104.5 ?	104.9 ?	?	?	?	?	?	?	?	?	?	101.2 ?	
15	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
16	?	?	?	?	?	?	?	?	?	?	?	104.8 ?	103	101.4	101.7	102.6	104	?	?	?	?	?	?	?	?	102.9 ?
17	?	?	?	?	?	?	105 ?	104.3	103.7	103.6	103.1	103.3	100.9	99.3	98.9	98.4	99.4	100.2	100.6	101.1	102.1	104.2	?	?	101.8 ?	
18	?	?	?	?	?	?	?	?	?	?	92.8	80.5	67.3	55.7	49.6	49.3	51	58.3	80.3	93	101.3	102.2	103.2	103.7	77.7 ?	
19	104.7 ?	?	?	?	?	?	102.1 ?	96.3	88.1	79.9	71.9	64.8	59.5	57.3	55.7	56.1	63	88.6	94.7	101.6	103.6	?	?	?	80.5 ?	
20	?	?	?	?	?	?	?	103.3 ?	99.4	92.1	84.1	85.8	90.7	84.9	85.8	83	82.9	89	96.3	97.8	97.9	98.3	98.2	99.3	92.3 ?	
21	102.4	102	102.5	102.1	100.9	101.4	101.8	95.6	78.6	53.2	55.9	62.2	58.7	50.8	47.2	44.9	51.4	65.2	83	87.2	90.9	92.7	94.4	97.3	80.1	
22	98.2	101.2	103.6	104.8 ?	?	?	?	102.7 ?	90.4	73.3	56.8	47.8	46.6	49.6	60.4	59.4	58.8	59.6	70.6	81.3	84.3	84.3	85.7	84.9	76.4 ?	
23	85.3	91.3	97	97.3	96.8	96.9	97.1	93.2	78.2	71.8	73.8	72.9	70.7	67.2	60.6	52.9	48.5	55.9	72.1	78.1	78.8	80.6	82.6	86.5	78.6	
24	90.3	93.2	87.9	74.8	69.9	71.1	71.3	68.7	68.7	55.1	46.1	44.2	47.7	45.3	49.9	53.3	54.2	56.4	68.1	80	79.5	82.3	86.1	81.6	67.7	
25	90.8	88.2	91.1	93.6	95.1	96.4	93.9	78.4	76.1	68.7	69.8	69.5	71.3	75	78.7	81.1	84.3	87.5	91.7	94	95.1	96.8	97.9	97.3	85.9	
26	97.1	95.4	94.9	99.3	103.9	103.1	103.9 ?	?	?	?	?	?	?	104.8 ?	100.9	100.2	103.9	104.2 ?	?	?	?	?	?	?	101.7 ?	
27	?	?	?	?	?	?	?	?	?	?	?	?	?	104.4 ?	?	?	?	?	?	?	?	?	?	?	?	?
28	?	?	?	104.8 ?	104.1	104.1	103.9	103.7	100.6	90.1	82.3	78.5	79	82	84	90.4	100.6	?	?	?	?	?	?	?	?	94.8 ?
29	100.5	97.2	98.9	99.9	98.7	95.2	93.5	93.7	94.2	91.8	95.5	96	89.9	84	74.3	64.8	57	51	51.3	52.3	54.4	58.8	61.7	64.3	80	
30	65.8	68.1	70.8	74.4	77.2	79.2	80.7	75.5	67.8	62.8	59.8	55.4	51.7	48	45.6	46.5	42.2	41.4	47.4	47.2	49.4	52.3	53	54.8	59	
31	61.6	74.7	77.9	83.9	84.7	81.3	78.4	79.8	77.7	73.5	70.1	67.8	66.5	67.6	69.5	70.6	74.5	83.5	91.8	94.7	98.6	101.9	102.6	102.8	80.7	
Avg	87.6	87.6	88.6	90.5	89.7	90.4	92.1	90.2	85.4	78.2	73.5	72.8	71.6	68.2	66.9	64.7	67.1	68.2	76.4	81.5	85.9	86.6	88.4	88.5	82.7 ?	
S D	13.5	14.5	15.1	15.7	15.5	14.7	14.1	13.9	14.2	15.9	16.5	19.4	21.1	20.7	20.9	20.5	21.4	19.2	17	16.5	15.8	14.3	13.2	12.8	13.2	
S/A	0.15	0.16	0.17	0.17	0.17	0.16	0.15	0.15	0.17	0.2	0.22	0.27	0.29	0.3	0.31	0.32	0.32	0.28	0.22	0.2	0.18	0.16	0.15	0.14	0.16	
Min	57.7	43.2	40	39.2	41.2	44.7	47.6	49.4	50.1	51	46.1	39.3	34.7	31.5	29.3	28.8	29.7	39.5	47.4	47.2	49.4	52.3	53	54.8	58.3	
Max	104.7	102	103.6	104.8	104.1	104.8	105	104.3	103.7	103.9	103.1	104.8	104.8	104.5	104.9	103.9	104.2	104.5	104.8	104.9	104.8	104.2	104.9	104.4	103.3	
n	245	240	240	245	240	235	256	282	299	293	299	309	326	321	318	312	302	283	288	285	283	274	269	273	6702	

Data Recovery: 0.0% missing; 0.0% untested; 24.8% 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

March 2009

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	5.5	5.4	5.1	4.6	4.2	4	3.9	3.8	4	4.4	4.9	5.1	5.3	5.4	5.3	5.1	4.8	4.6	4.8	5.1	5.1	4.6	3.5	3	4.6
2	3	3.1	3.1	3	2.4	1.8	1.2	0.6	-0.3	-1.3	-1.4	-0.8	-0.1	-0.1	-0.2	-0.2	-0.5	-1	-1.8	-2.3	-2.6	-3.4	-4.7	-5.3	-0.3
3	-5.7	-6	-6.3	-6.9	-7.4	-7.8	-8.1	-7.4	-4.9	-2.3	0.1	1.9	3.3	3.4	3.2	3.6	3.8	3.1	0.1	-2.8	-4.5	-5.8	-6.7	-7.1	-2.8
4	-7.5	-7.8	-7.9	-8	-8	-7.9	-8	-6.6	-1.9	2.8	6.7	9.4	10.5	11.2	11.3	11.2	11.2	9.9	6	2.1	0	-1.1	-1.6	-2.3	1
5	-2.3	-2.4	-2.5	-2.5	-2.7	-2.6	-2.5	-1.1	3.7	8	11.5	13.9	15.3	16	16.1	16.5	16	14.6	11.7	8.7	6.7	5.6	4.9	4.2	6.4
6	3.5	3.3	3.2	3.1	3.4	3.6	3.7	5.1	9.1	13.3	16.2	18.7	20.4	21.5	22.3	22.9	23.1	22.3	20.4	17.4	15.3	14	13.3	13	13
7	12.7	12.3	12	11.7	11.3	11.1	10.9	11.5	14.3	17.9	21.3	25	28.5	29.5	28.8	28.7	28.6	27.5	24.3	20.3	17.9	17	16.6	16.2	19
8	15.8	15.3	14.9	14.9	14.8	14.6	14.7	15	16.8	19.3	22.3	24.6	25.8	27	27.1	27.7	28.2	27.6	25.2	23	20.8	19.2	18.8	18.3	20.5
9	17.5	16.8	16.2	16.1	16.4	16.4	16.7	17.8	20.5	23.1	25.2	26.9	28.4	29.1	29.6	30.2	30.5	29.9	24.1	19	16.4	14.5	12.8	11.4	21.1
10	10.2	9	8.1	7.4	6.9	6.5	6.1	6.3	8.7	11.8	14.7	16.6	17.3	17.1	17.5	16.8	16.6	14.7	11.7	9.4	8.3	7.9	8	8.2	11.1
11	8.6	9.4	10.5	11.6	12.6	13.3	13.8	14.4	15.6	17.8	21.4	24.1	26.3	27.5	28.5	29.1	28.7	27.3	24.7	22.4	21.1	20.1	19.3	18.8	19.5
12	19.1	17.8	15.9	14.1	12.9	11.7	10.6	10.1	11.2	11.8	12.6	12.4	13	12	11.2	11	9.9	8.9	7.8	6.9	6.5	6.2	5.9	5.8	11.1
13	6	6.2	6.3	6.4	6.5	6.6	6.5	6	5.4	4.7	4.4	4.4	4.8	5.1	5.3	5.3	5.4	5.3	5.2	5	5	5.1	5.1	5	5.5
14	5	5	4.9	4.8	4.8	4.8	4.9	4.9	5.4	6.1	6.8	7.5	7.6	7.3	7.3	6.9	6.6	6.2	5.8	5.5	5.3	5.4	5.6	5.9	5.8
15	6.1	6.4	6.6	6.8	6.8	6.6	6.4	6.4	6.7	7.2	7.9	9	9.9	10.4	11.1	11.2	10.9	10.2	9.6	9.3	8.9	8.5	8.1	7.8	8.3
16	7.7	7.6	7.7	7.7	7.8	7.8	7.8	8.1	8.5	9.2	9.9	10.3	10.8	11.8	12.1	11.8	11.3	10.3	9.2	8.6	8.4	8.4	8.4	8.3	9.2
17	8.2	8.2	8.1	7.9	7.6	7.5	7.4	7.3	7.5	7.6	7.9	8.3	8.9	10.1	10.8	11.8	11.7	10.7	9.6	8.3	7.7	6.7	5.3	4.5	8.3
18	4.1	3.7	3.6	3.3	3.2	3	2.5	2.8	4.6	9	15.4	19.3	20.5	20.5	20.4	20.9	21.3	20.9	17.9	13.4	10.7	9.2	8.7	8.2	11.1
19	7.8	7.6	7.9	8.1	8.2	8.2	8.1	9.6	13.4	16.8	19.6	22.1	23.6	24.2	24.6	25.1	24.7	20.1	15	12.3	10.7	9.1	8.1	7.8	14.3
20	7.7	7.6	7.5	7.5	7.3	6.9	6.8	7.2	9.1	11.9	13.7	14.1	13.3	13.3	13.7	13.8	13.3	12.2	9.5	6.7	5.2	4.3	3.8	3.3	9.2
21	2.4	1.9	1.7	1.4	1.3	1.2	1.1	3.3	7.2	10	12.1	14	14.4	14.2	14.2	14.1	13.7	12	8.3	5.9	4.8	4.1	3.8	3.2	7.1
22	2.6	1.9	0.9	0.1	-0.4	-0.6	-0.6	2.2	7.9	13.5	17.7	20.4	21.6	20.9	19.9	18.8	18.3	17.2	14.3	10.6	8.6	7.6	7	6.2	9.9
23	5.4	5.1	5.1	4.5	3.7	3.7	3.8	5.9	8.6	10.6	12.2	13.8	14.7	14.7	14.9	15.8	16.2	15.3	11.9	7.4	4.8	3.2	2.4	1.6	8.5
24	0.8	0.5	0.8	1.1	1.1	0.7	0.5	2.6	5.7	8.5	10.4	11.8	12.7	13	13.7	14	13.7	12.6	9	5.2	2.9	1.5	0.5	-0.1	6
25	-0.6	-0.7	-0.3	-0.3	-1.3	-2	-1.4	2.9	7	8.6	9.6	10.6	11.1	10.7	10.3	9.8	9.1	8.6	8.2	7.9	7.8	7.8	7.9	8.1	5.8
26	8.3	8.7	9.1	9.1	9	9.3	9.8	10.3	11.1	12.3	13.7	14.6	15.3	16.4	17.3	16.8	16.3	15.8	15.5	15.3	15.4	15.6	15.9	16.1	13.2
27	16	15.9	16.1	16.1	16.1	16.3	16.3	16.4	16.6	16.8	16.9	15.6	15.1	14.1	12.7	11.7	11	10.7	10.5	10.6	10.8	11.2	11.8	12.5	14.1
28	13.1	13.4	13.7	14.8	15.9	16.6	16.9	17.3	18.7	21.4	24	26.5	27.1	27.9	28.9	28.2	25.5	21.7	18.5	16.7	16	15.9	16.1	17.2	19.7
29	18.6	19.1	19.4	19.3	18.8	18.3	17.8	17.9	18.7	20.5	21.8	21.5	23.7	25.8	27.6	29.1	29.5	28.4	25.8	23	21.1	19.2	16.8	14.9	21.5
30	13.1	11.7	10.5	9.7	9	8.4	8.1	9.9	12.6	15	16.8	17.7	18.7	19.3	19.9	20.5	21	20.7	18.5	14.7	12.7	11.5	10.7	9.9	14.2
31	9	8.3	7.6	7.1	6.9	6.9	7.4	10.3	13.9	16.1	17.9	19.5	20.3	19.9	19.7	19.5	19.1	16.2	12.7	10.6	9.3	8.8	8.7	8.7	12.7
Avg	7.2	6.9	6.8	6.6	6.4	6.3	6.2	7.1	9.2	11.4	13.4	14.8	15.7	16.1	16.3	16.4	16.1	15	12.7	10.5	9.3	8.5	7.9	7.5	10.6
S D	6.6	6.6	6.5	6.5	6.6	6.7	6.7	6.4	6.1	6.3	6.8	7.3	7.7	8	8.2	8.3	8.4	8.1	7.3	6.7	6.5	6.4	6.4	6.5	6.3
S/A	0.93	0.95	0.96	0.99	1.03	1.07	1.08	0.9	0.66	0.55	0.51	0.49	0.49	0.5	0.5	0.51	0.52	0.54	0.58	0.64	0.7	0.76	0.82	0.87	0.59
Min	-7.5	-7.8	-7.9	-8	-8	-7.9	-8.1	-7.4	-4.9	-2.3	-1.4	-0.8	-0.1	-0.1	-0.2	-0.2	-0.5	-1	-1.8	-2.8	-4.5	-5.8	-6.7	-7.1	-2.8
Max	19.1	19.1	19.4	19.3	18.8	18.3	17.8	17.9	18.7	20.5	21.8	21.5	23.7	25.8	27.6	29.1	29.5	28.4	25.8	23	21.1	19.2	16.8	14.9	21.5
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.

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

March 2009

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	4.2	4.8	4.3	3.6	3.3	3.4	3.4	3.7	2.6	5.1	4.7	4.6	3.7	4.7	4.9	5.8	5.1	6.8	7.6	4.9	5.2	8.8	6.2	3.7	4.8
2	3.4	2.8	2.4	1.9	3.6	3.7	5.2	5.8	6	5.7	4.2	4.2	4.3	4.7	4.3	4.2	3.5	3	3	3.3	2.6	2.1	1.8	2.2	3.7
3	3.1	3.2	2.7	2.3	2.4	2.5	2.7	3.5	4	3.6	3.3	3	3	3.7	3.3	3.3	2.9	2.6	2	1.1	0.5	0.4	0.9	0.7	2.5
4	0.9	0.8	1	0.8	1.1	1.3	1.1	1.1	1.7	1.9	1.7	2.3	2	1.3	2	1.7	1.9	1.7	1.4	1.6	1.1	1.2	0.8	1.1	1.4
5	1	1	0.8	0.8	0.7	1	0.6	0.8	2.3	3	3.5	3.8	3.6	3.7	3.9	3.6	3.3	2.8	3.4	2.7	2.9	2.3	1.9	1.3	2.3
6	1.2	1.6	1.3	1.6	1.7	1.5	1.8	2.9	4.4	7	7.9	9.3	9.2	8.7	8.2	7.4	6.3	4.5	2.4	2.4	2.7	3.7	3.7	3.8	4.4
7	3.8	3.7	3.8	3.7	3.1	3.2	2.7	2.9	3.2	3.2	2.4	1.4	1.8	3	2.6	2.3	1.5	1.3	1.7	2.1	2.5	3.6	4.1	4.1	2.8
8	3.9	3.6	4.1	4.3	4.3	4.8	4.1	5.1	5.4	5.5	5.2	5.2	5.5	5.5	5.7	6.4	5.1	3.3	3	2.5	2.7	4.2	3.8	3.7	4.5
9	3.6	3.7	3.7	4.8	4.7	4.9	4.9	4.1	5.1	6.6	6.9	7.1	6.3	6.1	4.9	4.6	3.1	3.1	3.6	4.2	3.4	2.5	2.7	3.2	4.5
10	2.5	2.3	2.2	2	1.9	2.5	1.4	1.2	3.4	2.7	3	2.6	3.1	3	2.9	3	3.6	3.5	3	2.8	2.3	1.8	1.8	2.2	2.5
11	3	3.6	2.5	1.9	3.3	2.9	2.8	2.8	3.1	4.2	5.1	5.2	5.4	5	6	6.2	4	2.9	2.8	2.4	1.8	1.7	1.4	1.7	3.4
12	4.1	4.9	5.1	5.4	5.3	5.4	5.2	4.6	5.1	5.9	5.4	5.8	4.9	4	3.7	3.2	3.1	2.9	2.9	2.9	2.7	2.5	2.3	2	4.1
13	2.3	2.1	2.8	3.1	3.7	4.9	5.3	5.2	5.2	4.5	4	3.6	3.9	3.7	3.7	3.1	2.9	3.2	3.8	4	3.5	2.9	3.1	2.9	3.6
14	3.1	3	3	3.1	2.5	1.9	2.2	2.4	3.2	3	2.3	1.9	1.5	1.7	1.8	3.4	3	2.2	1.9	1.7	2.2	1.7	1.5	0.8	2.3
15	0.5	0.6	0.3	0.1	0.9	1.1	0.9	0.6	0.9	0.6	1	0.9	0.6	0.1	1.1	0.5	0.7	0.5	0.4	1.6	1.3	1.9	1.9	1.7	0.9
16	1.6	1	0.9	0.9	1.1	1.1	0.3	1.1	1.4	2.2	1.9	2.3	2.3	2.3	2.1	2.2	2.9	3.6	2.6	1.3	1	1.9	1.6	1.6	1.7
17	1.3	2	3	3.7	3.3	3.6	3.5	3.6	4.1	4.5	4.7	4.6	3.7	3.5	3.6	4.2	3.7	3.3	2.6	2.2	1.7	0.6	0.5	1.1	3
18	0.4	0.8	0.6	0.1	0.1	0	0	0	0	0.3	0.7	1.4	1.8	2.4	2.3	2.6	2	1.8	2.5	2.1	1.4	1.5	1.6	1.4	1.2
19	1.1	1.7	1.7	2	1.6	1.7	2.1	2.4	3.6	4.2	4.3	4.5	5.1	5	5.1	4.4	4.4	5.7	5.7	5	4.9	3.8	2.6	1.5	3.5
20	1.2	0.5	0.2	1.9	2.2	1.8	2.3	2.9	3.9	4.8	4.9	4.7	4.7	4.6	4.7	4.6	4.2	3.9	3.3	3.2	3.1	3	2.6	1.2	3.1
21	1.5	2.4	1.8	2.3	2.4	2	1.7	2.3	3.2	4.6	3.6	3.7	3.7	3.3	4	4.1	3.8	3.1	2.5	3.1	2.5	1.8	1.9	1.7	2.8
22	1.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.7	0.7	0.9	1.4	1.5	2	3.3	3.3	3.2	2.6	2	2.4	1.9	2.1	1.6	1.2	1.4
23	1.1	1.3	0.9	0.2	0.6	0.7	1.7	4.9	6.2	5.8	4.9	4.4	4	3.5	3	2.5	2.9	2.5	1.9	1.6	1	1	0.9	0.5	2.4
24	0.6	1.7	2.5	3.2	2.6	2.8	2.6	3.2	3.4	3.6	4	4	3.5	2.7	3.1	2.9	2.7	2.4	2.6	1.8	0.7	0.6	0.7	0.7	2.4
25	0.5	1	0.6	0.1	0.2	0.9	1.5	1.6	3.1	3.4	3	2.7	2.5	2.5	2.4	2.1	2.2	1.8	1.5	1.1	2	1.8	1.6	1.6	1.7
26	1.8	2	1.5	1.8	1.9	1.8	1.2	1.9	1.5	2.1	3	2.4	2.8	3.6	2.7	3	3.6	3.6	3.9	3.8	4.4	5.1	4.2	3	2.8
27	1.4	2.4	1.8	0.3	1.4	0.7	0.1	0	0.4	1.6	3.6	4	3.5	3	2.6	2.9	3.2	2.7	2.6	2.3	1.9	1.3	1.2	0.9	1.9
28	0.8	0.7	1.8	3.3	2.4	2.2	1.5	2.1	3.5	4	3.1	4.1	4.4	3.2	2.7	2.6	3.2	2.7	2.9	1.5	0.5	0.2	1.1	4.1	2.4
29	9	9.5	5.1	3.5	2.9	2.8	3.2	4.3	4.7	6.1	5.1	6.4	6.5	5.9	5.5	5.4	5.7	6.6	6.8	6.8	6.6	5.6	5.9	5.8	5.7
30	6.2	5.5	5.9	6.1	5.2	4.8	4.5	4.9	5.4	4.7	5.5	5.1	4.8	4.4	4.9	4.1	3.8	3	2	1.8	1.4	1.5	1	0.9	4.1
31	1.1	1.2	0.9	1.4	2	2.1	2	2.1	3.7	3.4	3	2.8	2.6	2.7	3.4	3.5	3.8	3.1	3.4	2.3	3.3	3.8	3.1	2.9	2.7
Avg	2.3	2.4	2.2	2.3	2.3	2.4	2.3	2.7	3.4	3.8	3.8	3.9	3.7	3.7	3.7	3.6	3.4	3.1	3	2.7	2.4	2.5	2.3	2.1	2.9
SD	1.9	1.9	1.6	1.6	1.4	1.5	1.6	1.6	1.7	1.8	1.7	1.8	1.8	1.6	1.5	1.5	1.2	1.4	1.5	1.3	1.4	1.8	1.4	1.3	1.2
S/A	0.82	0.79	0.7	0.72	0.6	0.62	0.67	0.6	0.49	0.46	0.44	0.48	0.47	0.45	0.4	0.4	0.34	0.43	0.5	0.48	0.58	0.71	0.63	0.62	0.4
Min	0.4	0.2	0.2	0.1	0.1	0	0	0	0	0.3	0.7	0.9	0.6	0.1	1.1	0.5	0.7	0.5	0.4	1.1	0.5	0.2	0.5	0.5	0.9
Max	9	9.5	5.9	6.1	5.3	5.4	5.3	5.8	6.2	7	7.9	9.3	9.2	8.7	8.2	7.4	6.3	6.8	7.6	6.8	6.6	8.8	6.2	5.8	5.7
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.

Prepared by: Afshin M. Andreas, NREL

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

March 2009

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	345	342	342	332	335	339	344	352	355	18	17	26	4	5	22	17	11	33	35	14	324	6	12	343	4
2	342	1	345	311	325	303	321	328	322	323	319	314	305	309	309	312	309	309	302	307	304	298	301	301	316
3	305	308	309	305	308	306	308	313	316	319	313	321	294	295	297	299	299	295	313	305	287	264	253	272	305
4	270	280	268	278	280	282	277	292	316	327	0	320	339	326	265	275	238	252	110	100	100	122	151	152	292
5	148	155	152	163	194	195	178	173	196	200	200	201	194	165	169	153	105	131	159	162	162	170	183	167	170
6	178	195	175	187	187	186	185	191	201	214	212	214	212	212	212	216	215	212	197	184	187	193	196	192	206
7	201	198	198	201	203	219	218	224	252	250	242	264	90	86	117	160	184	192	152	162	187	193	199	198	198
8	201	209	219	222	221	224	228	225	235	240	236	222	206	210	213	215	212	200	204	181	194	198	198	197	215
9	196	201	211	221	224	228	228	239	251	255	262	266	266	268	279	280	287	20	47	42	31	52	49	51	258
10	43	34	39	35	30	39	2	35	55	52	56	58	72	85	66	85	86	71	77	75	88	89	112	124	65
11	119	120	122	144	141	156	157	158	183	185	186	188	188	188	207	212	188	178	187	189	187	217	234	297	180
12	9	5	0	359	11	11	12	12	27	30	31	39	33	34	34	36	46	48	42	46	44	44	40	43	25
13	33	36	45	49	45	44	37	33	36	37	38	38	38	34	32	21	10	9	359	2	14	20	10	359	28
14	348	349	13	25	19	8	4	32	39	37	47	33	20	39	28	40	42	21	6	26	45	46	58	51	26
15	42	39	315	308	304	302	330	352	347	352	44	37	55	118	63	73	16	41	335	357	342	340	342	354	359
16	358	32	16	355	339	18	11	11	19	21	24	50	31	10	24	36	39	35	42	21	31	33	27	3	25
17	1	330	326	335	335	333	335	339	336	346	348	349	350	347	333	343	334	348	356	349	5	10	5	11	343
18	345	2	345	316	304	311	329	116	108	30	160	151	161	163	158	182	190	155	125	125	131	157	168	173	156
19	184	198	195	200	204	206	207	219	212	224	219	211	208	212	211	212	289	1	353	2	7	9	12	6	246
20	344	330	324	334	348	353	347	341	356	0	355	23	36	32	37	38	44	42	45	42	40	41	39	9	21
21	350	356	358	1	8	357	359	1	23	39	43	29	31	37	40	53	47	52	46	52	63	51	63	54	33
22	36	7	309	309	327	321	306	354	65	352	39	7	172	125	138	151	137	131	117	111	149	180	152	175	131
23	195	214	204	210	240	266	332	33	40	31	42	47	49	43	34	35	55	66	97	75	81	83	76	70	46
24	332	358	1	5	356	6	354	354	1	13	12	25	42	35	48	42	45	51	63	54	20	16	43	48	21
25	309	351	270	282	297	23	37	51	70	77	80	84	81	77	73	76	79	70	81	79	82	95	117	107	75
26	109	108	110	114	104	120	147	166	171	170	175	156	156	166	169	177	184	176	167	177	187	193	199	194	167
27	216	222	216	227	239	234	208	21	57	49	55	47	55	59	62	63	65	72	69	72	79	75	90	102	69
28	92	84	136	152	171	186	186	202	230	222	216	215	210	193	174	133	138	8	45	54	53	57	136	164	178
29	145	153	174	184	178	180	183	178	182	191	185	192	182	180	187	191	209	226	226	232	254	275	265	267	199
30	263	263	264	263	264	259	259	264	268	277	265	263	264	267	264	260	283	291	285	283	261	256	266	282	267
31	342	26	42	37	29	30	36	56	60	62	63	62	85	82	97	83	87	75	80	90	92	93	88	86	71
Avg	308	300	293	295	306	304	312	325	332	332	332	329	183	146	159	143	60	41	57	54	53	60	89	168	322
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

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

March 2009

Peak Wind Speed (1-Minute Gust)
Hourly and Daily Averages
Instrument: NRG MAX-40
Meters per Second

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	7.3	8.7	7.6	6.9	6.2	6.6	6	6.5	5	9	8.9	8.2	6.7	8.6	8.4	10.4	8.9	11.9	12.7	9.2	9.5	14.9	11.5	6.8	8.6
2	6.3	5.8	4.7	4.6	7.2	7.3	9.2	10.6	11	10.4	8.6	8.3	9.1	9	8.4	8.5	7	6.5	6.4	6.4	5.1	4.1	4.1	4.8	7.2
3	6.6	6.4	5.5	4.6	4.6	5.2	5.3	6.9	7.4	6.9	6.7	6.2	6.4	7.2	7.1	6.8	5.8	5.4	3.9	2.7	1.3	0.8	1.3	1.3	5.1
4	1.5	1.6	1.5	1.7	2.1	2.5	2	2.4	3.8	3.6	3.7	5.1	4.1	3.2	4.4	3.6	3.7	2.8	2.2	2.7	1.9	1.8	1.4	1.7	2.7
5	1.5	1.7	1.4	1.5	1.2	1.6	1.4	1.5	3.7	4.7	5.4	6.4	5.9	6.2	6.6	5.9	5.2	4.4	5.8	4.4	4.6	4.1	3	2.3	3.8
6	2	2.9	2.3	2.8	3	2.6	3.2	4.6	6.9	11.1	12.3	14.3	13.9	13	12.3	11.1	9.6	6.8	3.7	3.9	4.3	5.5	5.5	5.8	6.8
7	5.8	5.4	5.4	5	4.3	4.3	3.7	4	5.2	5	4.1	2.6	3.4	4.5	4.3	4	2.7	2.1	2.8	3.3	4.1	5.3	5.9	5.9	4.3
8	5.7	5.1	5.7	6	5.9	6.9	5.9	7.6	8.6	8.6	7.8	7.6	8.3	8.6	8.9	9.3	7.6	5	4.6	3.8	4.3	6.1	5.8	5.5	6.6
9	5.4	5.6	5.4	7.2	6.8	7.4	7.3	6.5	8.6	11	12.8	12.3	11.7	11.5	9.7	9.1	6.3	5.5	6	7	5.2	4.1	4.6	5.3	7.6
10	4	3.6	3.8	3.2	3.4	4	2.4	2.3	5.8	4.6	5.1	4.6	5	5.1	4.5	4.7	5.5	5.2	4.9	4.6	3.9	2.9	2.9	3.5	4.1
11	4.5	5.6	4.1	3.2	5	5	4.6	4.8	5.4	6.9	8.8	8.5	8.6	8.5	9.4	9.4	6.5	4.8	4.8	4	3.1	2.7	2.2	3.1	5.6
12	7.3	8.4	8.8	9.3	9.2	9.5	8.7	7.8	8.5	9.6	9	9.2	7.8	6.6	6.2	5.3	5.1	5.1	4.6	5	4.4	4.4	3.9	3.5	7
13	3.7	3.4	4.8	5.5	6	7.9	8.5	8.8	8.6	7.9	6.8	6.4	6.6	6.5	6.4	5.7	5.4	6	7	6.7	6.2	5.2	5.6	5.2	6.3
14	5.5	5.5	5.8	5.8	4.7	4	4.3	4.5	5.5	5.1	4.4	3.6	3.1	3.3	3.7	5.7	5.1	4.3	4.1	3.5	4.1	3.5	3.2	2.4	4.4
15	1.7	1.8	1.3	0.8	2.6	3.3	2.6	2	2.4	1.9	2.2	2.3	1.7	0.5	2.1	1.4	1.7	1.5	1.4	3.3	2.7	3.6	3.4	3.5	2.1
16	3.5	2.3	2.5	2.3	2.5	2.5	1.1	2.7	3.2	4.1	3.9	3.9	4.1	4.2	3.7	4	5.1	6.3	4.9	2.8	2.6	3.8	3.8	3.7	3.5
17	3.4	4.3	5.6	6.7	6	6.8	6.4	6.4	7.2	8.2	8	7.7	6.7	6.2	6.5	6.9	6.4	5.5	4.4	4.2	3.4	1.8	1.6	2.5	5.5
18	1.4	2.1	1.7	0.8	0.7	0.5	0.1	0.2	0.2	0.9	1.6	2.7	3.4	4.3	4	4.2	3.3	3	3.7	3.3	2.3	2.6	2.7	2.4	2.2
19	2.1	2.6	2.6	2.9	2.4	2.4	3.3	3.9	5.7	6.6	6.2	7.1	7.4	7.6	7.6	6.7	7.6	9.4	9.5	8.6	8.5	6.6	4.7	3.5	5.6
20	2.7	1.6	0.6	3.7	4	3.6	4.3	5.1	7	8.4	7.7	7.7	7.8	8.1	7.6	7.7	7.2	6.4	5.5	5	5	4.8	4.4	2.4	5.4
21	2.6	3.7	3	3.8	4.1	3.5	3	3.9	5.5	7.6	6.1	6.2	6.2	5.6	6.9	6.9	6.1	5	4	4.9	4.4	2.9	3.3	2.7	4.7
22	1.9	0.7	0.6	0.7	0.7	0.6	0.8	0.9	1.7	1.6	2.2	2.8	3	3.7	5.4	5.4	4.9	4	3	3.5	3.1	3.5	2.5	2	2.5
23	1.8	1.8	1.3	0.4	1	1.3	3.5	8.1	10.4	9.6	7.8	7.2	6.8	5.7	5.3	4.6	4.7	4.1	3	2.6	1.6	1.5	1.5	0.9	4
24	0.9	2.5	4	5.3	4.4	5	4.6	5.2	5.5	6.2	6.4	6.8	6	5	5.7	5.4	4.7	4	4.2	3.3	1.3	1.2	1.2	1.1	4.2
25	1	1.5	1.1	0.5	0.6	1.3	1.8	2.6	5	5.5	5	4.6	3.9	3.9	4.2	3.5	3.6	3	2.5	2.1	3.3	3	2.7	2.6	2.9
26	3.1	3.3	2.6	3	3.1	2.9	2.3	3.7	3.3	4.1	5.3	4.5	5.1	6.3	5	5.7	6.5	6.7	7.2	7.2	7.1	8.6	6.6	5.1	4.9
27	3	4.2	3.2	1.3	2.8	1.8	0.4	0.1	1.2	3	5.8	6.3	6.1	5.5	4.7	4.7	5.3	4.6	4.3	3.9	3.6	2.7	2.7	1.8	3.5
28	1.6	1.4	3	5.5	4.5	3.7	3.1	3.7	5.7	6.1	5.1	6.6	6.6	5.2	4.4	4	4.9	4.8	5	3.1	1.4	0.9	2.7	7	4.2
29	14.6	15.8	8.6	6.3	5.2	5.4	5.6	7.4	7.8	10.4	8.9	10.5	10.9	9.2	8.7	9.2	9.5	10.5	10.7	10.4	10.9	10.2	10.3	10.1	9.5
30	10.7	9.3	10.2	10.5	8.7	7.7	7.5	9.1	10.2	8.9	9.5	8.9	9	8.4	8.9	7.8	7.4	6	3.9	3.2	2.3	2.2	1.6	1.6	7.2
31	1.9	2	1.4	2.1	3.1	3.5	3.2	3.7	6	5.7	4.8	4.9	4.7	4.6	5.2	5.5	5.9	5.1	5.3	3.9	5.3	6	5.3	4.7	4.3
Avg	4	4.2	3.9	4	4.1	4.2	4.1	4.8	5.9	6.6	6.5	6.6	6.5	6.3	6.3	6.2	5.8	5.4	5	4.6	4.2	4.2	3.9	3.7	5
S D	3	3.1	2.5	2.6	2.3	2.4	2.5	2.7	2.7	2.8	2.7	2.8	2.7	2.6	2.3	2.3	1.8	2.2	2.4	2.1	2.3	2.9	2.4	2.1	1.9
S/A	0.76	0.74	0.66	0.65	0.55	0.56	0.61	0.57	0.46	0.43	0.41	0.42	0.42	0.41	0.36	0.37	0.31	0.41	0.48	0.45	0.55	0.69	0.61	0.56	0.37
Min	0.9	0.7	0.6	0.4	0.6	0.5	0.1	0.1	0.2	0.9	1.6	2.3	1.7	0.5	2.1	1.4	1.7	1.5	1.4	2.1	1.3	0.8	1.2	0.9	2.1
Max	14.6	15.8	10.2	10.5	9.2	9.5	9.2	10.6	11	11.1	12.8	14.3	13.9	13	12.3	11.1	9.6	11.9	12.7	10.4	10.9	14.9	11.5	10.1	9.5
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

March 2009

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	1010	1010	1009	1009	1010	1010	1011	1011	1012	1011	1010	1010	1010	1009	1008	1007	1007	1005	1004	1004	1006	1002	1002	1003	1008
2	1003	1003	1003	1004	1004	1006	1007	1007	1009	1011	1011	1012	1012	1012	1012	1014	1015	1016	1017	1018	1019	1019	1020	1020	1011
3	1021	1021	1021	1022	1022	1023	1024	1025	1026	1026	1026	1026	1025	1025	1025	1025	1025	1026	1027	1028	1028	1028	1029	1028	1025
4	1028	1028	1029	1028	1029	1029	1030	1030	1031	1031	1031	1031	1030	1029	1028	1028	1028	1028	1028	1028	1028	1029	1029	1029	1029
5	1029	1029	1029	1029	1029	1030	1030	1031	1031	1032	1031	1031	1030	1029	1028	1028	1027	1027	1027	1028	1028	1028	1028	1027	1029
6	1027	1026	1026	1026	1026	1026	1026	1026	1026	1025	1024	1023	1021	1020	1019	1019	1019	1018	1019	1019	1019	1019	1019	1019	1022
7	1020	1020	1019	1019	1019	1020	1020	1021	1021	1021	1021	1021	1020	1019	1019	1018	1018	1017	1017	1017	1017	1017	1016	1016	1019
8	1016	1015	1015	1014	1014	1015	1015	1016	1016	1016	1015	1015	1014	1013	1012	1012	1012	1011	1011	1011	1011	1011	1012	1011	1013
9	1011	1010	1010	1009	1010	1010	1010	1011	1012	1011	1011	1011	1011	1011	1011	1012	1012	1013	1015	1016	1018	1019	1020	1021	1013
10	1021	1021	1021	1021	1022	1022	1023	1024	1025	1025	1026	1026	1025	1023	1023	1023	1023	1023	1022	1022	1022	1022	1022	1021	1023
11	1020	1020	1019	1019	1019	1019	1019	1019	1019	1019	1018	1017	1016	1015	1014	1014	1014	1015	1016	1016	1017	1018	1018	1019	1017
12	1019	1021	1022	1022	1023	1024	1026	1027	1028	1028	1029	1029	1029	1028	1028	1028	1028	1028	1028	1028	1029	1029	1029	1028	1027
13	1028	1028	1027	1027	1027	1027	1027	1028	1029	1029	1028	1028	1027	1026	1025	1024	1024	1024	1024	1024	1024	1023	1023	1023	1026
14	1023	1023	1022	1022	1022	1023	1024	1024	1024	1024	1024	1024	1023	1022	1021	1021	1021	1022	1022	1021	1021	1021	1021	1020	1022
15	1019	1019	1019	1018	1018	1019	1019	1020	1020	1020	1020	1019	1019	1019	1018	1017	1018	1018	1019	1019	1019	1019	1020	1020	1019
16	1020	1020	1020	1020	1021	1021	1022	1022	1022	1022	1022	1022	1021	1021	1021	1021	1020	1019	1019	1019	1019	1018	1018	1018	1020
17	1017	1017	1017	1017	1017	1017	1018	1019	1020	1020	1021	1021	1021	1021	1021	1021	1022	1022	1023	1023	1024	1024	1024	1024	1020
18	1024	1024	1024	1024	1024	1024	1024	1025	1025	1025	1025	1025	1024	1023	1022	1021	1021	1020	1020	1020	1020	1020	1020	1019	1023
19	1019	1019	1018	1017	1017	1017	1017	1018	1017	1017	1016	1016	1015	1014	1013	1013	1013	1015	1016	1017	1018	1018	1018	1018	1016
20	1018	1017	1017	1018	1018	1019	1019	1020	1020	1021	1021	1021	1022	1022	1022	1022	1023	1023	1024	1025	1026	1027	1027	1027	1022
21	1027	1027	1027	1027	1028	1028	1029	1030	1030	1031	1031	1031	1031	1030	1030	1029	1029	1029	1030	1030	1030	1030	1030	1030	1029
22	1029	1029	1029	1028	1028	1029	1029	1029	1029	1029	1029	1028	1027	1026	1025	1024	1023	1023	1024	1024	1024	1024	1024	1024	1027
23	1023	1023	1022	1022	1022	1023	1024	1025	1025	1026	1026	1026	1025	1025	1024	1024	1023	1024	1024	1025	1025	1025	1025	1025	1024
24	1025	1026	1026	1026	1026	1027	1028	1029	1029	1030	1030	1029	1029	1028	1028	1028	1028	1028	1028	1029	1029	1029	1029	1029	1028
25	1029	1028	1028	1028	1028	1027	1027	1027	1027	1027	1027	1027	1026	1025	1025	1024	1024	1024	1024	1024	1024	1023	1023	1022	1026
26	1021	1020	1019	1018	1018	1018	1018	1018	1018	1018	1017	1017	1016	1015	1014	1014	1013	1013	1013	1013	1012	1012	1013	1012	1016
27	1012	1012	1011	1011	1012	1012	1012	1013	1014	1014	1014	1014	1014	1014	1014	1013	1013	1012	1012	1012	1012	1011	1011	1010	1012
28	1010	1009	1008	1008	1008	1008	1008	1009	1009	1010	1010	1009	1009	1008	1008	1007	1007	1008	1007	1007	1007	1006	1005	1005	1008
29	1001	1000	1001	1001	1001	1001	1001	1001	1000	1000	999	998	997	995	994	993	993	993	993	995	996	998	1000	1001	998
30	1002	1003	1004	1005	1006	1007	1008	1009	1010	1010	1010	1010	1010	1010	1010	1010	1011	1012	1013	1014	1015	1015	1015	1010	1010
31	1016	1016	1016	1017	1017	1018	1019	1020	1020	1020	1020	1020	1020	1020	1019	1019	1019	1018	1018	1019	1019	1018	1018	1018	1018
Avg	1019	1019	1019	1019	1019	1019	1020	1020	1021	1021	1021	1021	1020	1019	1019	1019	1018	1019	1019	1019	1019	1020	1019	1019	1019
S D	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Min	1001	1000	1001	1001	1001	1001	1001	1001	1000	1000	999	998	997	995	994	993	993	993	993	995	996	998	1000	1001	998
Max	1029	1029	1029	1029	1029	1030	1030	1031	1031	1032	1031	1031	1031	1030	1030	1029	1029	1029	1030	1030	1030	1030	1030	1030	1029
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

March 2009

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	12.6	12.6	13.1	13.1	13.1	12.8	12.8	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.7
2	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.8	12.5	13.1	13.8	14	13.9	13.8	13.9	13.8	13.3	13.1	12.9	12.8	12.8	12.8	12.7	12.7	13
3	12.7	12.7	12.6	12.6	12.5	12.5	12.7	14.2	14.1	14	13.9	13.9	13.8	13.8	13.8	13.8	13.9	13.3	13	12.9	12.8	12.8	12.8	12.8	13.2
4	12.7	12.7	12.7	12.7	12.7	12.7	12.9	14.1	14	13.8	13.7	13.6	13.6	13.6	13.6	13.6	13.7	13.3	13	12.9	12.9	12.8	12.8	12.8	13.2
5	12.8	12.8	12.8	12.7	12.7	12.7	12.9	14	13.8	13.7	13.6	13.5	13.5	13.5	13.5	13.5	13.5	13.2	13	12.9	12.9	12.9	12.8	12.8	13.2
6	12.8	12.8	12.8	12.8	12.7	12.8	12.8	13.8	13.7	13.5	13.5	13.4	13.4	13.4	13.3	13.3	13.3	13.2	13	12.9	12.9	12.9	12.9	12.8	13.1
7	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13.6	13.5	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.1	12.9	12.9	12.9	12.8	12.8	12.8	13
8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13.4	13.5	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.1	13	12.9	12.9	12.9	12.8	12.8	13
9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13.4	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.1	13.2	13	12.9	12.9	12.8	12.8	12.8	12.7	13
10	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13.5	13.7	13.6	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.2	12.9	12.9	12.9	12.9	12.8	12.8	13.1
11	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.9	13.1	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13	12.9	12.9	12.9	12.8	12.8	12.8	13
12	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13.4	13.6	13.6	13.6	13.6	13.6	13.7	13.7	13.7	13.6	13.1	12.9	12.9	12.9	12.9	12.9	12.8	13.2
13	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.6	12.6	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.7
14	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.4	13.4	13.4	13.5	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.7	12.7	12.9
15	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.3	13.4	13.4	13.3	13.3	13.4	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.7	12.8
16	12.6	12.6	12.6	12.6	12.6	12.6	12.5	12.6	13.1	13.4	13.3	13.3	13.6	13.4	13.3	13.2	13	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.9
17	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.9	13.3	13.4	13.6	13.6	13.6	13.6	13.3	13	12.9	12.9	12.9	12.8	12.8	12.8	13
18	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13.4	13.8	13.6	13.4	13.3	13.3	13.3	13.3	13.3	13.4	13.1	12.9	12.9	12.9	12.8	12.8	12.8	13.1
19	12.8	12.8	12.8	12.8	12.8	12.7	13	13.7	13.5	13.4	13.4	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	13
20	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13.6	13.7	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.2	13	12.9	12.9	12.8	12.8	12.8	13.2
21	12.8	12.8	12.8	12.8	12.7	12.7	13.2	13.9	13.7	13.6	13.6	13.5	13.5	13.6	13.6	13.6	13.6	13.3	12.9	12.9	12.9	12.8	12.8	12.8	13.2
22	12.8	12.8	12.8	12.7	12.7	12.7	13.3	13.9	13.7	13.5	13.4	13.4	13.3	13.4	13.4	13.4	13.5	13.2	12.9	12.9	12.9	12.8	12.8	12.8	13.1
23	12.8	12.8	12.7	12.7	12.7	12.7	13.1	13.8	13.7	13.6	13.6	13.5	13.5	13.5	13.5	13.5	13.5	13.2	13	12.9	12.9	12.8	12.8	12.8	13.2
24	12.8	12.8	12.7	12.7	12.7	12.7	13.3	13.9	13.8	13.7	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.3	13	12.9	12.9	12.8	12.8	12.8	13.2
25	12.8	12.8	12.7	12.7	12.7	12.6	13.4	13.8	13.8	13.7	13.7	13.7	13.7	13.6	13.5	13.1	13	12.9	12.9	12.9	12.9	12.9	12.8	12.8	13.1
26	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.8	12.9	13.4	13.3	13.4	13.4	13.5	13.2	13.1	13	13	12.9	12.9	12.9	12.8	12.8	12.8	13
27	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.8	13.2	13.3	13.5	13.5	13.3	13.1	13	12.9	12.9	12.9	12.8	12.8	12.8	12.7	12.7	12.9
28	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.9
29	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.8	13.1	13.3	13.3	13.3	13.3	13.2	13.2	13.2	13.2	13	12.9	12.9	12.9	12.8	12.8	12.8	13
30	12.8	12.7	12.7	12.7	12.7	12.6	13.2	13.7	13.6	13.5	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.1	13	12.9	12.9	12.9	12.8	12.8	13.1
31	12.8	12.8	12.8	12.8	12.8	12.7	13.3	13.6	13.5	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.1	12.9	12.9	12.9	12.8	12.8	12.8	13.1
Avg	12.7	12.7	12.7	12.7	12.7	12.7	12.8	13.3	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.3	13.3	13.1	12.9	12.9	12.8	12.8	12.8	12.8	13
S D	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.3	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	0.02	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Min	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6	12.5	12.6	12.6	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.7
Max	12.8	12.8	12.8	12.8	12.8	12.8	13.4	14.2	14.1	14	13.9	14	13.9	13.8	13.9	13.8	13.9	13.3	13	12.9	12.9	12.9	12.9	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.