

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

May 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	35	97 ?	285 ?	339	443	523 ?	661 ?	608 ?	?	?	?	172 ?	119	29	0	0	0	0	0	3310 ?
2	0	0	0	0	0	33	119 ?	159	284 ?	?	354 ?	467 ?	427 ?	?	?	?	207	87	20	0	0	0	0	0	2156 ?
3	0	0	0	0	0	28	138	199 ?	?	?	?	477 ?	220 ?	247 ?	406 ?	?	200 ?	108	24	0	0	0	0	0	2047 ?
4	0	0	0	0	0	20	145	250	332	447	461 ?	556 ?	339 ?	243 ?	285 ?	322 ?	138	62	14	0	0	0	0	0	3614 ?
5	0	0	0	0	0	8	110	170	412 ?	300	143	?	75 ?	79 ?	230	177	50	106	12	0	0	0	0	0	1871 ?
6	0	0	0	0	0	20	124	183	153	202	283 ?	585 ?	460 ?	?	467 ?	?	127	51	32	0	0	0	0	0	2686 ?
7	0	0	0	0	0	17	102 ?	76	79 ?	183 ?	312	536 ?	?	376 ?	376 ?	?	?	110 ?	24	0	0	0	0	0	2190 ?
8	0	0	0	0	0	43	?	?	?	?	512 ?	576 ?	530	528 ?	500 ?	314	189	37	21	0	0	0	0	0	3250 ?
9	0	0	0	0	0	32	104 ?	?	?	?	?	?	?	?	?	?	?	50 ?	22	0	0	0	0	0	208 ?
10	0	0	0	0	0	40	?	510 ?	634 ?	825 ?	604 ?	791 ?	774 ?	?	?	?	?	?	38	0	0	0	0	0	4216 ?
11	0	0	0	0	0	11	72	78	140	204	161	268	100 ?	84	117	77	40 ?	28 ?	4	0	0	0	0	0	1384 ?
12	0	0	0	0	0	49	?	?	?	791 ?	882 ?	817 ?	419 ?	487 ?	?	370 ?	?	?	39	0	0	0	0	0	3853 ?
13	0	0	0	0	0	50	?	?	?	645 ?	?	?	?	?	?	431 ?	?	?	39	0	0	0	0	0	1165 ?
14	0	0	0	0	0	26	123	233 ?	391 ?	457 ?	388	477	640	353	432	366 ?	158	102	48	0	0	0	0	0	4196 ?
15	0	0	0	0	1	29	104 ?	324 ?	459 ?	300 ?	435 ?	298 ?	?	579 ?	433 ?	?	227 ?	97 ?	33	0	0	0	0	0	3320 ?
16	0	0	0	0	2	16	47	126	252	475 ?	632 ?	638 ?	444 ?	?	159 ?	312 ?	283 ?	77	33	0	0	0	0	0	3495 ?
17	0	0	0	0	1	34	172	241 ?	392 ?	397	428 ?	124 ?	108 ?	233	95 ?	57 ?	53	51	6	0	0	0	0	0	2392 ?
18	0	0	0	0	0	7	27 ?	72	156	277	351	549 ?	?	?	475 ?	320	191	109	27	1	0	0	0	0	2563 ?
19	0	0	0	0	0	24	81	164	313	412	588	641 ?	676 ?	627 ?	?	?	?	?	48	2	0	0	0	0	3577 ?
20	0	0	0	0	4	52	?	?	720 ?	827 ?	970 ?	?	800 ?	?	?	?	?	?	47	3	0	0	0	0	3424 ?
21	0	0	0	0	4	48	?	?	?	872 ?	1005 ?	1059 ?	797 ?	?	314 ?	?	?	?	47	3	0	0	0	0	4150 ?
22	0	0	0	0	5	41	72 ?	421 ?	592 ?	774	892 ?	1020 ?	899 ?	502 ?	551 ?	324	245	?	37	5	0	0	0	0	6381 ?
23	0	0	0	0	4	54	103 ?	447 ?	335 ?	885 ?	857 ?	827 ?	690 ?	?	351 ?	357 ?	?	153 ?	51	4	0	0	0	0	5117 ?
24	0	0	0	0	3	47	149 ?	291 ?	269 ?	498 ?	498 ?	652 ?	629 ?	?	504 ?	?	291	146 ?	162 ?	42	4	0	0	0	3688 ?
25	0	0	0	0	5	54	145 ?	290 ?	309 ?	540 ?	453 ?	617 ?	993 ?	?	513 ?	391	293	187	46	2	0	0	0	0	4839 ?
26	0	0	0	0	4	49	154	210	359 ?	529 ?	567 ?	535 ?	?	545 ?	?	?	212 ?	128	45	4	0	0	0	0	3341 ?
27	0	0	0	0	1	22	84	151	297	493	471	582 ?	364	528	260	259 ?	376 ?	174 ?	49	2	0	0	0	0	4113 ?
28	0	0	0	0	3	33	154 ?	433 ?	622	771	406	347 ?	733 ?	369	?	277 ?	245	156	46	2	0	0	0	0	4597 ?
29	0	0	0	0	3	34	147 ?	316 ?	500 ?	607 ?	640 ?	729 ?	967 ?	786 ?	?	?	353 ?	164	51 ?	6	0	0	0	0	5302 ?
30	0	0	0	0	2	43	162 ?	169	314 ?	707 ?	883	886	945 ?	882 ?	831 ?	715 ?	436 ?	?	46 ?	4	0	0	0	0	7024 ?
31	0	0	0	0	5	44 ?	?	274 ?	701 ?	783	612 ?	962 ?	932 ?	975 ?	?	626 ?	?	?	34 ?	1	0	0	0	0	5950 ?
Avg	0	0	0	0	2	34	114	243	374	542	552	617	581	470	377	332	207	105	34	1	0	0	0	0	3530 ?
S/D	0	0	0	0	2	14	37	119	174	221	234	224	287	244	178	158	103	47	14	2	0	0	0	0	1522
S/A	0	0	0	0	1.23	0.42	0.33	0.49	0.46	0.41	0.42	0.36	0.49	0.52	0.47	0.48	0.5	0.45	0.4	1.29	0	0	0	0	0.43
Min	0	0	0	0	0	7	27	72	79	183	143	124	75	79	95	57	40	28	4	0	0	0	0	0	208
Max	0	0	0	0	5	54	172	510	720	885	1005	1059	993	975	831	715	436	187	51	6	0	0	0	0	7024
n	0	0	0	0	27	346	201	209	196	218	224	160	128	116	119	146	183	213	331	22	0	0	0	0	2864

Daylight Data Recovery: 0.0% missing; 0.0% untested; 45.2% exceed the 15% QC threshold -- 5230 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.

May 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	1?	0	1	1	0?	0?	0?	?	?	?	0?	0	0	0	0	0	0	0	0	4?
2	0	0	0	0	0	0	1?	1	0?	?	0?	1?	0?	?	?	?	0	0	0	0	0	0	0	0	0	3?
3	0	0	0	0	0	0	2	0?	?	?	?	0?	0?	?	0?	?	0?	0	0	0	0	0	0	0	0	2?
4	0	0	0	0	0	0	1	1	1	0	0?	0?	0?	0?	0?	0?	0	0	0	0	0	0	0	0	0	3?
5	0	0	0	0	0	0	2	3	3?	1	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	14
6	0	0	0	0	0	1	2	1	1	0	0?	0?	0?	?	0?	?	0	0	0	0	0	0	0	0	0	5?
7	0	0	0	0	0	0	0?	0	0	0	1	2?	?	0?	0?	?	?	0?	0	0	0	0	0	0	0	3?
8	0	0	0	0	0	1	?	?	?	?	0?	0?	0	0?	0?	0	0	0	0	0	0	0	0	0	0	1?
9	0	0	0	0	0	0	1?	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	1?
10	0	0	0	0	0	0	?	?	?	?	0?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0?
11	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	5
12	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	0?	?	?	?	0	0	0	0	0	0	0?
13	0	0	0	0	0	0	?	?	?	?	?	?	?	?	0?	0?	?	?	?	0	0	0	0	0	0	0?
14	0	0	0	0	0	0	0	0?	0?	0?	0?	0	0	0	0	0?	0	0	0	0	0	0	0	0	0	2?
15	0	0	0	0	0	0	0?	0?	?	0?	0?	0?	?	0?	0?	0?	0?	0?	0?	0	0	0	0	0	0	0?
16	0	0	0	0	0	0	0	1	1	1?	?	?	0?	?	1?	4	0?	0	0	0	0	0	0	0	0	8?
17	0	0	0	0	0	0	1	0?	0?	0	0?	0?	0	0	0	0	0	0	0	0	0	0	0	0	0	2?
18	0	0	0	0	0	0	0	0	1	3	1	2?	?	?	0?	0	0	0	0	0	0	0	0	0	0	6?
19	0	0	0	0	0	0	0	0	1	0	0?	0?	0?	0?	?	?	?	?	?	0	0	0	0	0	0	1?
20	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0?
21	0	0	0	0	0	0	?	?	?	?	?	?	?	?	0?	?	?	?	?	0	0	0	0	0	0	0?
22	0	0	0	0	0	0	0?	?	?	?	?	?	?	0?	0?	0	0	?	?	0	0	0	0	0	0	0?
23	0	0	0	0	0	0	0?	?	0?	?	?	?	?	?	0?	0?	?	0?	?	0	0	0	0	0	0	0?
24	0	0	0	0	0	0	0?	0?	0?	2?	?	0?	?	0?	?	0	1	0?	0	0	0	0	0	0	0	3?
25	0	0	0	0	0	0	0?	0?	0?	0?	0?	0?	?	?	0?	0	0	0	0	0	0	0	0	0	0	0?
26	0	0	0	0	0	0	0	0	0?	0?	0?	0?	?	0?	?	?	0?	0	0	0	0	0	0	0	0	0?
27	0	0	0	0	0	0	1	1	1	0	0	0?	0	0	0	0?	?	0?	0	0	0	0	0	0	0	4?
28	0	0	0	0	0	1	0?	?	?	?	0?	0?	?	0?	?	0?	0	0	0	0	0	0	0	0	0	1?
29	0	0	0	0	0	0	0?	0?	0?	?	?	?	?	?	?	?	0?	0	0?	0	0	0	0	0	0	0?
30	0	0	0	0	0	0	0?	0	1?	0?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	1?
31	0	0	0	0	0	0?	?	0?	?	?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0?
Avg	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2?
SD	0	0	0	0	0	0	1	1	1	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	3
StA	0	0	0	0	5.57	1.2	1.23	1.58	1.27	1.48	2.05	1.92	1.68	2.79	2.63	3.14	2.47	3.14	2.82	0	0	0	0	0	0	1.31
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	0	0	0	0	0	1	2	3	3	3	1	2	0	1	2	4	1	1	1	0	0	0	0	0	0	14
n	0	0	0	0	27	348	212	190	163	147	149	120	98	94	121	141	184	225	333	22	0	0	0	0	0	2605

Daylight Data Recovery: 0.0% missing; 0.0% untested; 50.2% exceed the 15% QC threshold -- 5230 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

May 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	38	94 ?	227	291	372	412 ?	495 ?	505 ?	?	?	?	148 ?	100	24	0	0	0	0	0	2706 ?
2	0	0	0	0	0	28	76 ?	149	242 ?	?	345 ?	415 ?	362 ?	?	?	?	190	83	18	0	0	0	0	0	1908 ?
3	0	0	0	0	0	27	116	169 ?	?	?	?	340 ?	209 ?	230 ?	335 ?	?	163 ?	97	24	0	0	0	0	0	1711 ?
4	0	0	0	0	0	21	125	220	284	399	381 ?	502 ?	281 ?	199 ?	253 ?	265 ?	135	61	13	0	0	0	0	0	3137 ?
5	0	0	0	0	0	9	105	177	363 ?	289	125	49 ?	61 ?	63	205	176	49	104	11	0	0	0	0	0	1786 ?
6	0	0	0	0	0	18	114	182	153	200	255 ?	508 ?	422 ?	?	362 ?	?	123	50	31	0	0	0	0	0	2419 ?
7	0	0	0	0	0	18	97 ?	76	60	124 ?	308	488 ?	?	323 ?	331 ?	?	?	93 ?	23	0	0	0	0	0	1941 ?
8	0	0	0	0	0	25	?	?	?	?	430 ?	496 ?	496	448 ?	405 ?	302	185	35	21	0	0	0	0	0	2842 ?
9	0	0	0	0	0	29	69 ?	?	?	?	?	?	?	?	?	?	?	42 ?	21	0	0	0	0	0	161 ?
10	0	0	0	0	0	24	?	93 ?	136 ?	373 ?	550 ?	461 ?	527 ?	?	?	?	?	?	22	0	0	0	0	0	2185 ?
11	0	0	0	0	0	11	72	78	140	204	161	258	89	79	117	77	28	18	5	0	0	0	0	0	1336
12	0	0	0	0	0	31	?	?	?	152 ?	193 ?	208 ?	318 ?	273 ?	?	233 ?	?	?	28	0	0	0	0	0	1435 ?
13	0	0	0	0	0	26	?	?	?	276 ?	?	?	?	?	362 ?	296 ?	?	?	25	0	0	0	0	0	985 ?
14	0	0	0	0	0	25	111	194 ?	341 ?	409 ?	369	449	572	352	400	322 ?	151	102	40	0	0	0	0	0	3837 ?
15	0	0	0	0	?	28	99 ?	264 ?	252 ?	267 ?	359 ?	276 ?	?	381 ?	371 ?	229 ?	193 ?	85 ?	33	0	0	0	0	0	2836 ?
16	0	0	0	0	?	16	47	126	251	422 ?	440 ?	455 ?	416 ?	?	104 ?	276	237 ?	77	28	0	0	0	0	0	2896 ?
17	0	0	0	0	?	33	146	215 ?	370 ?	357	382 ?	110	88	233	76	48	53	51	6	0	0	0	0	0	2169 ?
18	0	0	0	0	0	7	24	72	156	275	351	503 ?	?	?	416 ?	308	191	109	27	1	0	0	0	0	2441 ?
19	0	0	0	0	0	24	81	164	305	392	462	517 ?	503 ?	457 ?	?	?	?	?	21	2	0	0	0	0	2929 ?
20	0	0	0	0	?	24	?	?	79 ?	82 ?	90 ?	?	600 ?	?	?	?	?	?	22	3	0	0	0	0	900 ?
21	0	0	0	0	?	24	?	?	?	198 ?	250 ?	147 ?	250 ?	?	237 ?	?	?	?	24	3	0	0	0	0	1133 ?
22	0	0	0	0	?	25	42 ?	82 ?	131 ?	197	213 ?	241 ?	303 ?	399 ?	445 ?	299	226	?	33	4	0	0	0	0	2641 ?
23	0	0	0	0	6 ?	38	66 ?	97 ?	258 ?	155 ?	212 ?	310 ?	302 ?	?	299 ?	265 ?	?	115 ?	49	4	0	0	0	0	2175 ?
24	0	0	0	0	4 ?	34	127 ?	203 ?	227 ?	465 ?	466 ?	527 ?	?	365 ?	?	272	122	147 ?	33	4	0	0	0	0	2997 ?
25	0	0	0	0	6 ?	51	123 ?	206 ?	213 ?	329 ?	386 ?	416 ?	423 ?	?	372 ?	345	252	162	45	2	0	0	0	0	3330 ?
26	0	0	0	0	5 ?	46	138	204	306 ?	432 ?	445 ?	456 ?	?	399 ?	?	?	163 ?	124	44	4	0	0	0	0	2767 ?
27	0	0	0	0	1	22	84	151	296	466	469	512 ?	362	485	277	256 ?	251 ?	146 ?	47	2	0	0	0	0	3826 ?
28	0	0	0	0	3	33	140 ?	76 ?	90	123	254	307 ?	425 ?	280	?	274 ?	209	137	46	2	0	0	0	0	2397 ?
29	0	0	0	0	3	30	104 ?	190 ?	353 ?	357 ?	426 ?	467 ?	228 ?	248 ?	?	?	195 ?	140	38 ?	6	0	0	0	0	2786 ?
30	0	0	0	0	2	41	140 ?	169	297 ?	335 ?	215	224	206 ?	201 ?	129 ?	128 ?	112 ?	?	26 ?	4	0	0	0	0	2229 ?
31	0	0	0	0	5	30 ?	95 ?	197 ?	215 ?	249	465 ?	263 ?	190 ?	105 ?	?	118 ?	?	?	19 ?	1	0	0	0	0	1951 ?
Avg	0	0	0	0	1	27	97	159	232	293	336	371	339	290	289	236	161	94	27	1	0	0	0	0	2284 ?
S D	0	0	0	0	2	10	32	57	92	113	120	141	155	127	116	86	64	40	12	2	0	0	0	0	845
S/A	0	0	0	0	1.55	0.37	0.33	0.36	0.4	0.39	0.36	0.38	0.46	0.44	0.4	0.36	0.4	0.42	0.42	1.31	0	0	0	0	0.37
Min	0	0	0	0	0	7	24	72	60	82	90	49	61	63	76	48	28	18	5	0	0	0	0	0	161
Max	0	0	0	0	6	51	146	264	370	466	550	527	600	485	445	345	252	162	49	6	0	0	0	0	3837
n	0	0	0	0	16	339	214	213	202	220	227	173	144	126	131	154	194	227	333	22	0	0	0	0	2961

Daylight Data Recovery: 0.0% missing; 0.0% untested; 43.4% exceed the 15% QC threshold -- 5230 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

May 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	18	18.7	19	19.2	19.2	19.4	19.8	20.6	21.7	22.3	23.4	24.5	25.5	26.4	27.1	27.5	27.3	25.9	24.9	23.3	21.7	21.4	21.3	20.8	22.5
2	20.3	20.1	19.8	19.6	19.6	19.7	20.5	21	22.3	23.7	24.8	24.7	25.3	25.6	26.2	27	26.8	26	24.2	22.6	21.9	21.6	21.2	20.9	22.7
3	20.5	21.1	20.9	20.6	20.1	19.9	20.3	21.2	22.6	23.9	25.8	27.2	27.8	25.9	27.4	28.6	28.2	26.9	25.5	24.3	23.5	23.2	22.6	22.3	23.8
4	22.1	21.9	21.8	21.7	21.8	21.9	22.3	23.1	23.8	24.9	26	26.8	27.9	28.1	26.1	24.7	24.1	22.5	21.6	21.4	21.2	21.4	22.1	22.1	23.4
5	20.5	18.7	18.4	18	17.6	17.8	18.1	19	21	21.7	21.6	19.1	18.7	18.9	19.3	20.2	20.2	20.7	21.2	21.4	21.5	21.6	21.6	21.5	19.9
6	21.5	21.3	21.1	20.9	20.6	20.5	21.1	21.9	22.2	22.4	22.8	25	25.4	26.4	27.2	27.2	25.8	25	24.2	23.6	23.1	22.7	22.1	21.9	23.2
7	21.9	22.1	22.2	22.2	22.2	22	22.3	22.2	21.4	20	20.8	22.7	24.7	25.3	26	26.6	26.7	26.4	24.3	22.9	22.3	21.3	19.9	18.1	22.8
8	16.9	17	17.2	17.5	17.5	17.7	18.7	20.8	22.2	23.5	24.5	24.9	25.4	26.7	27.3	27	26.9	26.2	25.2	24.4	24.2	23.8	23.3	23.1	22.6
9	23	22.9	22.4	22.2	22.1	21.9	22.9	24.5	25.5	26.4	27.6	28.8	29.7	30.4	30.8	31.1	30.9	30.1	28.6	27.7	27.2	26.2	24.6	24	26.3
10	23.1	22	21	20.1	19	18.4	19.5	20.8	21.7	22.3	22.4	23.2	23	23.5	24.2	24.4	24.5	24.3	21.7	20.6	19.8	19.1	18.8	18.8	21.5
11	18.8	18.9	18.5	18.2	17.8	17.3	17.2	16.8	16.6	16.5	16.3	16.5	15	14.3	13.5	12.3	11.7	11.4	11.5	11.7	11.8	11.3	10.8	10.4	14.8
12	10.1	9.4	8.7	8.4	8.3	8.5	10.1	12.4	14.8	16.4	18	19.2	20.2	21.2	22.3	19.9	18.8	18.5	17.9	16.8	15.8	15.5	14.6	14	15
13	13.8	13.1	11.6	11.9	12	11.9	14.9	17.2	19	19.1	19.9	20.2	20.3	20.1	19.9	19.7	19.8	19.5	18.4	17.3	16.6	16.5	16.8	16.7	16.9
14	16.3	16.5	16.8	17.2	18	18.5	19.2	20.3	21.3	22.1	22.2	22.4	23	23	22.8	23.1	22.7	22.1	21.7	21.4	21.3	21.2	21.2	21	20.6
15	20.3	19.7	19.1	19	19.2	19.2	19.9	21.6	23.1	24.1	25.2	25.3	26.3	26.6	26.2	26.2	25.5	25.1	23.7	22.5	21.5	21.1	20.9	20.9	22.6
16	20.8	20.6	20.2	20	20.1	20.1	19.9	20.3	21	22.5	24	24.9	25.7	26.4	21.8	23	24.7	24.1	23.3	22.8	22.3	21.8	21.5	21.5	22.2
17	21.3	21.1	21	21	20.9	20.8	21.3	22.1	23.1	23.5	24.3	18.4	15.8	15.6	15.4	15.4	14.6	13.9	12.9	12.5	11.9	11.8	11.9	11.5	17.6
18	11	10.7	10.2	10.5	10.7	10.9	10.7	10.1	10.5	11.1	11.9	13.4	14.3	14.8	15	14.4	13.9	13.3	12.6	12	11.8	11.7	11.6	11.6	12
19	11.5	11.6	11.6	11.8	12.1	12.3	12.6	12.9	13.4	13.9	14.3	14.8	15	14.9	15.5	15.8	15.4	14.7	13.5	12.1	11.3	10.8	10.6	10.2	13
20	8.8	9.1	9.3	9.6	9.6	10.2	12	14.4	16.3	17.3	18.2	19.1	19.6	19.8	20	19.6	18.7	18	16.5	15	14.1	13.6	13.5	13.2	14.8
21	12.8	12.9	12.8	12.7	12.8	13.5	15.3	17.3	19.6	21.3	22.1	22.4	23.2	22.9	22.7	22.7	22.5	22.1	21.4	19.9	18.7	17.9	17.4	17	18.5
22	16.8	16.7	16.5	16.6	16.5	16.3	18.3	21	22.5	23.6	24.6	25.3	26	25.5	24.9	24.7	24.4	24.8	23.8	22.5	21.5	21	20.4	20	21.4
23	19.3	18.8	18.5	18.2	18.1	18.3	19.4	21.5	22.9	24.2	24.9	25.6	26.1	26	26.4	26.4	26.3	25.1	24.1	22.9	22.2	21.5	20.9	20.5	22.4
24	20.1	19.7	19.5	19.3	19.6	19.9	20.8	22.5	23.6	23.2	24.6	24.7	25.2	25.6	25.3	24.8	22.4	22.4	23.2	22.6	22.1	21.7	21.4	21.2	22.3
25	20.9	20.6	20.2	19.9	19.8	19.9	20.9	22.5	23.7	24.9	25.2	26.4	27.1	27.4	26.6	26.3	26.2	25.9	25.2	23.9	23.1	22.4	22	21.6	23.4
26	21.3	21.1	20.7	20.6	20.9	21	21.7	22.6	23.7	24.7	25.1	25.4	25.9	25.6	25.3	25.1	24.6	23.8	23.4	22.7	21.8	21.2	21	20.9	22.9
27	21	20.7	20.3	20.2	20.2	20.4	20.7	21.4	22.5	23.9	24.3	24.9	24.6	25.1	24.5	24.4	23.9	23	21.4	21	21.1	20.9	20.6	20.6	22.2
28	20.5	20.3	20.1	20.1	19.9	20	20.4	22.8	25	26.2	26.7	27.3	28.2	26.4	26.3	26.1	25.5	26.1	25.7	24.7	24.1	23.5	23.2	23.1	23.8
29	22.9	22.8	22.7	22.5	22.3	22.2	22.7	23.6	24.6	25.3	26.5	27.3	28.7	29.7	30.3	30.9	30.4	27.4	26.7	25.8	25.3	24.9	23.6	23.1	25.5
30	21.7	21.1	20.5	20.3	20	19.8	20.2	20.6	21.3	22.8	24.1	25.3	26.1	26.9	27.4	26.5	26.3	26.4	25.7	24.1	23.1	22.3	21.7	21.5	23.2
31	21.4	21.2	21.1	21	20.7	20.6	21.6	23.3	24.9	25.9	26.9	27.5	27.9	28.6	29.2	29.8	29.8	29.6	29	27.2	24.6	23.6	23.8	23.1	25.1
Avg	18.7	18.5	18.2	18.1	18	18.1	18.9	20.1	21.2	22.1	22.9	23.3	23.8	24	24	23.9	23.5	22.9	22	21.1	20.4	20	19.6	19.3	20.9
S D	4.1	4	4.1	3.9	3.9	3.8	3.5	3.5	3.5	3.6	3.7	3.9	4.3	4.4	4.5	4.7	4.8	4.7	4.6	4.4	4.2	4.1	4.1	4.1	3.7
S/A	0.22	0.22	0.22	0.22	0.21	0.21	0.18	0.17	0.17	0.16	0.16	0.17	0.18	0.18	0.19	0.2	0.21	0.2	0.21	0.21	0.21	0.21	0.21	0.21	0.18
Min	8.8	9.1	8.7	8.4	8.3	8.5	10.1	10.1	10.5	11.1	11.9	13.4	14.3	14.3	13.5	12.3	11.7	11.4	11.5	11.7	11.3	10.8	10.6	10.2	12
Max	23.1	22.9	22.7	22.5	22.3	22.2	22.9	24.5	25.5	26.4	27.6	28.8	29.7	30.4	30.8	31.1	30.9	30.1	29	27.7	27.2	26.2	24.6	24	26.3
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

May 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	?	?	?	?	?	104.9 ?	104.2	101.6	97.8	94	87.7	78.8	73.1	65.8	61.4	59.5	60.6	76.3	80.4	88.7	92.9	91.8	91.9	95.5	84.6 ?	
2	98.4	99.6	100.9	101.6	101.6	101.3	99.4	98.4	95	90.3	83.9	82.3	77.2	76.3	74.5	71.5	69.9	71.5	87.3	95.8	100.1	103.4 ?	?	?	90	
3	?	103.8	104	104.5	104.9 ?	?	104.8 ?	103.2	98.7	93.8	84.6	79.2	75	85.4	74.5	68.1	70.2	80.3	84.8	88.7	91	93.9	98	97.6	90.4 ?	
4	96.9	99.1	101.9	103.1	102.9	102.4	101.4	99.4	97	91.8	85.6	83.6	77.7	76.7	83.2	90.3	95.3	95.5	98	99.3	102.5	104	99.6	97.8	95.2	
5	100.2	104.8 ?	?	?	?	?	?	?	99.6	95.1	95.6	102.7 ?	?	?	?	103.4	104.2 ?	?	?	104.3	102.9	102.5	102	102.8	101.5 ?	
6	101.4	101.3	102	103.1	103.8	104.5	103.5	101.2	100.9	102.1	101.7	89.2	89.1	83.3	81.1	81.9	86.6	88.2	89.2	89.2	93.1	97	98.3	101.4	103	96.1
7	103	101.9	100.9	101.6	100.8	100.9	100.6	101.5	103.9	?	104.8 ?	99.5	88.2	86.6	82.5	78.8	78.5	81	94.8	101.8	104.6	97.1	93	96.5 ?	95.8	
8	?	?	?	?	?	?	?	?	100.2	95.1	87.5	83.6	86.3	84	78.7	69.9	70.6	74.3	81.1	88.1	92.3	96.3	100.5	101.9	102.1	87.8 ?
9	102.2	102.5	104.2	104.7	104.8 ?	?	102.6	96.6	92.7	89.7	84.2	79.7	75.3	69.8	64.9	62.4	61.5	62.3	68.7	72.2	74.4	71.2	75.2	79.5	82.7	
10	84.1	89.5	93.3	96.4	99.5	100.4	94.7	75.1	63.6	61.5	59.8	58.3	59.8	58.2	56.3	55.1	55.9	60.1	78.7	86	90.3	95.2	97.9	99.4	77.9	
11	99.9	101	102.7	97.4	76.7	71.7	66.7	65.9	65.6	66.4	66.1	65.1	78.3	86.9	91.1	98.9	102.6	?	?	?	?	?	?	?	82.5 ?	
12	?	?	?	?	?	?	?	101.1 ?	93.4	88	78.7	72.4	69.3	63.9	56.3	79.7	79	77.5	78.2	84.6	90.9	91.6	94.6	96.3	82.1 ?	
13	97.9	103.3 ?	?	?	?	?	98.4	88.6	74.2	71.7	60.3	57.3	58.1	59	58.8	60.2	62.4	69.5	81.5	88	96.4	100	100.7	101.2	79.4 ?	
14	102.8	104.1	102.8	98.8	95.2	94	92.8	87.1	84.6	82.7	82.9	82.4	80.8	82.7	86	85.8	88.4	93	94.4	96.4	96.4	98.6	100.4	101.4	103.4	92.6
15	104.5 ?	?	?	?	?	?	?	104.5 ?	100.6	95.1	90.1	90	83.2	82.3	81.7	81	83.8	86.5	95.4	100	102.2	103.5	?	?	92.8 ?	
16	?	?	?	?	?	?	?	?	?	102.2	95.5	91.2	87.7	85.9	93.7 ?	100.8	95	95.9	97.8	99.6	98.6	103.1	104.2	103.7	97 ?	
17	104.1	104.4	104.5	104.7	104.8	104.9 ?	104.3	102.1	98.6	96.4	93.2	99.6	102.9 ?	?	104.5 ?	105 ?	104.6	102.8	101.6	100.8	99.2	102.3	102.7	100	102.1 ?	
18	99	95	99.9	99.8	97.7	99.2	98.9	100	100.7	93.4	86.5	74.4	60.7	56.2	62.6	67.4	68.6	71.8	78	81.9	85	87.8	89.2	89.5	85.1	
19	91.1	87.2	82	78.6	77.4	75.9	77	78.8	81.5	78.2	75	71.5	72.7	71.7	67.9	62.7	61.6	67.4	77.6	86.8	93.9	98.4	100.5	102.9	79.9	
20	?	?	?	?	?	?	102.9 ?	98.1	90.1	82.4	76.3	77.9	78.9	77.9	77.3	80.7	80.6	84.2	91.8	98.4	102.5	104.7	105 ?	?	88.8 ?	
21	?	?	?	?	?	?	104.6 ?	101.4	94.2	85.9	80.1	78.6	76.3	76.9	79.1	80.7	81.7	82.6	86.9	95.1	101.1	103.9	?	?	88.1 ?	
22	?	?	?	?	?	?	103.3 ?	97.5	90.5	81.9	74.4	75.1	71.7	80.3	86	87	89.8	86.7	88.4	94	97.9	100.5	102.7	104.4 ?	89.6 ?	
23	?	?	?	?	?	?	?	101.9 ?	95	84.6	79.8	78.1	79	79.6	79.5	76.8	77.8	82.4	89.4	97	98.3	101.3	104.3	?	87.8 ?	
24	?	?	?	?	?	?	?	101.2	96.6	99.8	87.6	89.8	89	87	90	91.9	97.9 ?	103.9 ?	100.2	100.1	100	101.4	101.7	102.5	96.5 ?	
25	103.8	104.8 ?	?	?	?	?	?	102.1 ?	97.2	90	88	83.8	76	76.3	81	82.7	82	83.4	86.1	95.5	98.1	101.4	103.8	105 ?	91.6 ?	
26	?	?	?	?	?	?	?	103.7	97.6	91.7	87.8	84.9	82	83.5	85.2	87.3	90.4	94.9	95.4	98.7	103.3	104.3	104.5	104.9 ?	94.1 ?	
27	?	?	?	?	?	?	104.5 ?	102.9	99.5	95.5	94.7	93.5	94.7	92.4	94.6	96.4	97.9	100.4	104.4 ?	?	?	?	?	?	97.8 ?	
28	?	?	?	?	?	?	?	99.4	93.1	88.2	89.7	85.5	76.3	91.9	91.2	87.5	93.2	91	93.2	98.1	100.6	103.2	104.4	104.5	93.6 ?	
29	105 ?	?	?	?	?	?	102.6	98.6	96.5	96.6	93.6	88.2	77.7	74.7	71.5	67.6	69.2	82.8	88.6	95.7	98.4	100.4	99	92.8	89.4 ?	
30	100	102.9	104.5 ?	?	98.9 ?	96.6	92.7	91.8	90	83.7	77.7	72.2	67.5	63.8	63.1	72.4	71.9	70	73.3	80.2	87.3	99.4	103.7	?	84.7 ?	
31	?	?	?	?	?	?	101.2 ?	92.7	83	72.8	68.2	65.9	62.3	57.1	56.8	54.9	54.5	56	59.2	67	84.7	87.9	85.6	90.3	72.2 ?	
Avg	99.7	100.3	100.3	99.5	97.6	96.4	98.2	96.4	92.2	87.8	83.8	81.2	77.5	76.2	76.9	79	80.3	82	87.3	92.4	96.2	98.4	98.8	98.9	89.3 ?	
S D	5.3	5.3	6.2	7.2	9.6	11.1	9.6	9.2	9.9	10.8	11.1	10.2	10.5	12.9	14.2	14.7	12.6	10.3	8.9	6.8	7.1	7	6.3	7.1		
S/A	0.05	0.05	0.06	0.07	0.1	0.11	0.1	0.1	0.11	0.11	0.13	0.14	0.13	0.14	0.17	0.18	0.18	0.15	0.12	0.1	0.07	0.07	0.07	0.06	0.08	
Min	84.1	87.2	82	78.6	76.7	71.7	66.7	65.9	63.6	61.5	59.8	57.3	58.1	56.2	56.3	54.9	54.5	56	59.2	67	74.4	71.2	75.2	79.5	72.2	
Max	105	104.8	104.5	104.7	104.9	104.9	104.8	104.5	103.9	102.2	104.8	102.7	102.9	92.4	104.5	105	104.6	103.9	104.4	104.3	104.6	104.7	105	105	102.1	
n	190	173	149	144	135	132	215	324	359	360	367	365	352	348	351	360	359	344	344	346	348	343	301	247	6961	

Data Recovery: 0.0% missing; 0.0% untested; 22.0% 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

May 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	17	17.7	18.3	18.7	18.9	19	19.5	21.1	23.1	24.4	25.6	26.8	28.1	28.9	29.8	30.8	31.1	29.7	27.9	25.7	23.6	22.2	21.6	21.2	23.8
2	20.7	20.2	19.9	19.6	19.5	19.4	20.3	22.2	23.3	26.1	28.4	28.3	28.7	28.8	29.5	30.3	30.3	28.9	27.2	24.7	22.9	22	21.4	21.2	24.3
3	20.7	20.6	20.9	20.9	20.5	20.1	20.4	22.1	25	27.4	29.1	30.4	31.1	29.3	29.3	30.9	31.5	30.6	28.5	26.2	24.6	23.7	23.2	22.7	25.4
4	22.3	22.1	21.9	21.6	21.5	21.6	22.1	23.6	25	26.6	28.3	30	31.6	31.8	30.7	29.6	28.2	26.1	24	22.5	21.6	21.2	21.4	21.9	24.9
5	21.8	20.3	19	18.5	17.9	17.7	18.1	19.2	22.4	25.8	25.8	23.5	20.9	20	19.7	20.6	21.1	20.9	21.1	21.2	21.3	21.5	21.6	21.5	20.9
6	21.3	21.3	21.3	21.2	20.8	20.5	21	22.5	23.5	24	24.1	26.6	28.8	29.9	30.8	31.7	30.9	28	26.3	25	23.9	23.1	22.5	22	24.6
7	21.7	21.9	22.2	22.2	22.3	22.2	22.5	23.3	22.7	21.4	20.9	22.5	25.8	27.5	28.5	29.6	30.2	30	28.4	25.3	23.3	22.4	21.4	20.2	24.1
8	18.3	17.4	17.2	17.1	17.1	17.2	18.6	22.2	25.8	28.6	30.6	31	30.6	30.7	31.4	31.3	30.1	29	27.4	25.7	24.5	23.9	23.4	23	24.7
9	22.8	22.9	22.8	22.6	22.4	22.1	22.8	25.3	27.8	29.5	30.9	32	32.7	33.1	33.6	34.2	34.5	34	31.6	29.3	27.9	27.3	26.2	25.1	28.1
10	24.2	23.1	21.8	20.7	19.5	18.4	19.7	23.2	25.6	28.1	29.6	30.3	30.9	29.6	29.5	29.6	29.5	29.1	27.4	23.5	21	19.4	18.3	18	24.6
11	18.1	18.2	18.1	18.1	18.2	17.9	17.7	17.7	17.7	17.9	18.1	18.5	17.9	15.7	14.8	13.8	12.8	12.1	11.8	11.7	11.7	11.5	10.6	10.1	15.5
12	9.9	9.5	9.1	8.4	8.2	8.1	10	14	17.8	21.2	23.7	25.3	25.6	26.2	27.3	28.1	25.1	23.6	22	19.1	16.6	15.1	13.7	12.3	17.5
13	11.2	11	10.8	10.2	10.3	10.2	12.3	17.1	21.4	23.9	24.9	25.7	25.8	25.3	24.9	24.5	24.2	24.4	22.9	19.8	17.4	16.1	15.8	15.9	18.6
14	15.6	15	15	15.2	15.9	16.7	18	19.9	22.3	24.3	25.7	25.9	26.3	27	26.5	26.5	26.9	25.2	24.2	23	22.2	21.7	21.5	21.4	21.8
15	21	20.2	19.4	18.9	18.9	19.1	19.5	21.9	25.6	28.8	30.3	30.8	30.5	31.2	31.2	31.4	30.9	29.7	27.7	24.9	23	21.8	21.1	20.7	24.9
16	20.6	20.7	20.6	20.4	20.3	20.3	20.4	20.6	21.3	23.4	27.1	29.5	30.6	31.1	29.7	24.5	25.3	26.4	25.3	24.2	23	22.2	21.6	21.4	23.8
17	21.3	21.1	20.8	20.9	21.1	21.1	21.4	23.1	25.3	26.5	27.7	27	21.1	18.1	17.2	16.3	15.8	15.1	14.1	13.2	12.3	11.9	11.8	11.8	19
18	11.2	10.6	10.1	10	10.1	10.1	10.3	10.2	10.3	10.9	12.3	14.4	16.9	18	18.9	18.8	17.4	16	14.6	13.1	12	11.5	11.3	11.1	12.9
19	10.8	10.7	10.7	10.8	11.1	11.5	12	12.7	13.7	15.1	16.3	17.6	18.6	18.8	18.8	20.1	20.8	20.2	18.4	15	11.9	10.2	9.3	8.8	14.3
20	8.2	7.8	7.9	8.2	8.4	8.7	10.9	14.6	18.3	21.1	23.1	24.1	24.7	24.6	25.2	25.6	25.3	24.3	22.3	18.5	15.2	13.5	12.7	12.3	16.9
21	12	11.9	11.9	11.8	11.8	12.1	14.5	18.1	21.9	25.7	28.5	29.7	29.6	28.7	27.9	27.5	27.8	27.7	26.4	23.2	20	18.2	17.1	16.4	20.8
22	15.9	15.5	15.2	15.3	15.5	15.7	17.3	21.9	26.3	29.1	30.8	31.8	32.2	32.1	30.7	30	28.4	27.9	27.8	25.1	22.7	21.3	20.3	19.6	23.7
23	19.1	18.4	18	17.6	17.4	17.5	19.2	22.9	26.4	28.3	31	32.1	32.3	31.6	31.5	31.3	31.5	30.5	28	25.2	23.3	22.1	21.1	20.3	24.9
24	19.7	19.4	19.1	19	19.1	19.4	21	23.6	26.5	27.1	28.5	30.2	30.6	30.5	30.6	30.4	27.9	24.6	24.9	24.1	22.8	22	21.4	21	24.3
25	20.8	20.5	20.1	19.7	19.5	19.6	20.4	23.1	25.8	28.6	30.2	31.4	32.7	33.3	33.1	31.8	30.8	29.6	28.3	26.1	24.1	22.9	22	21.5	25.7
26	21	20.7	20.5	20.3	20.3	20.6	21.1	22.4	24.3	27.4	29.4	30.2	30.4	30.6	29.9	29.6	29.1	27.6	25.7	24.2	22.9	21.9	21.1	20.8	24.7
27	20.8	20.8	20.5	20.2	20	20.1	20.5	21.4	23	25.6	28.2	29.5	30.2	29.7	29.5	28.9	30.1	29.5	27	23.9	22.5	21.9	21.3	21.2	24.4
28	21.1	21	20.9	20.7	20.6	20.5	21.2	24.9	30.4	34	35.2	33.3	34.3	33.4	31	31.6	30.5	29	28.1	26.6	25.3	24.4	23.6	23.2	26.9
29	23.1	22.9	22.9	22.8	22.7	22.5	23.3	25.1	27.2	28.9	30.8	32	32.4	33	34	35.1	35.5	33.6	30.6	28.4	26.6	25.8	24.7	23.5	27.8
30	22.9	21.4	20.7	20.3	20.2	20.2	20.8	22.7	23.4	26.2	29.8	32.2	32.8	33.2	34	34.1	33.5	32.6	31	27.7	24.4	22.7	21.8	21.1	26.2
31	20.9	20.7	20.6	20.6	20.4	20.3	21.5	24.5	26.7	29.5	30.8	31.4	31.9	31.9	32.7	34.1	34.7	34.5	33.4	30.3	26.8	24.4	23.2	22.4	27
Avg	18.6	18.2	18	17.8	17.8	17.8	18.7	20.9	23.2	25.3	27	27.9	28.3	28.2	28.1	28.1	27.8	26.8	25.3	23.1	21.3	20.3	19.6	19.1	22.8
S D	4.5	4.4	4.4	4.4	4.3	4.2	3.8	3.8	4.2	4.6	4.8	4.7	4.8	5.1	5.1	5.3	5.5	5.4	5	4.7	4.5	4.5	4.5	4.5	4
S/A	0.24	0.24	0.24	0.24	0.24	0.23	0.2	0.18	0.18	0.18	0.18	0.17	0.17	0.18	0.18	0.19	0.2	0.2	0.2	0.2	0.21	0.22	0.23	0.23	0.18
Min	8.2	7.8	7.9	8.2	8.2	8.1	10	10.2	10.3	10.9	12.3	14.4	16.9	15.7	14.8	13.8	12.8	12.1	11.8	11.7	11.7	10.2	9.3	8.8	12.9
Max	24.2	23.1	22.9	22.8	22.7	22.5	23.3	25.3	30.4	34	35.2	33.3	34.3	33.4	34	35.1	35.5	34.5	33.4	30.3	27.9	27.3	26.2	25.1	28.1
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

May 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	1.9	2.4	2	2.4	2.6	3	3.8	4.5	5.4	6	6.2	7	6.2	7	6.4	6.2	5.7	4.8	4.5	5.1	4.3	4.3	4.3	4.8	4.6
2	4.5	4.5	4.4	4.8	4.6	4.8	4.9	4.8	5	5.7	6.1	5.4	6.7	5.8	5.2	4.6	4.3	3.9	2.5	2.3	1.7	1.9	2	1.4	4.2
3	1.6	2.4	2.1	2.4	1.9	2	2.5	3.5	3.6	4.4	5.6	4.9	6.4	5.2	6.2	6.1	4.3	4	3.8	2.8	2.8	3.5	4.4	4.5	3.8
4	4.8	4.8	4.5	3.8	3.7	3.8	3.5	4.9	4.8	5.2	5	4.2	4.7	4.9	5.5	4.2	3.8	4.4	3.5	2.5	2.4	3	3.6	4.4	4.2
5	3.8	1.1	0.2	0.3	0.2	1	1.7	1	1	1.7	1.4	1.9	1.5	1.1	1	2.3	3	3.6	3.7	4.3	3.4	3.9	3.9	4.2	2.1
6	4.2	3.8	2.9	2.9	2.8	2	2.1	3.3	2.8	2.6	2.6	4.1	4.1	4.6	4.3	4.7	4.2	3	3.5	3.3	3.5	3.6	3.9	3.7	3.4
7	4.7	5.2	4.9	4.7	5.3	5	5	4.5	4.4	3.2	3.9	4.2	5.3	5.5	5.4	5.4	5	3.4	3.2	2.4	2.5	2.7	1.1	1.7	4.1
8	1.5	0.9	1.1	2	1	1.6	1.2	2	2.2	1.3	1.7	2.5	2.6	3.1	3.5	3	1.3	1.4	2	1.2	1.9	2.2	2.5	3.1	1.9
9	4.2	3.6	3.1	3.5	3.6	3.1	3.6	5.4	5.8	6.3	6	6.1	6.2	6.9	7.6	6.9	6.1	5.8	4	3.8	4.1	5.1	4	3.4	4.9
10	2.6	2.6	2.8	2.4	2	1.4	1.1	2.8	2.9	2.4	1.9	1.4	2.3	2.5	3.1	3.4	3.3	2.5	2.2	2.6	2.2	1.1	1.5	0.9	2.2
11	0.8	0.3	0.8	3.1	4.7	4.3	4.2	4.4	4.6	4.5	4.2	3.9	3.1	3.1	3.8	3.8	2.9	1.8	0.9	0.7	0.6	0.4	0.4	0.3	2.6
12	0.1	0.3	0.1	0.4	0.6	0.3	0.6	1.5	2.1	1.9	1.8	1.8	1.9	2.1	1.9	3.9	4.3	3.4	2.5	2.1	1.4	0.5	0	0	1.5
13	0.1	0.5	0.3	0.7	0.3	0.4	1.6	2	2.5	3.4	3.5	3.8	4.2	4.4	4	3.4	3.1	3.6	3.1	2.9	2.3	2	1.9	1.3	2.3
14	0.3	0.6	1.2	2	2.5	2.4	3.5	4.6	5.6	5.1	4.6	4.6	4.8	4.9	5.2	5	5.1	4.1	4.1	3.6	3.2	2.4	2.7	1.2	3.5
15	1.4	0.5	0	0	0.2	0.1	0.9	2.7	2.5	2.6	2.4	2.8	3.9	3.9	4.4	4.1	3.5	3.1	2.8	2.7	2.5	1.9	1.3	1.7	2.2
16	2.5	2.5	1.9	2	1.7	1.1	1.4	1.3	2.1	3.1	3.5	3.4	2.9	3.4	3.6	1.9	3.3	2.7	2.8	2.6	2.8	2.3	2.2	3.5	2.5
17	3.4	2.8	3.2	3.5	3.1	2.5	3.1	3.7	4.3	3.8	3.1	6.7	4.4	4.7	4.8	3.5	4.5	4.7	3.6	4.3	3	2.6	1.5	3.2	3.7
18	3.2	3.2	2.5	2.1	1.4	1.4	2.9	3.5	3.7	4.1	4.6	5	6.1	5	3.5	3.7	3.6	3.3	2.3	2.4	2.3	1.9	1.8	1.2	3.1
19	1.1	1.7	2.2	2.5	3.3	3.8	4.3	4.5	5.1	5.3	5.3	5.7	5.2	5	4.7	4.4	4.3	4.1	3.3	2	1.6	1.4	1.2	0.8	3.4
20	1.1	1.5	2.1	2	2.3	2.3	2.6	3.4	3.8	3.7	3.8	3.6	3.5	3.6	3.8	3.8	4	3.3	2.9	2.1	1.3	1.2	0.9	0.5	2.6
21	0.7	0.7	0.4	0.2	0.4	0.8	1.9	2.3	2.6	2.3	2.9	2.8	3	3.5	3.5	3.3	3.4	2.8	1.9	1.1	1	0.6	0.1	0	1.8
22	0	0	0	0	0	0	0	0.9	1.4	2.2	2.2	2.5	2.3	3.1	3.5	3.2	2.7	3	2.8	1.5	1.2	0.8	0.4	0.1	1.4
23	0	0	0	0	0	0	0	1	2.4	2.5	2.5	2.8	3.9	3.5	4	4.2	3.9	2.9	2.3	2.1	1.2	0.6	0.1	0.1	1.8
24	0	0	0	0.1	0.1	0.2	1	2	3.2	2.4	3	3.2	3.6	4.4	4.1	3.2	2	1.2	1	1.2	1.6	1.2	1.2	1.1	1.7
25	0.5	0.3	0	0.1	0.1	0.1	0.7	2.4	3.1	2.3	2.4	2.1	2.8	3	3.3	3.3	3.5	2.8	2	1.1	1.2	1.2	0.9	0.4	1.6
26	0.3	0.2	0.1	0	0.1	0.2	0.8	1.7	2.9	3.2	2.9	3.2	5.2	5.4	5.4	5.5	5.4	4.8	3.8	3	2.5	2	1.5	1.7	2.6
27	1.8	1.7	1.2	1.1	1.3	1.7	1.7	1.8	2.3	3	3.1	3	3.3	3.4	3.2	3.8	3.4	3.2	3.4	2.5	1.9	1.6	1.1	0.6	2.3
28	0.3	0.6	1.1	1.2	1	1.2	0.9	0.5	0.7	1	2.2	2.2	2.8	5.7	4.8	4.4	4	3.5	3.3	2.8	2.4	1.8	1.8	2.4	2.2
29	2.6	2.6	2.7	1.9	1.5	2.5	3.3	4.1	4.7	3.9	3.4	4	4.5	4.3	4.3	4.4	4.5	3.8	4	3.6	2.9	2.6	2.5	3	3.4
30	1.7	1	1.5	2.2	3.3	2.3	1.1	1.4	1.7	2	1.5	1.6	1.3	1.4	1.9	2.8	2.5	2.2	1.5	1.4	1.5	1.8	1.7	1.5	1.8
31	1.1	0.9	1.2	1.5	1.2	1.9	2.2	2.7	4.2	4.8	5.1	4.4	4.3	4.4	3.4	3.3	2.8	2.2	1.1	0.4	1.6	1.2	1	0	2.4
Avg	1.8	1.7	1.6	1.8	1.8	1.8	2.2	2.9	3.3	3.4	3.5	3.7	3.9	4.2	4.1	4	3.8	3.4	2.9	2.5	2.2	2.1	1.9	1.8	2.8
S D	1.6	1.5	1.4	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.4	1.4	1.1	1.1	1	1	1.1	0.9	1.1	1.3	1.5	1
S/A	0.86	0.89	0.88	0.78	0.84	0.79	0.64	0.49	0.42	0.42	0.41	0.4	0.38	0.34	0.33	0.28	0.28	0.3	0.33	0.44	0.4	0.55	0.68	0.83	0.36
Min	0	0	0	0	0	0	0	0.5	0.7	1	1.4	1.4	1.3	1.1	1	1.9	1.3	1.2	0.9	0.4	0.6	0.4	0	0	1.4
Max	4.8	5.2	4.9	4.8	5.3	5	5	5.4	5.8	6.3	6.2	7	6.7	7	7.6	6.9	6.1	5.8	4.5	5.1	4.3	5.1	4.4	4.8	4.9
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

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

May 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	161	164	177	196	204	198	200	204	208	208	209	201	204	210	211	201	200	198	196	193	191	192	194	194	200
2	195	198	197	194	198	199	200	199	203	197	201	217	223	236	236	236	220	217	181	188	182	183	188	177	207
3	182	195	198	201	201	191	196	200	202	216	216	212	221	218	211	212	193	188	192	190	185	193	191	192	203
4	196	197	193	192	192	191	184	190	194	198	196	180	175	178	195	176	175	182	186	185	191	199	208	230	191
5	265	283	6	26	54	75	92	108	157	180	153	65	92	153	159	160	153	154	152	154	170	167	183	187	161
6	189	190	191	187	188	182	191	193	193	197	208	188	181	185	170	169	165	162	156	162	170	169	165	178	179
7	192	194	192	193	196	198	196	199	218	224	210	204	197	204	217	219	219	215	180	186	183	304	146	238	204
8	202	182	209	224	255	253	251	256	256	252	207	175	205	217	226	220	209	140	137	180	195	187	193	199	210
9	209	212	199	199	203	205	210	216	219	226	219	217	212	215	215	216	220	224	224	212	217	257	259	246	219
10	248	254	268	279	287	289	298	335	323	4	25	75	211	212	226	224	219	197	142	140	156	180	201	198	239
11	196	175	330	11	40	42	52	55	49	54	48	45	38	34	30	30	38	47	67	33	336	315	303	312	40
12	259	235	264	284	272	273	265	285	286	275	315	310	315	343	331	111	112	100	89	80	111	131	113	5	41
13	4	358	322	23	12	0	43	57	62	90	79	75	79	89	78	82	77	82	83	78	75	82	71	86	75
14	101	106	127	127	125	123	119	122	122	141	142	147	140	145	140	152	148	155	156	145	144	152	166	184	141
15	195	188	284	98	144	143	146	158	182	171	165	155	169	160	159	162	162	151	138	155	152	154	167	166	161
16	139	125	142	153	156	173	181	178	180	191	196	189	177	177	203	152	189	186	180	182	183	187	188	194	178
17	198	196	196	204	212	209	207	210	214	231	248	342	347	350	9	13	32	20	21	31	42	40	20	349	331
18	341	5	6	37	41	9	10	3	7	20	22	23	17	18	30	38	33	37	46	37	42	46	46	44	23
19	41	39	41	38	41	43	46	47	48	46	37	44	39	40	32	34	39	47	51	44	44	46	43	11	42
20	327	347	346	357	13	22	36	54	60	52	64	55	48	62	58	59	62	57	60	54	45	50	46	12	46
21	6	33	34	26	39	56	67	65	62	59	94	92	83	103	93	87	87	87	88	79	74	77	84	86	80
22	0	0	0	79	0	73	97	131	171	185	187	162	181	133	109	105	119	131	138	142	137	143	148	136	141
23	137	2	2	0	0	2	142	181	185	185	158	164	113	94	99	134	141	142	139	140	151	162	172	175	141
24	153	162	145	143	134	135	152	171	180	193	196	155	146	154	156	137	172	131	156	156	160	169	184	188	163
25	183	198	179	174	152	146	185	216	226	234	195	189	173	173	132	136	145	142	138	132	138	141	138	149	167
26	158	150	96	0	120	118	118	119	128	139	132	109	110	105	104	106	106	103	103	91	85	86	79	70	107
27	71	61	49	48	38	41	44	41	42	55	40	26	39	41	31	53	47	43	43	31	38	27	23	354	42
28	142	223	232	224	242	269	299	45	212	190	75	117	146	108	127	131	123	126	153	154	157	158	185	193	144
29	198	200	206	211	214	213	217	216	224	217	222	218	228	223	211	214	213	188	193	199	210	227	239	243	214
30	244	264	323	334	332	330	330	6	45	58	14	52	27	79	180	156	163	165	171	138	156	163	178	173	116
31	179	175	183	192	192	202	208	214	218	235	219	233	244	247	259	273	279	278	292	284	66	73	85	92	233
Avg	201	196	200	198	195	191	173	179	188	187	180	163	168	161	165	155	151	145	143	145	153	170	181	200	170
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

May 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	3.7	4.7	4	4.4	4.4	5.4	6	8	9	9.7	10	11.2	10.1	11.7	10.4	10	9.6	8.1	7.5	8.3	7.4	7.6	7.4	7.9	7.8
2	7.1	7.1	7.2	7.9	7.6	7.6	8	7.9	8.3	9.3	9.8	8.6	10.9	9.5	8.4	7.5	6.8	6.3	4.6	4.2	3.3	3.7	3.6	2.7	7
3	3.2	4	3.7	4.2	3.2	3.4	4.4	5.6	6	7.1	8.7	8	10.7	8.8	9.6	9.8	7.2	7.4	6.5	4.9	4.8	6	7.6	7.8	6.4
4	7.7	8.2	7.5	6.4	6.4	6.4	6.8	8.9	8.8	8.7	8.6	7.8	9.1	8.6	9.3	7.3	7.2	8.4	6.6	4.7	4.4	5	5.8	7.5	7.3
5	6.8	3	0.6	1.2	1	2.1	3.2	2.2	2.4	2.9	2.4	3.4	3.1	2.7	2.8	4.5	5.6	6.4	7	7.6	6.8	7.3	7.7	7.6	4.2
6	7.7	6.7	5.3	5.2	5	3.8	3.9	5.9	4.9	4.3	5	7	6.9	7.9	7.8	8.1	7.5	5.3	6.1	5.9	6.7	6.5	7.5	7.1	6.2
7	8	9.5	8.5	7.9	9	8.5	8.2	7.6	7.2	6.1	6.8	7.3	9.3	8.6	8.9	8.9	8.1	5.7	5.8	4.7	4.8	5.8	2.2	3.5	7.1
8	2.7	2.1	1.9	3.1	2.2	2.9	2.7	3.8	3.9	2.8	3.3	4.4	4.4	5.1	5.5	4.7	2.1	2.3	3.2	2.3	3.3	4.1	4.4	5.2	3.4
9	6.7	5.8	4.9	5.8	5.8	5	5.8	8.3	9.4	9.6	9.4	9.6	10.3	11.5	12.5	11.1	9.7	8.7	6.7	5.9	6.5	9.2	7.5	5.7	8
10	4.5	4.3	5.5	4.9	3.9	3	2.6	5.2	5.5	4.4	3.4	3.1	4.3	4.9	5.4	5.8	5.1	4.5	3.8	4.3	3.9	2.6	2.4	1.9	4.1
11	1.4	1	1.7	5.6	8.3	7.6	7.4	7.6	7.9	7.7	7.5	6.9	5.6	5.8	6.6	6.7	5.5	3.7	2.3	1.9	1.8	1.1	1.2	1	4.7
12	0.3	0.8	0.6	1.4	1.7	1.1	1.8	3.4	4.4	4.1	3.9	3.9	4.2	4.6	3.9	6.2	6.7	5.6	4.3	3.6	2.3	1.1	0.1	0	2.9
13	0.3	0.8	0.6	1.2	0.7	0.8	2.9	3.8	4.3	5.3	5.7	6.3	6.8	7.1	6.4	5.4	5.2	5.9	5.4	5	3.9	3.5	3.3	2.4	3.9
14	0.7	1.1	1.9	3.4	4.3	4.2	5.5	7.6	9.2	8.6	7.7	7.5	7.6	8.3	8.7	9.4	8.8	7.2	7.6	6.1	5.7	4.4	4.6	2.9	6
15	2.7	1.3	0	0.2	0.6	0.8	2.1	4.4	4.3	4.7	4.4	4.9	6.7	6.8	7.3	7.1	6.2	5.6	4.9	5.3	4.4	3.7	3.1	3.6	4
16	4.2	4.2	3.5	3.9	3.2	2.9	3.2	3.1	4.3	5.7	6	5.6	5.4	6.1	6	3.5	5.8	5.1	5.6	5.1	5.7	4.5	4.3	5.9	4.7
17	5.9	4.9	5.2	5.8	5.3	4.3	5.1	6.1	6.7	6.3	5.5	11	7.8	8.3	8.3	6.6	8	8.6	6.8	7.8	5.6	4.9	3.3	5.8	6.4
18	5.9	6.1	4.7	4.8	3.1	3.2	5.4	6.6	6.7	7.4	8.2	9.5	10.2	8.4	6.5	6.6	6.4	5.8	4.1	4.3	4.5	3.6	3.6	2.9	5.8
19	2.6	3.5	4.2	5.1	6.1	7	7.6	8	8.8	9.3	9.3	9.8	8.8	8.9	8.3	7.9	7.7	7.1	6	3.5	2.8	2.4	2.3	1.8	6.2
20	2	2.4	3.3	3.5	4.1	4.2	4.6	5.6	6.4	6	6	5.9	6.3	6.2	6.3	6.3	6.4	5.6	4.9	3.7	2.4	2.3	1.9	1.2	4.5
21	1.5	1.9	1.4	1.2	1.7	2.2	3.5	3.9	4.4	4.1	4.9	4.9	5.1	5.7	5.7	5.6	5.5	4.7	3.4	2.1	1.8	1.4	0.5	0.1	3.2
22	0	0	0	0.2	0	0.2	0.2	2	2.8	4	4	4.5	4.3	5	5.5	5.4	4.4	5.2	4.8	3.1	2.8	2.2	1.4	0.7	2.6
23	0.1	0	0	0	0	0	0.4	2.4	4.5	4.4	4.4	4.4	5.3	6.4	6	6.6	7.2	6.5	5.2	4.2	4.3	3	2.1	1	3.3
24	0.4	0.4	0.3	0.4	0.9	1.1	2.5	3.5	5.6	4.7	5.3	5.5	6.3	7.4	7	5.8	4.3	2.7	2.9	3.2	3.8	3.1	3.2	3	3.5
25	1.9	1.3	0.5	0.7	0.6	0.6	1.9	4.3	4.8	3.9	3.9	3.9	5.1	5	5.7	5.4	5.9	4.8	3.7	2.2	2.3	2.5	1.9	1.5	3.1
26	1.3	0.7	0.3	0	0.4	0.9	2	3.1	4.9	5.6	4.8	5.3	8.1	8.7	8.8	8.8	8.5	7.9	6.7	5.1	4.6	3.5	2.7	2.8	4.4
27	3	2.9	2.4	2	2.4	3.1	3.1	3.2	4	5.4	5.1	5.4	5.9	5.7	5.8	6.5	5.6	5.7	5.7	4.3	3.7	3.1	2.4	1.5	4.1
28	1	1.6	2	2.3	2.1	2.6	2.2	1.4	1.6	2.4	3.8	4.1	5.1	9.1	8.1	7.4	6.4	6	6.1	5.2	4.4	3.4	3.9	4.6	4
29	4.4	4.5	4.5	3.2	2.6	4.1	5.4	6.5	7.4	6.2	5.6	6.5	7	6.9	7	6.8	7.2	6.7	7.3	5.9	4.6	4.8	4.2	4.9	5.6
30	3.2	2.2	3	4.3	5.8	4.3	2.5	2.8	3.1	3.8	3.2	3.1	3	2.9	3.5	4.7	4.2	4	2.9	2.3	2.7	3.4	3.3	3.3	3.4
31	2.3	2.2	2.9	3	2.4	3.2	3.6	4.4	6.5	8.2	8.3	7.5	7.5	7.6	6.3	6.3	6	4.2	2.6	1.1	2.8	2.1	1.7	0.2	4.3
Avg	3.3	3.2	3	3.3	3.4	3.4	4	5.1	5.7	5.9	6	6.3	6.8	7.1	7	6.9	6.5	5.9	5.2	4.4	4.2	3.9	3.6	3.5	4.9
S D	2.5	2.5	2.4	2.3	2.5	2.3	2.2	2.2	2.1	2.1	2.2	2.3	2.3	2.2	2	1.7	1.6	1.6	1.6	1.7	1.5	1.9	2.1	2.5	1.6
S/A	0.76	0.78	0.8	0.69	0.74	0.67	0.54	0.43	0.37	0.36	0.37	0.36	0.33	0.3	0.29	0.26	0.25	0.28	0.3	0.39	0.36	0.49	0.6	0.7	0.32
Min	0	0	0	0	0	0	0.2	1.4	1.6	2.4	2.4	3.1	3	2.7	2.8	3.5	2.1	2.3	2.3	1.1	1.8	1.1	0.1	0	2.6
Max	8	9.5	8.5	7.9	9	8.5	8.2	8.9	9.4	9.7	10	11.2	10.9	11.7	12.5	11.1	9.7	8.7	7.6	8.3	7.4	9.2	7.7	7.9	8
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

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

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

May 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	13.1	13.3	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.1	13.1	13.1	12.9	12.9	12.9	12.8	12.8	12.8	13
2	12.8	12.8	12.7	12.7	12.7	12.7	13.2	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13	12.9	12.9	12.9	12.8	12.8	12.8	13
3	12.8	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.2	13.2	13.2	13.1	13.1	13.2	13.2	13.1	13.1	13.1	12.9	12.9	12.8	12.8	12.8	12.8	13
4	12.8	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	13
5	12.7	12.7	12.7	12.7	12.7	12.7	13	13.3	13.3	13.2	13.2	13	12.9	12.9	13.2	13.3	13	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.9
6	12.7	12.7	12.7	12.7	12.7	12.7	13	13.3	13.2	13.3	13.3	13.2	13.2	13.2	13.1	13.1	13.1	13	12.9	12.9	12.8	12.8	12.8	12.8	13
7	12.8	12.7	12.7	12.7	12.7	12.7	13	13	12.9	12.8	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.9
8	12.7	12.7	12.7	12.7	12.6	12.7	13.2	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	12.9
9	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.7	12.9
10	12.7	12.7	12.7	12.7	12.6	12.6	13.2	13.3	13.2	13.2	13.1	13.1	13.1	13.2	13.1	13.2	13.1	13	12.9	12.8	12.8	12.8	12.8	12.8	12.9
11	12.7	12.7	12.7	12.7	12.7	12.6	12.7	12.8	13.2	13.4	13.4	13.3	13.2	13.2	13.4	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9
12	12.7	12.6	12.6	12.6	12.5	12.6	13.4	13.5	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.3	13.1	12.9	12.9	12.8	12.8	12.8	12.8	13
13	12.7	12.7	12.7	12.7	12.7	12.7	13.3	13.4	13.3	13.3	13.2	13.2	13.3	13.3	13.3	13.3	13.3	13.2	12.9	12.9	12.8	12.8	12.8	12.8	13
14	12.8	12.8	12.8	12.7	12.7	12.7	13	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13	12.9	12.9	12.9	12.8	12.8	13
15	12.8	12.8	12.8	12.8	12.7	12.7	13	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.8	13
16	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.3	13.2	13.1	13.1	13.1	13	13.3	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.8	13
17	12.8	12.7	12.7	12.7	12.7	12.7	13	13.3	13.2	13.2	13.2	13.1	13.1	13.4	13.1	13	12.9	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9
18	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.7	13.5	13.7	13.6	13.5	13.5	13.4	13.4	13.5	13.5	13.4	13	12.9	12.9	12.9	12.8	12.8	13.1
19	12.8	12.8	12.8	12.8	12.8	12.8	13	13.4	13.6	13.5	13.5	13.5	13.4	13.4	13.4	13.4	13.4	13.2	13	12.9	12.9	12.8	12.8	12.8	13.1
20	12.8	12.8	12.8	12.7	12.7	12.8	13.4	13.5	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.8	13
21	12.8	12.7	12.7	12.7	12.7	12.7	13.3	13.4	13.3	13.2	13.2	13.1	13.2	13.2	13.2	13.2	13.2	13	12.9	12.9	12.8	12.8	12.8	12.8	13
22	12.8	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	13.1	13.2	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	13
23	12.8	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.9	12.8	12.8	12.8	12.8	13
24	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.3	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.2	12.9	12.9	12.8	12.8	12.8	12.8	13
25	12.8	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	13.1	13.1	13.1	13.2	13	12.9	12.8	12.8	12.8	12.8	13
26	12.8	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.3	13.2	13.2	13.1	13.1	13.1	13.2	13.2	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	13
27	12.8	12.8	12.7	12.7	12.7	12.7	12.8	13.2	13.3	13.2	13.2	13.1	13.1	13.2	13.2	13.2	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	13
28	12.8	12.7	12.7	12.7	12.7	12.7	13.2	13.2	13.1	13	13	13.1	13.1	13.1	13.1	13.1	13.2	13.2	12.9	12.9	12.8	12.8	12.8	12.7	12.9
29	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13	13.1	13	12.9	12.8	12.8	12.8	12.8	12.7	12.9
30	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.3	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
31	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.2	13.1	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
Avg	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13
S D	0	0	0	0	0	0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	
S/A	0	0	0	0	0	0	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	0	0	0	0	0	
Min	12.6	12.6	12.6	12.6	12.5	12.6	12.6	12.7	12.9	12.8	13	13	12.9	12.9	13	13	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9
Max	12.8	12.8	12.8	12.8	12.8	12.8	13.4	13.5	13.6	13.7	13.6	13.5	13.5	13.4	13.4	13.5	13.5	13.4	13	12.9	12.9	12.9	12.8	12.8	13.1
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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