

April 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	1	18	55	117	197	180	379	285	421	299	129	205	97 ?	18	0	0	0	0	0	2402
2	0	0	0	0	0	2	26	103	130	196	261	382	324	158	125	103	74	16	3	0	0	0	0	0	1901
3	0	0	0	0	0	1	43	81	142	282 ?	?	?	?	?	?	?	?	77 ?	18	0	0	0	0	0	644 ?
4	0	0	0	0	0	8	63 ?	?	?	?	?	?	?	?	?	?	?	78 ?	18	0	0	0	0	0	166 ?
5	0	0	0	0	0	9	65 ?	?	?	?	?	?	?	?	?	?	?	61 ?	15	0	0	0	0	0	150 ?
6	0	0	0	0	0	2	13	67	113 ?	?	215 ?	104 ?	150	340 ?	469 ?	163 ?	229 ?	49 ?	10	0	0	0	0	0	1924 ?
7	0	0	0	0	0	10	66 ?	?	396 ?	465 ?	474	448	302	318	365	269	169	79 ?	18	0	0	0	0	0	3380 ?
8	0	0	0	0	0	11	70 ?	?	?	?	?	?	?	?	352 ?	?	146 ?	60	19	0	0	0	0	0	657 ?
9	0	0	0	0	0	0	23	96 ?	?	?	?	?	329 ?	266 ?	?	?	110 ?	73 ?	17	0	0	0	0	0	915 ?
10	0	0	0	0	0	11	90	180 ?	318	312 ?	559 ?	579 ?	?	?	442	213 ?	176	80	18	0	0	0	0	0	2978 ?
11	0	0	0	0	0	2	15	106	225 ?	384 ?	?	450 ?	306 ?	346	201 ?	63	36 ?	12 ?	6	0	0	0	0	0	2152 ?
12	0	0	0	0	0	16	77 ?	?	?	?	?	?	?	?	?	?	?	84 ?	25	0	0	0	0	0	201 ?
13	0	0	0	0	0	12	66	181	297	394	593 ?	500	491	186	78	138	112	54	6	0	0	0	0	0	3108
14	0	0	0	0	0	2	24	72	122	204	348	298	236	429	272	221 ?	54	37 ?	9	0	0	0	0	0	2328
15	0	0	0	0	0	8	25	85	164	150	143	183	232	154	78	71	41	47	13	0	0	0	0	0	1392
16	0	0	0	0	0	13	83 ?	?	?	?	?	?	?	?	?	?	?	96 ?	32	0	0	0	0	0	224 ?
17	0	0	0	0	0	22	83 ?	?	?	?	?	?	?	?	?	?	?	87 ?	28	0	0	0	0	0	220 ?
18	0	0	0	0	0	21	79 ?	?	?	?	?	?	?	?	?	?	?	64 ?	6	0	0	0	0	0	170 ?
19	0	0	0	0	0	23	98 ?	?	?	?	?	550 ?	610 ?	434	324	212	111	32	7	0	0	0	0	0	2402 ?
20	0	0	0	0	0	12	58	91	230	352	498	360 ?	111 ?	519 ?	330	224 ?	107 ?	79	39	0	0	0	0	0	3010 ?
21	0	0	0	0	0	5	82	193	230 ?	262 ?	?	?	?	?	?	?	?	77 ?	25	0	0	0	0	0	874 ?
22	0	0	0	0	0	3	74 ?	222 ?	246 ?	148 ?	333 ?	?	?	371 ?	316 ?	?	176 ?	90 ?	32	0	0	0	0	0	2012 ?
23	0	0	0	0	0	20	73 ?	?	?	?	?	?	?	?	?	?	?	112 ?	35	0	0	0	0	0	240 ?
24	0	0	0	0	0	32	95 ?	?	?	?	?	?	?	?	?	?	?	86 ?	30	0	0	0	0	0	243 ?
25	0	0	0	0	0	24	81 ?	?	?	?	?	?	?	?	?	?	240 ?	126	16	0	0	0	0	0	486 ?
26	0	0	0	0	0	28	83 ?	?	?	?	?	?	?	?	?	?	?	?	30	0	0	0	0	0	140 ?
27	0	0	0	0	0	29	86 ?	?	?	?	?	?	?	?	?	?	?	?	32	0	0	0	0	0	147 ?
28	0	0	0	0	0	32	93 ?	?	?	?	?	?	990 ?	?	?	?	?	68 ?	24	0	0	0	0	0	1206 ?
29	0	0	0	0	0	36	100 ?	?	?	?	600 ?	625	587 ?	?	?	414 ?	188	54	8	0	0	0	0	0	2613 ?
30	0	0	0	0	0	13	53	157	243	242	386	514	617 ?	469 ?	?	401 ?	282	126	23	0	0	0	0	0	3525 ?
Avg	0	0	0	0	0	14	64	121	212	276	382	413	398	339	281	202	144	71	19	0	0	0	0	0	1394 ?
S D	0	0	0	0	0	11	27	54	86	100	162	152	236	119	127	111	72	28	10	0	0	0	0	0	1166
S/A	0	0	0	0	0	0.79	0.43	0.45	0.41	0.36	0.42	0.37	0.59	0.35	0.45	0.55	0.5	0.39	0.51	0	0	0	0	0	0.84
Min	0	0	0	0	0	0	13	55	113	148	143	104	111	154	78	63	36	12	3	0	0	0	0	0	140
Max	0	0	0	0	0	36	100	222	396	465	600	625	990	519	469	414	282	126	39	0	0	0	0	0	3525
n	0	0	0	0	0	180	239	142	133	118	115	119	122	120	112	114	151	204	214	0	0	0	0	0	2096

Daylight Data Recovery: 0.0% missing; 0.0% untested; 55.5% exceed the 15% QC threshold -- 4714 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.

April 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	1	1	1	0	4	1	2	1	0	1	3?	0	0	0	0	0	0	16
2	0	0	0	0	0	0	0	2	1	3	3	3	2	1	0	0	0	0	0	0	0	0	0	0	14
3	0	0	0	0	0	1	2	1	2	4	?	?	?	?	?	?	?	1?	0	0	0	0	0	0	11?
4	0	0	0	0	0	0	4?	?	?	?	?	?	?	?	?	?	?	3?	0	0	0	0	0	0	7?
5	0	0	0	0	0	0	9?	?	?	?	?	?	?	?	?	?	?	1?	0	0	0	0	0	0	10?
6	0	0	0	0	0	0	0	1	1	0	2	0	0	4?	9?	0?	2?	0?	0	0	0	0	0	0	19?
7	0	0	0	0	0	0	5?	?	4?	6?	3	3	1	2	0	0	0	2?	0	0	0	0	0	0	27?
8	0	0	0	0	0	1	6?	?	?	?	?	?	?	?	2?	0?	0?	0	0	0	0	0	0	0	9?
9	0	0	0	0	0	0	0	4?	?	?	?	?	0?	0?	?	?	0?	3?	1	0	0	0	0	0	8?
10	0	0	0	0	0	1	3	4?	2	3?	2?	3?	?	?	1	0?	0	0	0	0	0	0	0	0	19?
11	0	0	0	0	0	0	0	2	3?	2?	?	3?	1?	2	0	0	0	0	0	0	0	0	0	0	14?
12	0	0	0	0	0	1	6?	?	?	?	?	?	?	?	?	?	?	5?	1	0	0	0	0	0	13?
13	0	0	0	0	0	0	2	3	4	3	5?	1	2	0	0	0	0	0	0	0	0	0	0	0	20
14	0	0	0	0	0	0	1	2	2	2	3	3	1	2	2	1	0	0	0	0	0	0	0	0	17
15	0	0	0	0	0	0	0	1	2	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	9
16	0	0	0	0	0	0	3?	5?	?	?	?	?	?	?	?	?	?	3?	1	0	0	0	0	0	12?
17	0	0	0	0	0	3	9?	?	?	?	?	?	?	?	?	?	?	5?	1	0	0	0	0	0	17?
18	0	0	0	0	0	1	5?	?	?	?	?	?	?	?	?	?	?	2?	0	0	0	0	0	0	8?
19	0	0	0	0	0	0	2?	3?	?	?	?	0?	1?	0	0	0	0	0	0	0	0	0	0	0	7?
20	0	0	0	0	0	0	1	1	2	3	4	1?	1	3	5?	6?	0?	1	0	0	0	0	0	0	29?
21	0	0	0	0	0	0	2	3	2?	0?	?	?	?	?	?	?	?	1?	0	0	0	0	0	0	8?
22	0	0	0	0	0	0	1?	1?	2?	0?	3?	?	?	0?	0?	?	1?	0?	0	0	0	0	0	0	8?
23	0	0	0	0	0	0	3?	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	3?
24	0	0	0	0	0	2	4?	?	?	?	?	?	?	?	?	?	?	1?	0	0	0	0	0	0	7?
25	0	0	0	0	0	1	3?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	5?
26	0	0	0	0	0	2	3?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	4?
27	0	0	0	0	0	2	3?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	5?
28	0	0	0	0	0	2	4?	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	5?
29	0	0	0	0	0	1	3?	?	?	?	0?	1	0?	?	?	0?	0	0	0	0	0	0	0	0	4?
30	0	0	0	0	0	0	1	2	3	1	3	2	1?	1?	?	0?	0	0	0	0	0	0	0	0	15?

Avg	0	0	0	0	0	1	3	2	2	2	2	2	1	1	2	1	0	1	0	0	0	0	0	0	12?
SD	0	0	0	0	0	1	2	1	1	2	1	1	1	1	3	2	1	2	0	0	0	0	0	0	7
S/A	0	0	0	0	0	1.1	0.82	0.64	0.47	0.78	0.56	0.62	0.61	1.01	1.73	2.79	1.94	1.37	1.81	0	0	0	0	0.57	
Min	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Max	0	0	0	0	0	3	9	5	4	6	5	4	2	4	9	6	2	5	1	0	0	0	0	29	
n	0	0	0	0	0	180	243	148	137	132	118	130	126	127	121	120	160	214	214	0	0	0	0	2180	

Daylight Data Recovery: 0.0% missing; 0.0% untested; 53.8% exceed the 15% QC threshold -- 4714 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.

April 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	1	18	55	117	197	180	371	284	409	285	128	195	81 ?	18	0	0	0	0	0	2340
2	0	0	0	0	0	1	26	103	130	196	261	380	305	158	125	103	74	16	3	0	0	0	0	0	1879
3	0	0	0	0	0	1 ?	32	81	136	257	?	?	?	?	?	?	?	48 ?	14	0	0	0	0	0	569 ?
4	0	0	0	0	0	8 ?	27 ?	?	?	?	?	?	?	?	?	?	?	29 ?	11	0	0	0	0	0	75 ?
5	0	0	0	0	0	7	28 ?	?	?	?	?	?	?	?	?	?	?	38 ?	12	0	0	0	0	0	84 ?
6	0	0	0	0	0	2	13	58	86	34 ?	196	74 ?	150	310 ?	335 ?	154 ?	211 ?	44 ?	10	0	0	0	0	0	1677 ?
7	0	0	0	0	0	9 ?	27 ?	?	376 ?	434 ?	425	398	294	291	357	250	158	41 ?	13	0	0	0	0	0	3072 ?
8	0	0	0	0	0	9 ?	28 ?	?	?	?	?	?	?	?	261 ?	189 ?	134 ?	56	16	0	0	0	0	0	694 ?
9	0	0	0	0	0	0	23	82 ?	?	?	?	?	258 ?	217 ?	?	?	98 ?	36 ?	11	0	0	0	0	0	724 ?
10	0	0	0	0	0	13	76	130 ?	285	298 ?	476 ?	457 ?	?	?	376	198 ?	170	78	18	0	0	0	0	0	2576 ?
11	0	0	0	0	0	3	15	106	215 ?	284 ?	?	354 ?	255 ?	337	94 ?	60	30	13	6	0	0	0	0	0	1770 ?
12	0	0	0	0	0	13	30 ?	?	?	?	?	?	?	?	?	?	?	31 ?	14	0	0	0	0	0	88 ?
13	0	0	0	0	0	11	66	174	283	370	493 ?	500	470	186	73	138	112	54	6	0	0	0	0	0	2936
14	0	0	0	0	0	2	24	72	122	204	343	287	236	408	250	187 ?	54	32	9	0	0	0	0	0	2232
15	0	0	0	0	0	7	25	85	157	149	143	182	231	154	78	71	40	45	13	0	0	0	0	0	1378
16	0	0	0	0	0	13	68 ?	142 ?	?	?	?	?	?	?	?	?	?	32 ?	16	0	0	0	0	0	271 ?
17	0	0	0	0	0	15	36 ?	?	?	?	?	?	?	?	?	?	?	34 ?	16	0	0	0	0	0	99 ?
18	0	0	0	0	0	15	34 ?	?	?	?	?	?	?	?	?	?	?	37 ?	5	0	0	0	0	0	91 ?
19	0	0	0	0	0	20	83 ?	138 ?	?	?	?	466 ?	493 ?	404	321	211	111	37 ?	6	0	0	0	0	0	2284 ?
20	0	0	0	0	0	12	58	91	229	313	451	322 ?	85	261 ?	286	191 ?	103 ?	70	26	0	0	0	0	0	2499 ?
21	0	0	0	0	0	5	78	173	219 ?	247 ?	?	?	?	?	?	?	?	46 ?	17	0	0	0	0	0	783 ?
22	0	0	0	0	0	3	70 ?	193 ?	202 ?	138 ?	323 ?	?	?	307 ?	271 ?	?	139 ?	45 ?	19	0	0	0	0	0	1710 ?
23	0	0	0	0	0	22	47 ?	?	?	?	?	?	?	?	?	?	?	39 ?	20	0	0	0	0	0	129 ?
24	0	0	0	0	0	24	46 ?	?	?	?	?	?	?	?	?	?	?	43 ?	21	0	0	0	0	0	133 ?
25	0	0	0	0	0	20	45 ?	?	?	?	?	?	?	?	?	?	217 ?	115	13	0	0	0	0	0	411 ?
26	0	0	0	0	0	20	41 ?	?	?	?	?	?	?	?	?	?	?	?	16	0	0	0	0	0	77 ?
27	0	0	0	0	0	19	39 ?	?	?	?	?	?	?	?	?	?	?	?	18	0	0	0	0	0	76 ?
28	0	0	0	0	0	17	38 ?	?	?	?	?	?	102 ?	?	?	?	?	51 ?	22	0	0	0	0	0	231 ?
29	0	0	0	0	0	28	64 ?	?	?	?	430 ?	507	498 ?	?	?	321 ?	182	54	8	0	0	0	0	0	2090 ?
30	0	0	0	0	0	15	53	157	243	242	386	511	575 ?	420 ?	?	312 ?	235	119	23	0	0	0	0	0	3290 ?
Avg	0	0	0	0	0	11	42	115	200	240	342	370	302	297	239	179	133	48	14	0	0	0	0	0	1209 ?
S D	0	0	0	0	0	8	20	44	81	101	122	131	152	97	109	79	63	25	6	0	0	0	0	0	1092
S/A	0	0	0	0	0	0.7	0.48	0.38	0.4	0.42	0.36	0.35	0.5	0.33	0.46	0.44	0.47	0.51	0.41	0	0	0	0	0	0.9
Min	0	0	0	0	0	0	13	55	86	34	143	74	85	154	73	60	30	13	3	0	0	0	0	0	75
Max	0	0	0	0	0	28	83	193	376	434	493	511	575	420	376	321	235	119	26	0	0	0	0	0	3290
n	0	0	0	0	0	165	242	148	137	125	117	127	128	125	120	119	159	217	213	0	0	0	0	0	2153

Daylight Data Recovery: 0.0% missing; 0.0% untested; 54.3% exceed the 15% QC threshold -- 4714 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

April 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	9.9	10.2	10.9	11.5	11.8	12	12.9	13.9	15.4	16.2	16.6	17.1	18.1	18.3	19	18.7	18.4	17.9	17.3	15.7	15.3	15.5	15.1	14.4	15.1
2	14	13.9	13.5	13.3	13.2	12.8	12.8	13.2	14.1	15	16.1	17.3	18.1	17.6	17.5	16.4	15.7	15.6	15.2	15.6	15.5	16.2	16.5	16.9	15.2
3	17.2	17.1	17.3	17.6	17.7	18.2	18.9	19.6	20.5	21.5	23.1	24.2	24.6	24.8	25	24.7	24.3	23.6	22.4	21.1	19.9	18	16.3	15	20.5
4	13.9	13.1	12.2	11.6	11.2	10.7	10.7	12	13.5	14.7	15.9	17.2	18.2	19.1	20.1	20.8	21.1	20.9	19.6	18.1	16.5	15.9	15.3	15.1	15.7
5	14.6	13.9	12.5	11.3	10	9.4	9.5	13.1	16.3	17.3	18	18.2	18.8	18.7	18.5	18	19.6	19.4	17.7	16.9	16.9	17.5	17.5	17.3	15.9
6	17.2	17.7	17.8	18.2	18.6	19.2	19.5	19.9	20.6	20.6	21.5	21.9	18.9	16.7	19	18.9	19.2	18.5	17.4	16.5	16	14.9	13.6	12.4	18.1
7	10.9	9.5	8.7	8.1	7.2	6.6	6.7	7.6	8.6	9.3	9.2	9.6	9.3	9.1	9.4	9.3	8.8	8.9	7.7	6.9	6.1	5.3	5.1	5	8
8	4.7	4.2	4.1	3.7	3	2.6	3.2	5.3	7.1	8.4	9.6	10.6	11.6	12.1	12.7	13.1	13.2	13.1	12.5	11.4	10.2	9.7	9.6	9.6	8.6
9	9.5	9.2	9.3	10.5	11.1	10.5	9.3	10.2	11.6	12.8	14.6	15.6	16.5	16.8	18.2	18.3	18.1	17.9	15.5	13	12.6	12.2	11.7	11.9	13.2
10	11.8	11.9	12	12.3	12.6	13.5	14.4	16	17.7	18.9	20.8	22.4	23.9	25	25.3	25.8	25.1	24	22.5	21.2	19.9	19.3	18.7	17.7	18.9
11	17.5	17.9	17.2	16.7	16.9	16.3	15.7	16	16.6	17.8	18.9	20.1	20.5	19.9	17.1	12.9	12.2	11.8	11.8	11.7	11.8	11.7	10.6	9.5	15.4
12	8.6	8.5	8.7	9.3	9.1	7.9	7.5	8.1	8.9	10.1	10.9	11.9	12.9	13.6	14.6	15.3	15.4	11.7	10.5	9.5	8.9	8.2	7.8	7.7	10.2
13	7.4	6.4	6.1	6.4	6.5	6.5	7.9	8.7	10.3	11.5	12.1	12.1	12.1	11.1	10.3	10.5	11.2	11.5	11.7	11.9	12.1	12.6	13.1	13.8	10.1
14	14.9	14.9	15.2	15.1	14.7	15.1	15.4	16.2	16.8	18	19.1	19.4	19.8	19.8	20.1	20.6	18.2	17.8	16.8	16.6	16.3	16	15.2	13.3	16.9
15	12.3	12	11.9	11.7	11.6	11.3	10.9	10.8	10.8	10.8	10.7	10.9	11.6	11.8	11.6	11.4	10.3	9.9	9.1	8.4	7.6	7.2	6.5	6.1	10.3
16	5.8	5.9	5.8	5.3	5.7	5.6	6	8.1	9.4	10.3	11.4	12.6	13.3	13.4	13	12.9	11.9	10.6	9.4	8.3	7.6	7.1	6.3	6	8.8
17	4.6	3.6	2.4	2.6	2.9	2.9	4.6	8.1	11.4	13.6	14.5	16.4	18.2	18.8	19.7	20	18.8	18.6	17.4	15.2	14	12.8	12	11.7	11.9
18	11.5	10.9	10.9	10.6	10.1	9.7	10.6	13	15.5	17.5	19.6	21.9	24.1	24.2	25.2	25	25.3	25.1	22.8	19.2	17.3	17.5	16.8	15.8	17.5
19	15.3	14.9	14.2	13.7	13.2	13.3	13.7	15.8	18.1	20.5	22.1	22.4	22.8	22.6	22	21.5	21.2	21	20.4	19.9	19.2	18.2	16.4	15	18.2
20	15	14.9	14.9	15.2	15.2	15.3	15.7	16.4	17.6	19	21.3	22.4	18.2	19.1	21	21.8	22.7	21.8	21.1	20.2	19.6	19.1	18.9	18.7	18.5
21	18.1	17.7	17.4	16.9	16.5	16	15.7	16.3	17.4	19	20.2	21.7	22.7	22.9	23.2	23.5	23.2	22.7	21.3	19.8	17.7	16.5	15.8	13.9	19
22	13.8	13.4	13.4	12.7	12.9	13	13.1	14.2	14.4	13.1	11.6	14.6	15.8	15.5	14.6	14.2	14.6	14.6	13.7	12.7	11.6	10.7	10.3	10.2	13.3
23	10.1	10.5	10.9	11.1	11.5	12	13.3	15.1	16.7	18.4	19.8	20.6	21	22.2	22	22.4	22.4	20.3	15	13.5	12.9	12.6	12.3	12.3	15.8
24	12.7	12.5	12.2	12	12.3	12.9	14.2	16.1	18.1	19.4	20.6	21.9	23.1	24	24.4	25.7	25.9	25.1	23.7	21.9	21.5	20.8	20.4	19.9	19.2
25	19.6	19.2	18.7	18.3	18.1	18.2	18.9	20.2	21.4	22.7	24.2	25.8	27.2	28.5	29.3	29.9	30.1	29.2	27.4	25	23.6	22.6	21.6	20.6	23.3
26	19.9	19.1	18.5	18	17.5	17.5	18.9	20.7	23.1	24.9	27	28.6	30.1	30.9	31.4	31.6	31.4	30.7	28.9	27.1	24.9	23	21.9	20.8	24.4
27	19.9	19.3	18.9	18.3	17.7	17.3	18	20	22.4	24.6	26.8	28.4	29.7	30.2	30.8	31.2	30.8	28.6	26.7	25	23.6	22.4	21.3	20.1	23.8
28	19.1	18.3	17.6	17	16.6	16.2	17.1	19.1	21.1	23.2	25	26.4	27	28	28	28.4	28.3	27.5	25.8	23.7	23	22	21.3	20.5	22.5
29	19.4	18.6	17.8	17.1	16.6	16.3	17.4	19	21	22.6	23.6	24.3	22.9	21.1	19.9	17.4	14.7	13.6	13.4	13.4	13.1	13	13	13.2	17.6
30	13.5	13.2	12.9	12.9	12.9	12.7	13.2	13.7	14.6	15.4	16	17.6	18.7	19.4	20.4	20.5	20.8	20.7	19.6	17.8	17	16.8	17	17.4	16.4
Avg	13.4	13.1	12.8	12.6	12.5	12.4	12.8	14.2	15.7	16.9	18	19.1	19.7	19.8	20.1	20	19.8	19.1	17.8	16.6	15.7	15.2	14.6	14.1	16.1
S D	4.5	4.5	4.5	4.4	4.4	4.5	4.5	4.3	4.4	4.7	5.2	5.3	5.4	5.7	5.8	6.1	6.2	6.1	5.7	5.3	5.1	4.9	4.7	4.5	4.6
S/A	0.34	0.35	0.35	0.35	0.35	0.36	0.35	0.31	0.28	0.28	0.29	0.28	0.28	0.29	0.29	0.3	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.28
Min	4.6	3.6	2.4	2.6	2.9	2.6	3.2	5.3	7.1	8.4	9.2	9.6	9.3	9.1	9.4	9.3	8.8	8.9	7.7	6.9	6.1	5.3	5.1	5	8
Max	19.9	19.3	18.9	18.3	18.6	19.2	19.5	20.7	23.1	24.9	27	28.6	30.1	30.9	31.4	31.6	31.4	30.7	28.9	27.1	24.9	23	21.9	20.8	24.4
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

April 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	102.2	102.5	102.3	102.3	102.6	102.3	100.4	97.7	92.4	88.5	86.7	85.3	85.5	88.9	90.3	91.4	94.5	96.4	99	103.8	?	?	?	?	95.7 ?
2	?	?	?	?	?	?	?	?	?	?	102.7	98.8	96	98.3	98.5	101.9	104.6 ?	?	?	?	?	?	?	104.5 ?	100.7 ?
3	104.5	?	?	?	104.6 ?	103.9	102.2	100.5	98.8	97	84.2	67.1	56.7	54.6	53.7	52.4	52.9	53.2	57.1	63.4	62.2	65.4	66.7	68	74.7 ?
4	73.3	74.5	78	80.7	81.7	81.8	80.4	73.6	63.7	54.7	49.6	44.4	40.4	40.7	37.4	34.8	36.7	37.1	41.7	47.2	54.4	57.4	60.9	61.2	57.8
5	61.5	61.8	65.8	71	77.1	79.2	79.7	70.7	48	43.6	42.8	46.4	44.9	48.3	51.1	61	53.1	58.3	76.8	88.7	91.3	81.5	82.7	89	65.6
6	96	98.9	99.3	99.3	100.6	103.5	104.8	104.9 ?	103.7	104.5	101.5	98.8	103 ?	100.3	87.6	90	81.4	78.4	84.2	86.8	80.6	69.6	70.2	71.6	92.5
7	72	74.8	75.7	76.1	81	82.4	82.2	75.4	64.9	60.2	59.8	54.4	58.3	59.9	54.6	50.7	51.9	48.6	52.7	55.1	59.4	65.4	68.6	69.9	64.8
8	71.1	77.5	79	81.5	84.1	85.7	81.6	72.8	65.8	59.1	51.8	47.8	45.2	44.4	44.1	42.9	42.5	43.8	49.8	55.7	61.6	64.5	72.1	82.3	62.8
9	83.8	90.4	95	90.6	83.8	89.4	99.4	98.6	88.3	82.2	72.6	62.9	54.3	49.7	43.9	42.1	42.9	44.2	73.3	90.8	96.8	98.1	100.5	100.6	78.1
10	102.1	102.8	104.4 ?	104.6 ?	104.6	103.4	102	100.7	96.5	93.5	85.2	73.3	57.6	54.3	51	43	41.8	48.5	49.2	60.8	81.1	93.6	97.8	98.8	81.3
11	101.1	101.8	104 ?	?	103.7	?	104.5 ?	102.3	100.4	94.2	84.9	75.5	70	71.4	88.9	?	102.3 ?	100.8	98.1	97	96.2	95.1	95.4	99.8	94.6 ?
12	102.6	104	104.1	95.3	74.9	72.7	72.6	66.6	65.4	57.1	49.8	45.4	43.3	42.5	38.7	34.5	33.7	66.7	72.2	74.6	79.7	82.7	84	86.2	68.7
13	90.6	95.2	97.1	94.5	97.5	99.2	92	92.2	80.9	73.7	72.2	77.2	76.8	80.3	85.5	89	84.6	81.1	83	81.8	82	85.5	90.2	95.5	86.6
14	97.4	99.8	100.5	102.8 ?	?	?	?	?	?	104.8 ?	104.8 ?	102.4	100.7	100.3	100.9	96.7	94.6	102.7	104.2 ?	?	?	?	?	?	100.6 ?
15	?	?	?	?	?	?	?	?	?	104.8 ?	104.2	103.7	99.6	98.7	99.3	100.6	104.4	100	97.1	98.5	100.4	98.6	101.4	104.4 ?	101.1 ?
16	?	101.7	99.9	99.9	95.1	99.4	99.2	81.2	68.4	64.4	59.2	51.1	41.3	36.4	37.8	40.2	49.5	54.2	51.9	63.2	70.9	76.7	83.8	87.5	70.1
17	93.3	97.8	102.5	102.2	100.7	100.4	95.2	79.9	65.4	54.6	52.2	48.3	44.1	43.4	42.6	46.1	50	49.2	56.1	73.3	73.4	75.9	80.4	87.8	71.4
18	85.2	86.7	83.5	82.2	84.5	86.1	83.5	74.5	66.6	59.8	55.9	46.7	37.7	37.6	36.7	35.5	34.8	37.1	50.9	69	79.6	77.4	74.3	74.1	64.2
19	72.4	71.2	72.4	73.5	76.2	76.4	77.3	71.3	63	53.1	47.8	46.2	44.3	43.8	51.2	58.2	61.2	64.4	69	64.8	67	77.5	96.1	?	65.1
20	?	?	104.6 ?	103.9	104.6 ?	103.9	103	102.6 ?	104.6 ?	103.2	97.5	92.6	?	?	100.6	96	80.9	86.6	91.9	95.9	97.9	99.8	102.4	103.6 ?	98.8 ?
21	?	?	?	?	?	?	?	104.3 ?	101.2	96.1	90.1	79.3	65.7	62.8	56	52.4	52.7	54.4	58.3	63.1	73.7	77.2	84.2	99.6	74.8 ?
22	99.5	100.9	101.5	104.3	104.5	?	?	102.3 ?	98.1	92.1	93.9	70	53.5	51.1	51.4	55.4	53.6	51.4	53.2	56.3	61.4	68.2	71.3	77.4	76 ?
23	85.6	83.3	72.6	68.2	70.3	74.6	75.5	73.2	57.4	48.5	41.2	41.2	41.8	36.5	33.3	31.3	29.5	44	69.9	80.6	84.9	87.9	92.6	91	63.1
24	87.3	91.3	94.8	97.9	95.9	93.5	88.2	78.9	71.3	75.8	79.2	82.8	82.4	78.8	77.2	66.7	63.6	71.7	77.1	87.1	87	90.5	95.6	99.7	83.9
25	102.9	104.8 ?	?	?	?	?	104.1 ?	101.2	97.1	92.2	86.3	80.7	75	69.9	66.8	65.1	64	66.8	73.7	82.5	87.3	87	85.9	87.6	84.1 ?
26	91.6	95.4	97.7	99.2	102.2	102.7	99.1	93.7	80.7	74.7	67.9	60.6	54	51.4	50.9	49	47.6	50.2	55.8	58.7	74.5	93.6	96.1	96.6	76.8
27	97	96.1	94.2	94.1	96.4	98.9	98.8	96.3	89.3	83.1	73	61.1	51.6	48.5	45.6	43	44.5	56.8	65.3	69.3	71.3	72.1	75.1	77.7	75
28	82	87.5	92.6	96.3	98.2	99.6	98.5	93.3	85.7	74.1	58.4	49.4	48.6	48.4	47.6	46.1	47.9	52	61.9	75.5	82.1	88.1	94.2	95.1	75.1
29	96.6	96.6	97.6	98.7	100.6	103.1	101.5	96.9	89.7	81.5	75.6	74	76.7	80.3	81.8	88.2	97.3	101.4	103.7	104.2	104.8 ?	?	?	?	92.9 ?
30	104.9 ?	104.6	104.8 ?	?	?	?	104.7 ?	103.7	101.7	100	98.1	93	90.5	89.6	88.1	89.5	90	92.1	95.3	101.2	103.5	104.8 ?	?	?	97.9 ?

Avg	90.3	92.1	92.9	92.1	92.7	92.8	93.2	89.2	82.6	78.3	74.2	68.6	63.4	62.5	63	61.8	63.2	65.3	70.3	76.7	80.2	82.1	84.9	88.4	79.8 ?
S D	12.4	12	12.1	11.7	11.3	11	10.7	13.2	17.2	19.3	20.1	19.7	20.8	21.6	22.7	23.4	24.2	21.4	18.1	16.7	14.2	12.7	12.3	12.6	13.5
S/A	0.14	0.13	0.13	0.13	0.12	0.12	0.12	0.15	0.21	0.25	0.27	0.29	0.33	0.34	0.36	0.38	0.38	0.33	0.26	0.22	0.18	0.15	0.14	0.14	0.17
Min	61.5	61.8	65.8	68.2	70.3	72.7	72.6	66.6	48	43.6	41.2	41.2	37.7	36.4	33.3	31.3	29.5	37.1	41.7	47.2	54.4	57.4	60.9	61.2	57.8
Max	104.9	104.8	104.8	104.6	104.6	103.9	104.8	104.9	104.8	104.8	103.7	102.3	103	100.9	100.6	101.9	104.6	104.2	103.7	104.2	104.8	104.8	102.4	104.5	101.1
n	288	292	274	268	276	264	276	303	323	342	359	360	345	348	360	348	349	343	336	334	316	302	300	285	7595

Data Recovery: 0.0% missing; 0.0% untested; 12.1% failed QC -- 8640 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

April 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	9	9.5	9.9	10.7	11.4	11.7	12.2	12.9	14.2	15.9	17.2	18	19.4	20.4	21.3	21.2	20.7	20.6	20	17.9	16.1	15.7	15.4	14.7	15.7
2	14.1	13.8	13.6	13.3	13.3	13.3	13.1	13.1	13.9	15.1	16.9	18.8	20.5	20.6	19.6	18.9	17.7	17.1	16.3	15.9	15.9	16	16.3	16.6	16
3	16.9	17.2	17.4	17.5	17.6	17.8	18.4	19.7	20.6	22	23.9	26	27	27.3	27.6	27.9	27.6	26.8	25	22.6	21	19.5	17.7	16	21.7
4	14.6	13.4	12.4	11.4	10.7	10.2	10.2	12.4	15.3	17.6	19.3	20.9	21.7	21.9	22.4	23.4	24	23.9	22.4	19.4	17.1	15.4	14.5	13.8	17
5	13.4	12.9	11.7	10	8	6.7	7	12.2	18.5	22.1	24.3	25.6	24.7	24.2	23.6	23.3	23.1	23.4	21.4	18.5	17.1	16.6	16.7	16.8	17.6
6	16.8	16.9	17.5	18	18.4	18.9	19.4	19.9	20.7	21.2	21.6	22.7	21.8	19.8	21.1	24	22.8	23.1	20.3	18.2	17	16.1	14.6	13.5	19.3
7	12.1	10.5	9.2	8.2	7.2	6.4	6.4	8.7	11.3	13.1	14.4	13.9	13.4	12.1	12.1	12.2	11.5	11.2	10.3	7.8	6.1	4.9	3.9	3.6	9.6
8	3.3	3.1	3	2.7	2.4	1.8	2.1	5.2	8.6	11.2	13.3	14.8	15.3	15.5	15.7	16.3	16.4	15.3	14	12.3	10.1	8.2	7.4	7.7	9.4
9	7.9	7.7	7.5	8.2	9.6	10.3	9.8	9.6	13.3	16.7	19.2	21.3	22	21.6	21.9	23.4	22.9	22	19.8	15.6	12.8	11.8	11.2	10.7	14.9
10	10.5	10.4	10.5	10.7	11.1	11.8	12.8	15.3	18.7	20.3	22.6	25	26.5	27.2	27.6	28	27.8	26.4	24.6	22.6	20.9	19.7	19.1	18.5	19.5
11	17.8	17.7	17.5	16.9	16.7	16.4	16.1	16	17.2	19.6	21.7	23.3	24	23.4	22.8	18.2	14.7	13.1	12.5	12.3	12.2	12.1	11.1	9.4	16.8
12	8	7.7	8.1	8.4	8.9	8.6	8.1	9.9	12.2	14.3	16.4	17.8	18.8	18.4	18.5	19.7	20.8	19.5	15.7	11.5	9	7.6	6.4	5.8	12.5
13	5.5	4.8	4.1	4.2	4.3	4.6	5.3	7.2	9.9	13	15.6	17.1	17.3	16.3	14	12.6	12.4	12.5	12.3	12.1	12.1	12.3	12.7	13.2	10.6
14	13.9	14.5	14.8	15.2	15	15	15.2	15.8	16.6	17.8	19.4	21.3	22.4	22.2	22.8	23.3	22.2	19.8	18.5	17.6	17	16.6	16.4	15.4	17.9
15	14.1	13.1	12.5	12.2	12.1	11.9	11.7	11.5	11.9	12.3	12.6	12.8	13.4	14	13.8	13.2	12.3	11.2	10.4	9.7	9	8.3	7.7	7.1	11.6
16	6.6	6.2	6	5.7	5.5	5.6	5.8	8.1	11.3	13.4	14.7	16	16.7	16.7	16.6	16.8	16.9	15.8	13.5	10.1	7.9	6.5	5.2	4	10.5
17	3	1.9	1	0.6	0.7	0.8	2.3	7.4	13.3	18.4	21.6	23.1	24.3	24.3	24.6	25.5	25.3	23.8	21.8	17.8	14.8	13.1	11.9	11.1	13.8
18	10.9	10.6	10.2	9.9	9.6	9.2	10	13.3	17	20.5	23.1	26.3	28.9	30	30.1	30.6	30.1	29.4	26.7	22.1	18.5	16.3	16	15.5	19.4
19	15	14.6	14.1	13.5	13	12.8	13.2	15.3	18.7	22.1	24.9	26.3	26.3	26.4	25.7	24.7	23.6	22.6	21.6	20.7	19.8	19.1	18.1	16.4	19.5
20	15.3	15	14.8	14.8	14.9	15	15.4	16.2	17.2	19.2	22.2	24.8	23.5	20.6	21.4	22.2	24.8	24	23.2	21.6	20.2	19.4	19.1	18.9	19.3
21	18.5	17.8	17.5	17.2	16.8	16.2	15.9	16.8	18.6	22.5	25.8	27.5	27.5	27	27	27.5	27.4	26.7	24.6	21.5	19.3	17.6	16.7	15.4	21.2
22	14	13.3	12.9	12.7	12.6	12.7	12.9	14.6	16.5	18.1	15	16	18.1	18.5	18.2	17.6	17.7	17.3	16.4	14	12	10.5	9.5	8.8	14.6
23	8.3	7.9	8.4	9.2	9.8	10.2	11.5	14.8	18.3	21.2	23.2	24.5	25.3	25.4	25.9	26.3	26.8	26.6	22.5	16.8	13.8	12.4	11.6	11	17.2
24	10.8	10.6	10.5	10.5	10.6	11	12.7	16.3	20	22.6	24.5	26.5	27.5	27.9	28.6	29.5	30.5	30.1	28.1	24.6	22.3	21.2	20.5	20.1	20.7
25	19.6	19.2	18.7	18.3	17.9	17.7	18.5	21	23.6	25.7	27.2	28.8	30	31.1	32.4	33.4	33.9	33.2	30.7	27.7	25.3	23.7	22.4	21.4	25.1
26	20.5	19.7	18.8	18.1	17.5	17.1	18.2	21.2	24.6	27.4	29.9	31.9	33	33.6	34.6	35.6	35.9	35.3	33.3	29.5	26.6	24.2	22.5	21.3	26.3
27	20.3	19.5	18.8	18.2	17.4	16.8	17.9	21.4	25.3	28.6	31.7	33.6	34.3	34.3	34.7	35.7	36.2	35.3	32.1	27.8	24.7	22.7	21.4	20.3	26.2
28	19.3	18.3	17.4	16.7	16	15.4	16.7	20.2	23.4	26.4	28.8	30.5	31.1	31.2	31.8	32.3	32.5	31.8	29.1	25.9	23.7	22.2	21.3	20.6	24.3
29	19.6	18.6	17.7	16.8	16.1	15.9	16.9	19.8	23.1	26	27.8	28.8	29.3	27.9	26.6	24.8	21.7	18	15.8	14.8	14.3	13.9	13.6	13.6	20.1
30	13.7	13.9	13.7	13.6	13.5	13.4	13.5	14.3	15.8	17.7	18.9	21.4	24.7	26	26.6	26.8	26.3	25.3	22.9	20.4	18.4	17.3	16.8	16.8	18.8
Avg	13.1	12.7	12.3	12.1	11.9	11.8	12.3	14.3	17	19.4	21.3	22.8	23.6	23.5	23.7	23.8	23.6	22.7	20.9	18.3	16.5	15.4	14.6	13.9	17.6
S D	5	5	5	4.9	4.8	4.8	4.8	4.6	4.5	4.7	5.1	5.5	5.5	5.8	6	6.4	6.7	6.8	6.3	5.7	5.4	5.2	5.2	5.1	4.7
S/A	0.38	0.39	0.4	0.4	0.4	0.4	0.39	0.32	0.26	0.24	0.24	0.24	0.23	0.24	0.25	0.27	0.29	0.3	0.3	0.31	0.33	0.34	0.35	0.37	0.27
Min	3	1.9	1	0.6	0.7	0.8	2.1	5.2	8.6	11.2	12.6	12.8	13.4	12.1	12.1	12.2	11.5	11.2	10.3	7.8	6.1	4.9	3.9	3.6	9.4
Max	20.5	19.7	18.8	18.3	18.4	18.9	19.4	21.4	25.3	28.6	31.7	33.6	34.3	34.3	34.7	35.7	36.2	35.3	33.3	29.5	26.6	24.2	22.5	21.4	26.3
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

April 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	3.3	3.1	2.4	2.5	2.5	2.3	2.5	3.2	3	4.1	4.3	4.9	3.8	4.3	3.9	3.2	2.7	2.3	1.7	1.5	0.8	1.3	1.1	0.5	2.7
2	0.5	0.2	0.3	0.2	0.4	1	0.8	1	1.6	1.4	2.1	3.5	3.5	3	3.2	3.2	2.4	2.9	2.4	3.5	3.2	3.1	2.7	2.9	2
3	4	3.3	1.7	1.6	2.3	3.7	5.4	4.2	5.6	6.3	9.3	10.3	10.4	9.2	8.2	7.5	6.7	6	4.6	4.2	5.4	6.1	5.7	5.3	5.7
4	4.3	4	3.3	3.1	3.2	3.5	3.7	4.7	5.2	5.6	4.9	4.8	5.6	5.7	5.7	5.9	5	4.1	2.9	2.4	1.9	2.2	1.8	2	4
5	2.4	1.4	0.8	0.1	0	0.1	0.1	0.3	1.7	1.8	1.7	3.7	3	3.8	4.2	4.7	4	3.8	3.1	3	2.9	3.6	3.7	3.3	2.4
6	3.7	3.4	3.1	3.7	3.3	4.1	3.8	4.2	4.5	3.8	4.4	4.9	5.9	2.8	1	2.7	2.1	1.6	1.4	1.8	3.9	3.4	3.8	4.9	3.4
7	4.5	4.5	4.2	3.1	3	3	3	4.4	3.9	3.9	3.9	4.6	5	5.8	5.9	6.7	5.4	4.3	3.5	3	2.3	1.7	1.9	2.3	3.9
8	1.7	2	1.9	2.7	2.5	2.1	2.9	4.8	5.1	5	4.5	5.3	5.3	6.3	5.9	5.5	4.5	3.9	2.1	1.9	0.7	0.8	1.9	2.3	3.4
9	2.3	1.6	1.7	2.6	1.9	0.9	0.4	0.4	2	2.6	2.7	2.6	2.5	2.5	2.1	3.1	3.3	2.7	1.6	1.6	2.2	2.5	1.8	2.1	2.1
10	1.7	1.7	1.6	1.8	2.1	2.5	2.8	3.3	3.7	3.1	4	4.7	7	6.9	7.4	7.5	5.3	3.5	4.2	4	4.2	4.9	5.2	3.4	4
11	3	3.7	3.8	4.4	3.5	2	3.1	4	3.5	4.5	5.2	5	4.5	4.1	5.6	4	4	3.7	3.4	3.7	2.2	2.5	1.4	0.7	3.6
12	0.9	0.9	0.6	2.8	4.4	4	2.9	3.3	3.8	2.6	2.8	2.2	2.4	3.3	3.1	2	2.4	3.3	2.4	2.4	1.8	1.2	1	0.7	2.4
13	0.6	0.4	0.4	0.1	0.4	0.7	0.4	1.6	1.5	1.5	2.8	3.4	3.9	3.4	3.2	3.3	4	3.1	2.4	2.5	3.3	2.7	2	1.6	2.1
14	2.8	2.7	3.6	3.9	2.9	2.3	1.4	1	1.5	2.3	3.2	2.9	3.2	3.3	3.9	3	2.2	1.7	2.4	0.6	0.9	0	1.3	2.4	2.3
15	3.6	1.9	1.5	1.6	1.5	2.2	2.1	1.7	1.9	2.5	2.6	2.6	2.8	3	3.1	3.2	3.9	4.9	5.4	5.3	4.4	4.3	4.5	3.9	3.1
16	4.1	3.6	3.9	3.9	2.9	3.1	2.7	4.9	5.5	5.7	5.9	5.6	6.4	7	7.3	6.2	5.6	5.3	4.8	3.6	2.7	1.5	0.5	0.5	4.3
17	0.4	0.2	0.7	0.8	0.9	1.1	1.2	1.3	0.8	1.1	1.4	1.4	1.5	2.2	2.2	2.4	3.6	2.9	1.6	1.8	2.3	3	3	3.5	1.7
18	3.5	3.4	3.2	3	2.8	2.9	2.9	3.3	3.4	3.7	2.4	1.5	0.9	2	1.8	3.3	2.9	1.6	0.6	0.7	0.3	2.1	2.4	2.8	2.4
19	3.2	3.2	2.9	3	3.7	3.6	3.7	3.7	4.1	4	4.4	5.3	5	5.3	4.4	3.2	2	0.6	2.1	1.4	0.9	2.2	2.1	0.3	3.1
20	0.8	0.4	1.1	1.4	1.9	1.8	2.2	1.8	3	3.3	3.2	4.3	1.8	1	3.3	2.8	5	4.7	4.6	3.6	2.9	3.1	3.6	4.1	2.7
21	3.1	2.6	1.7	0.8	0.3	0	0.6	1	0.8	0.8	2.5	4.3	5	5.4	5.8	5.2	5.3	4.2	3	2.4	2.2	0.7	0.5	1	2.5
22	1.8	1.8	0.8	0.8	0.8	0.5	1	2.4	2.9	5.2	3.5	5.6	7.4	7.3	8.3	6.8	5.5	4.7	4.4	3	1.7	1.9	1.7	1.6	3.4
23	1	1.7	3.1	3.9	3.3	3.6	4	3.9	3.9	4.6	4.9	4.2	4.1	3.7	5	3.6	3.1	2.5	3.3	2.8	2.7	2.2	1.8	1.7	3.3
24	1.3	1.6	2	2.4	2.5	2.3	2.6	2.9	3.7	4.2	3.3	3.4	3.6	3.6	4.1	3.4	3.2	3.1	2.9	2.3	2.6	3	3.6	3.5	3
25	2.8	2.3	2.4	2.4	2	2.4	3.4	4.8	4.7	5.5	5.2	5	4.8	4.5	4.5	3.9	3.3	2.9	2.2	2.5	3.1	2.9	3.4	3.1	3.5
26	2.9	2.6	2.1	2.2	2.6	3	4.1	3.7	4.4	4.5	3.9	4.2	4.2	4.2	4	3.7	3.9	3	2.2	2.1	1.9	2.4	2.7	2.7	3.2
27	3	2.6	2.1	1.1	0.8	1	1.6	1.5	2.3	1.8	2.1	2.4	3	3.4	3.2	2.8	2.8	2.8	1.7	1.8	1.4	2	2	2.1	2.1
28	1.8	1.6	1.4	1.3	1.1	0.9	1.6	2.8	2.9	3.1	3.2	3.5	4.1	3.7	4.5	4.6	4.3	3.2	1.4	1.6	1.3	2	2.7	2.7	2.6
29	2.1	2.1	1.2	1	2.2	2.4	2.8	3.5	3	3.9	3.7	2.8	3.4	4.5	4.7	5.1	5.8	5.5	4.5	3.5	3.5	3.5	2.8	2.5	3.3
30	2.4	3	2.7	1.7	1.5	0.9	1.3	1.4	1.3	1.6	1.6	0.7	1.4	1.1	2.1	2.2	1.3	1.8	2.4	2.8	2.6	2.3	1.8	1.4	1.8
Avg	2.4	2.2	2.1	2.1	2.1	2.1	2.4	2.8	3.2	3.5	3.7	4	4.2	4.2	4.4	4.2	3.8	3.4	2.8	2.6	2.4	2.5	2.5	2.4	3
SD	1.2	1.2	1.1	1.2	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.8	2	1.9	1.9	1.6	1.4	1.3	1.2	1.1	1.2	1.3	1.3	1.3	0.9
S/A	0.49	0.52	0.54	0.57	0.54	0.56	0.55	0.51	0.44	0.44	0.43	0.44	0.48	0.45	0.43	0.38	0.35	0.38	0.42	0.41	0.49	0.5	0.51	0.53	0.29
Min	0.4	0.2	0.3	0.1	0	0	0.1	0.3	0.8	0.8	1.4	0.7	0.9	1	1	2	1.3	0.6	0.6	0.6	0.3	0	0.5	0.3	1.7
Max	4.5	4.5	4.2	4.4	4.4	4.1	5.4	4.9	5.6	6.3	9.3	10.3	10.4	9.2	8.3	7.5	6.7	6	5.4	5.3	5.4	6.1	5.7	5.3	5.7
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

April 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	82	77	83	84	81	79	93	104	120	120	118	122	106	114	118	135	101	102	111	102	104	122	105	86	105
2	62	63	52	7	16	32	38	40	61	67	74	77	82	84	73	62	67	85	97	106	114	127	119	128	86
3	123	129	129	140	157	160	159	164	183	194	211	215	218	228	241	244	244	247	230	234	267	270	272	274	219
4	266	266	259	253	252	257	255	257	267	262	255	253	256	251	248	253	249	250	238	218	204	215	223	232	252
5	250	270	285	311	201	201	210	42	61	80	128	119	118	84	103	110	131	133	134	134	158	182	183	178	134
6	182	177	162	159	169	180	176	178	185	178	185	207	249	317	266	300	300	298	266	241	262	268	272	262	216
7	266	260	262	266	258	257	254	263	277	277	259	257	252	245	259	258	268	277	274	270	268	252	245	255	262
8	240	221	229	256	258	244	243	256	263	261	252	244	235	226	221	234	231	234	220	206	184	173	160	185	236
9	188	186	164	200	198	324	306	341	245	256	290	302	282	272	289	255	248	246	70	77	103	121	130	142	233
10	152	136	133	126	134	137	152	169	188	181	189	191	196	208	216	218	229	198	194	190	186	192	192	178	190
11	162	170	182	183	195	193	201	225	238	232	254	256	278	282	311	316	315	312	319	327	320	341	326	292	260
12	262	278	295	350	2	0	14	10	351	329	328	338	301	280	282	298	286	106	90	76	77	125	136	132	349
13	150	202	201	194	221	226	233	355	4	57	81	78	89	90	97	96	114	116	114	113	121	121	124	126	102
14	133	119	118	119	118	129	143	154	149	171	174	176	185	203	194	181	190	174	196	193	116	200	359	351	158
15	357	16	359	321	332	333	324	316	314	293	300	301	308	306	308	314	335	339	344	346	349	348	334	340	331
16	341	335	340	335	329	316	320	353	8	5	15	9	18	25	15	31	35	26	26	27	34	8	16	39	8
17	322	293	302	307	307	306	309	319	323	333	254	318	322	263	227	179	164	163	152	161	183	196	195	205	218
18	216	222	225	221	222	224	228	249	265	266	266	279	339	238	236	239	247	239	153	101	107	184	194	200	233
19	207	205	205	214	218	217	219	231	238	247	242	233	232	242	229	219	222	186	187	193	173	208	200	114	223
20	117	110	111	121	120	118	116	135	158	153	170	165	166	164	157	153	169	173	174	178	177	174	183	190	162
21	193	199	207	217	222	295	293	342	360	91	177	195	208	229	223	226	224	221	208	198	272	302	219	198	216
22	200	110	252	234	159	102	211	243	253	272	260	257	253	258	259	272	270	276	270	262	236	208	206	197	255
23	182	190	210	213	217	211	216	240	271	271	272	275	289	282	278	294	301	40	87	103	119	127	128	116	245
24	99	77	80	76	79	79	78	85	100	107	95	87	88	86	94	125	133	150	160	166	181	191	196	198	116
25	194	193	189	196	184	184	195	207	218	223	217	217	212	217	210	211	206	201	188	181	191	191	195	197	204
26	196	201	207	207	205	220	227	246	258	251	241	244	227	222	206	214	208	205	202	200	189	188	195	199	219
27	209	212	232	224	215	218	219	239	258	254	228	229	213	220	205	191	179	127	125	165	177	187	194	206	206
28	210	213	219	214	221	221	219	231	233	230	237	223	220	207	210	212	214	216	180	176	182	182	196	198	213
29	199	217	209	219	204	218	229	236	244	242	260	280	10	14	8	16	19	26	29	30	36	32	38	35	352
30	36	34	31	32	26	338	344	355	30	51	64	57	180	130	96	76	65	94	128	127	120	126	136	147	76
Avg	199	196	202	205	203	212	212	237	244	240	231	229	233	239	235	235	232	209	177	168	177	189	197	203	221
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

April 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	5.4	4.9	4.1	4.2	4.2	3.9	4.3	5.3	5	6.3	6.9	7.6	6.1	6.5	6.4	5.4	4.2	3.8	2.7	2.4	1.6	2.2	1.7	0.9	4.4
2	0.9	0.7	0.7	0.5	1.3	1.8	1.7	2.1	3.3	2.7	3.6	5.3	5.8	5	5.4	5.2	4	4.9	4.4	6	5.6	5.5	5	5.2	3.6
3	6.7	5.6	3.3	3.3	4.2	6.4	9	6.9	9.5	10.5	14.5	16.1	15.7	14.9	12.8	12.4	11.6	9.8	7.2	6.5	9.4	11.5	10.6	9.4	9.5
4	7.9	7.3	5.4	5	5.2	5.7	5.9	8	9.3	9.5	8.2	8.5	9.5	9.3	9.4	9.6	9.2	6.9	4.7	3.4	2.7	3	2.6	2.9	6.6
5	3.4	2.6	1.6	0.4	0.1	0.2	0.5	0.7	3	3.2	3.3	5.8	5.3	6	6.4	7.1	6.6	6.2	5	5	4.9	6.4	6.1	5.5	4
6	6	6.2	5.3	6.2	5.9	7.3	6.7	7.2	7.6	6.7	7.9	7.7	10.2	6.1	2.5	5.1	4.7	3.4	2.6	3.3	6.7	6.3	7.1	8.5	6.1
7	8.2	7.8	7	5.6	4.9	5	5.2	7.6	7.3	7.7	7.1	7.9	8.8	9.5	10.1	11.7	10.1	8.7	7	5.1	4	2.7	3	3.6	6.9
8	2.9	2.9	2.9	4.5	4	3.4	4.7	8.2	8.9	8.8	8	9.1	9.1	10.1	9.6	9.1	7.4	6.2	3.1	2.8	1.6	1.6	3	3.9	5.7
9	4	2.9	2.9	4.3	3.2	2	1	1.2	3.7	4.8	5.2	5.3	5.4	4.9	4.5	6.1	5.7	4.6	2.8	2.9	3.4	3.9	2.8	3.4	3.8
10	2.9	2.7	2.5	2.9	3.3	4.3	4.8	6	6.4	5.2	6.5	8.5	11.1	10.4	11.5	11.7	8.2	5.7	6.7	6.7	7.2	7.9	8.4	6	6.6
11	4.9	6.5	7.2	7.2	5.7	3.4	5	6.8	6	7.5	8.5	8.7	8.8	8.2	10.5	7.5	8.1	8	6.8	6.5	4.6	4.9	2.9	1.8	6.5
12	1.4	2	1.7	5.2	7.3	7.2	5.3	5.9	6.4	5.5	5.6	5.1	4.8	6.4	6	4.3	4.8	5	4	4.1	2.8	2	1.9	1.4	4.4
13	1.1	0.9	1	0.3	0.6	1.1	0.9	2.7	2.7	2.9	4.8	5.6	6.2	5.6	5.3	5.6	6.2	5	3.7	3.9	5.3	4.3	3.4	3	3.4
14	4.7	4.9	5.5	6.1	4.6	4.2	3.2	2.6	2.9	4.1	5.7	5.2	5.4	5.5	6.6	5	4.2	3.1	4.2	1.2	2.1	0.3	2.5	4.3	4.1
15	6.1	3.9	3.5	3.4	3.1	4.2	4.4	4	4.4	5.3	5.9	5.6	5.8	6.1	6.4	6.6	7.3	8.1	9.1	9.3	7.9	7.4	7.5	7	5.9
16	7.8	6.7	6.8	7.5	5.9	6.2	5.3	8.5	9.4	9.5	10	9.6	11	11.9	12.6	10.4	9.7	8.7	8.2	6.2	4.7	2.8	1.1	1	7.6
17	0.7	0.5	1.3	1.6	1.7	2	2.7	2.8	2	2.5	3.1	3.1	3.5	4.1	4.2	4.4	5.6	4.6	2.7	3	3.9	4.6	4.4	4.9	3.1
18	4.8	4.8	4.7	4.3	4	4	4.4	5.6	6	5.8	4.5	3.2	2.4	3.9	3.7	5.6	5	2.8	1.3	1.3	0.7	3.8	4	4.1	4
19	4.5	4.6	4.2	4.2	5.6	5.3	5.4	5.6	6.5	6.5	7	8.3	7.9	8.7	7.2	5.2	3.3	1.5	3.7	2.5	1.8	3.3	3.5	0.6	4.9
20	1.4	1.2	2	2.7	3.1	3	3.6	3.1	5.1	5.4	5.6	7.8	3.2	2.3	5.7	5.2	9.1	8.2	7.9	6.3	5.1	5.3	6.2	6.8	4.8
21	5.3	4.5	3	1.6	0.8	0.1	2	2.4	2.1	2.2	4.8	7.2	8	8.7	9	8	8.5	6.7	4.5	4.1	4.8	1.6	1.1	1.8	4.3
22	3.3	2.9	1.7	1.9	1.7	1.2	1.9	4.1	4.6	9.4	6.5	9.3	12	13.6	14.9	13.2	9.9	9.1	8.3	5.3	2.7	2.8	2.5	2.7	6.1
23	1.9	2.9	4.7	5.9	5	5.8	5.8	6.4	7.4	8.5	9	8.2	8.5	7.6	9.4	6.9	6.1	5	5.6	4.6	4.2	3.3	2.9	2.9	5.8
24	2.1	2.5	3.2	3.6	4	3.8	4.1	4.5	6.1	6.5	5.6	5.4	5.7	5.9	6.4	6	5.1	5.1	4.8	4.2	4.7	4.9	6	5.9	4.8
25	4.8	4.2	4.2	4	3.6	4.4	6.1	7.7	7.4	8.5	8	7.3	7.4	7.3	7	6.5	5.5	5	3.9	4.2	5.4	4.6	5.8	5	5.7
26	4.7	4	3.2	3.2	3.9	4.4	6.1	6.5	7.8	7.3	6.5	6.7	6.8	7	6.7	5.9	6.1	5.1	3.2	3	3.7	4	4.4	4.5	5.2
27	4.5	3.8	3.4	1.9	1.4	1.6	2.5	3.1	4.3	3.7	4.1	4.5	5	5.4	5.6	4.9	4.8	4.4	2.8	3.3	3	3.7	3.4	3.1	3.7
28	2.6	2.5	2.2	2.1	1.8	1.7	2.8	4.6	4.9	5	5.9	6.2	6.6	6.4	7.1	7.8	6.7	5.1	2.1	2.9	2.7	3.7	4.7	4.7	4.3
29	3.4	3.2	2.1	1.8	3.4	3.5	4.4	6	5.4	6.5	6.6	5.3	6.4	7.5	8	8.8	10.1	9.8	7.5	7	6.3	6.4	5.3	4.6	5.8
30	4.3	5.2	4.8	3.4	3	2.3	2.6	2.6	2.7	2.9	2.7	2	3.1	2.6	3.7	3.8	2.5	2.9	3.7	4.5	4	3.7	3.3	2.8	3.3
Avg	4.1	3.8	3.5	3.6	3.6	3.6	4.1	5	5.6	6	6.4	6.9	7.2	7.2	7.5	7.2	6.7	5.8	4.8	4.4	4.3	4.3	4.2	4.1	5.2
S D	2.1	1.9	1.8	1.9	1.8	2	2	2.2	2.2	2.4	2.4	2.6	2.9	2.9	3	2.6	2.3	2.2	2.1	1.8	2	2.2	2.2	2.2	1.5
S/A	0.51	0.5	0.5	0.54	0.5	0.54	0.48	0.45	0.4	0.39	0.37	0.38	0.41	0.4	0.4	0.36	0.35	0.38	0.44	0.42	0.47	0.52	0.53	0.53	0.28
Min	0.7	0.5	0.7	0.3	0.1	0.1	0.5	0.7	2	2.2	2.7	2	2.4	2.3	2.5	3.8	2.5	1.5	1.3	1.2	0.7	0.3	1.1	0.6	3.1
Max	8.2	7.8	7.2	7.5	7.3	7.3	9	8.5	9.5	10.5	14.5	16.1	15.7	14.9	14.9	13.2	11.6	9.8	9.1	9.3	9.4	11.5	10.6	9.4	9.5
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

April 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	1017	1016	1016	1016	1016	1016	1016	1016	1017	1017	1016	1015	1014	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1015
2	1013	1013	1012	1012	1012	1012	1013	1013	1013	1014	1013	1012	1011	1011	1010	1010	1008	1007	1007	1006	1005	1004	1003	1002	1010
3	1001	999	998	997	997	996	994	993	993	992	991	991	991	991	991	992	993	994	995	996	997	999	1000	1001	995
4	1002	1003	1003	1004	1005	1006	1007	1008	1008	1008	1008	1008	1008	1007	1007	1007	1006	1007	1007	1008	1009	1009	1009	1009	1007
5	1010	1010	1010	1010	1011	1011	1012	1013	1013	1013	1013	1012	1011	1010	1009	1009	1008	1007	1007	1006	1006	1005	1005	1004	1009
6	1004	1003	1002	1001	999	999	998	997	995	994	992	991	991	991	991	990	990	991	991	993	993	994	994	995	995
7	995	996	996	997	997	998	999	999	1000	1000	1000	1000	1000	1000	1000	1000	1001	1002	1002	1004	1005	1006	1006	1007	1000
8	1007	1007	1007	1008	1008	1009	1010	1010	1010	1010	1010	1009	1008	1007	1006	1006	1006	1006	1007	1007	1008	1009	1009	1009	1008
9	1009	1009	1008	1008	1008	1009	1009	1010	1010	1011	1011	1011	1011	1010	1010	1011	1011	1011	1012	1012	1013	1014	1015	1015	1011
10	1015	1015	1014	1014	1014	1014	1014	1014	1015	1015	1015	1014	1014	1013	1012	1011	1011	1011	1011	1011	1011	1011	1011	1010	1013
11	1009	1007	1006	1005	1005	1005	1005	1005	1005	1004	1004	1004	1005	1005	1006	1008	1009	1010	1012	1013	1014	1015	1015	1016	1008
12	1016	1016	1017	1017	1018	1019	1020	1021	1021	1022	1022	1021	1021	1020	1020	1019	1019	1020	1020	1020	1020	1021	1021	1022	1020
13	1022	1022	1022	1021	1021	1022	1022	1022	1022	1022	1022	1021	1020	1020	1019	1019	1018	1018	1017	1016	1016	1016	1015	1015	1020
14	1014	1012	1011	1011	1010	1009	1009	1009	1008	1008	1007	1007	1006	1005	1004	1004	1004	1004	1004	1005	1005	1005	1005	1005	1007
15	1004	1004	1004	1004	1005	1006	1006	1007	1007	1008	1008	1008	1009	1009	1010	1010	1011	1012	1013	1014	1015	1015	1016	1016	1009
16	1016	1017	1017	1017	1017	1018	1019	1020	1020	1021	1021	1022	1022	1022	1022	1022	1023	1024	1024	1025	1025	1025	1025	1025	1021
17	1024	1024	1024	1024	1025	1025	1026	1027	1027	1027	1027	1027	1026	1025	1024	1024	1023	1022	1022	1021	1021	1021	1021	1021	1024
18	1020	1020	1020	1019	1019	1019	1019	1019	1020	1020	1020	1019	1018	1017	1016	1016	1015	1015	1014	1015	1015	1015	1015	1015	1017
19	1015	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1013	1013	1013	1013	1012	1012	1012	1012	1013	1013	1013	1014	1013	1013
20	1012	1012	1011	1011	1010	1010	1010	1010	1010	1010	1009	1007	1007	1006	1005	1004	1003	1004	1004	1005	1006	1007	1007	1007	1008
21	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1005	1004	1003	1003	1002	1003	1003	1004	1005	1006	1007	1007	1008	1005
22	1007	1005	1005	1005	1005	1005	1006	1006	1005	1006	1006	1005	1005	1006	1006	1007	1008	1009	1010	1012	1013	1013	1013	1013	1008
23	1013	1012	1012	1013	1013	1013	1014	1015	1016	1016	1016	1016	1016	1016	1017	1017	1018	1018	1018	1019	1020	1021	1021	1022	1016
24	1022	1022	1022	1022	1022	1023	1024	1025	1025	1025	1025	1025	1024	1024	1023	1022	1022	1022	1022	1022	1022	1023	1023	1023	1023
25	1023	1023	1023	1023	1023	1024	1024	1025	1025	1025	1025	1025	1025	1024	1024	1023	1023	1023	1023	1022	1023	1024	1024	1024	1024
26	1024	1023	1023	1024	1024	1024	1025	1025	1025	1026	1026	1025	1025	1024	1024	1023	1023	1023	1023	1023	1024	1025	1025	1026	1024
27	1025	1025	1026	1026	1026	1027	1028	1028	1028	1028	1028	1028	1027	1027	1026	1026	1026	1026	1026	1026	1027	1027	1027	1027	1027
28	1027	1026	1026	1026	1026	1026	1027	1027	1027	1027	1027	1027	1027	1026	1025	1024	1024	1023	1023	1023	1023	1023	1023	1023	1025
29	1023	1023	1023	1023	1023	1023	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1025	1025	1025	1026	1026	1026	1026	1026	1024
30	1026	1025	1025	1025	1025	1026	1026	1027	1027	1026	1026	1026	1025	1025	1024	1023	1023	1023	1023	1023	1023	1022	1022	1022	1024

Avg	1014	1014	1013	1013	1014	1014	1014	1014	1015	1015	1014	1014	1013	1013	1013	1013	1013	1013	1013	1013	1014	1014	1014	1014	1014
S D	8	9	9	9	9	9	9	10	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9
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	995	996	996	997	997	996	994	993	993	992	991	991	991	991	991	990	990	991	991	993	993	994	995	995	995
Max	1027	1026	1026	1026	1026	1027	1028	1028	1028	1028	1028	1028	1027	1027	1026	1026	1026	1026	1026	1026	1026	1027	1027	1027	1027
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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

April 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	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13.1	13.4	13.5	13.5	13.4	13.4	13.4	13.3	13.4	13.3	13	12.9	12.9	12.9	12.9	12.9	12.9	13.1
2	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13	13.4	13.5	13.5	13.4	13.4	13.4	13.4	13.3	13.2	13	12.9	12.9	12.9	12.9	12.9	12.8	13	
3	12.8	12.8	12.8	12.8	12.8	12.7	12.9	13.1	13.2	13.3	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	
4	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.6	13.5	13.4	13.4	13.3	13.4	13.4	13.3	13.3	13.3	13.1	13	12.9	12.9	12.9	12.9	12.8	13.1	
5	12.8	12.8	12.8	12.8	12.7	12.7	13.3	13.6	13.4	13.3	13.3	13.2	13.3	13.3	13.3	13.3	13.3	13.2	13	12.9	12.9	12.9	12.8	12.8	13.1	
6	12.8	12.8	12.8	12.8	12.8	12.8	12.7	12.8	13	12.8	13.2	13	13.1	13.4	13.3	13.3	13.3	13.1	13	12.9	12.9	12.8	12.8	12.7	13	
7	12.7	12.7	12.7	12.6	12.6	12.6	13.4	13.7	13.6	13.6	13.6	13.6	13.6	13.7	13.6	13.7	13.7	13.4	13	12.9	12.9	12.9	12.8	12.8	13.2	
8	12.8	12.8	12.8	12.8	12.8	12.7	13.5	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	12.9	12.9	12.8	13.2	
9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13.4	13.5	13.5	13.4	13.3	13.4	13.4	13.3	13.3	13.4	13.2	13	12.9	12.9	12.9	12.8	12.8	13.1	
10	12.8	12.8	12.8	12.8	12.8	12.7	13.1	13.5	13.4	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13	12.9	12.9	12.9	12.9	12.8	13.1	
11	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13	13.5	13.4	13.3	13.3	13.3	13.3	13.1	13	12.9	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13	
12	12.7	12.7	12.7	12.7	12.7	12.7	13.4	13.7	13.6	13.5	13.4	13.4	13.4	13.5	13.4	13.4	13.4	13.1	13	12.9	12.9	12.8	12.8	12.8	13.1	
13	12.8	12.8	12.8	12.8	12.7	12.7	12.9	13.6	13.7	13.6	13.5	13.5	13.5	13.5	13.2	13.6	13.6	13.2	13	12.9	12.9	12.9	12.9	12.9	13.1	
14	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.9	13	13.4	13.4	13.4	13.3	13.4	13.3	13.3	13	13	12.9	12.9	12.9	12.8	12.8	12.8	13	
15	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9	13.3	13.5	13.5	13.6	13.6	13.5	13.3	13.2	13	13	12.9	12.9	12.9	12.8	12.8	12.8	13	
16	12.7	12.7	12.7	12.6	12.6	12.6	13.2	13.7	13.6	13.6	13.5	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	13.1	
17	12.8	12.8	12.8	12.7	12.7	12.7	13.6	13.7	13.5	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.1	13	12.9	12.9	12.9	12.8	12.8	13.1	
18	12.8	12.8	12.8	12.8	12.7	12.7	13.4	13.6	13.4	13.4	13.3	13.2	13.2	13.2	13.1	13.2	13.2	13	13	12.9	12.9	12.8	12.8	12.8	13	
19	12.8	12.8	12.7	12.7	12.7	12.7	13.2	13.5	13.4	13.3	13.3	13.2	13.2	13.3	13.3	13.3	13.3	13	12.9	12.9	12.9	12.9	12.8	12.8	13	
20	12.8	12.8	12.8	12.7	12.7	12.7	12.8	12.9	13.4	13.4	13.3	13.2	13.2	13.2	13.3	13.3	13.2	13.1	13	12.9	12.9	12.9	12.8	12.8	13	
21	12.8	12.8	12.7	12.7	12.7	12.7	12.9	13.5	13.4	13.3	13.2	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	
22	12.8	12.7	12.7	12.7	12.7	12.7	13	13.5	13.5	13.4	13.6	13.5	13.5	13.5	13.5	13.5	13.5	13.3	13	12.9	12.9	12.9	12.9	12.8	13.1	
23	12.8	12.8	12.8	12.8	12.8	12.8	13.3	13.5	13.4	13.3	13.3	13.3	13.3	13.2	13.2	13.2	13.2	13.1	13	12.9	12.9	12.8	12.8	12.8	13.1	
24	12.8	12.8	12.7	12.7	12.7	12.7	13.4	13.5	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13	13	12.9	12.9	12.9	12.8	12.8	13	
25	12.8	12.8	12.8	12.7	12.7	12.7	13.2	13.3	13.3	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	12.9	12.9	12.9	12.8	12.8	12.8	13	
26	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13	13	13	13	12.9	12.8	12.8	12.8	12.7	12.7	12.9	
27	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13	13	13	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	13.2	13.4	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.9	12.8	12.8	12.8	12.8	12.7	12.9	
29	12.7	12.7	12.7	12.7	12.6	12.7	13.2	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.3	13.3	13.1	12.9	12.8	12.8	12.8	12.8	12.8	13	
30	12.8	12.7	12.7	12.7	12.7	12.7	12.7	13.3	13.5	13.4	13.4	13.3	13.3	13.2	13.2	13.2	13.3	13.2	13	12.9	12.9	12.8	12.8	12.8	13	
Avg	12.8	12.8	12.7	12.7	12.7	12.7	13.1	13.4	13.4	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.1	12.9	12.9	12.9	12.8	12.8	12.8	13	
S D	0	0.1	0.1	0	0	0	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0	0	0	0	0	0	0.1	
S/A	0	0	0	0	0	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0	0	0	0	0.01	
Min	12.7	12.7	12.7	12.6	12.6	12.6	12.7	12.8	13	12.8	13.1	13	13.1	13.1	13	13	12.9	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.9	
Max	12.9	12.9	12.8	12.8	12.8	12.8	13.6	13.8	13.7	13.6	13.6	13.6	13.6	13.7	13.6	13.7	13.7	13.4	13	12.9	12.9	12.9	12.9	12.9	13.2	
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640	

Data Recovery: 0.0% missing; 0.0% untested; 0.0% failed QC -- 8640 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.