

January 2005

Global Solar Radiation on a Horizontal Surface
 Hourly Integrated and Daily Totals
 Instrument: Eppley PSP
 Watt-Hours per Square Meter

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	0	28	142	286	395	470	462	395	250	57 ?	36	0	0	0	0	0	0	0	2522 ?
2	0	0	0	0	0	0	0	46	157	263	346	392	420	376	241 ?	135 ?	46	0	0	0	0	0	0	0	2422 ?
3	0	0	0	0	0	0	0	33	95	209	283	300	353 ?	386	275 ?	116 ?	35	0	0	0	0	0	0	0	2083 ?
4	0	0	0	0	0	0	0	7	50	198	326 ?	385 ?	481 ?	418 ?	289 ?	104 ?	67	0	0	0	0	0	0	0	2325 ?
5	0	0	0	0	0	0	0	36	152	259	387	413	420	340	406 ?	129 ?	40	0	0	0	0	0	0	0	2581 ?
6	0	0	0	0	0	0	0	16	89	202	297	418	322	283	215	126	42	0	0	0	0	0	0	0	2010
7	0	0	0	0	0	0	0	23	139	260	387	465	410	447	263 ?	130 ?	43	0	0	0	0	0	0	0	2567 ?
8	0	0	0	0	0	0	0	16	55	126	138	156	477 ?	365 ?	117	86	4	0	0	0	0	0	0	0	1538
9	0	0	0	0	0	0	0	16	78	178	322	333 ?	288	256	269 ?	?	51	2	0	0	0	0	0	0	1793 ?
10	0	0	0	0	0	0	0	36	86	340 ?	414	237	277	330	364 ?	215	66	0	0	0	0	0	0	0	2364 ?
11	0	0	0	0	0	0	0	28	78	181	324	447	290	225	236	145	45	5	0	0	0	0	0	0	2004
12	0	0	0	0	0	0	0	26	121	273	349	452	375	410	310	128	70	1	0	0	0	0	0	0	2514
13	0	0	0	0	0	0	0	29	143	251	319	301	315	384	368	229	43	4	0	0	0	0	0	0	2386
14	0	0	0	0	0	0	0	16	40	70	87 ?	?	?	42 ?	33 ?	28	9	1	0	0	0	0	0	0	326 ?
15	0	0	0	0	0	0	0	20	69	164	234	218	333	344	227	111	35	4	0	0	0	0	0	0	1758
16	0	0	0	0	0	0	0	5	23	45	67	70	39 ?	44	40 ?	40	22	5	0	0	0	0	0	0	398 ?
17	0	0	0	0	0	0	0	22	173	351	498	585	606	555	444	276	95	5	0	0	0	0	0	0	3611
18	0	0	0	0	0	0	0	37	189	368	512	599	617	565	455	284	100	5	0	0	0	0	0	0	3731
19	0	0	0	0	0	0	0	44	196	238	210	185	178	233	105	47	16	3	0	0	0	0	0	0	1454
20	0	0	0	0	0	0	0	24	140	288	374 ?	283	505	488	384	183	44	4	0	0	0	0	0	0	2717
21	0	0	0	0	0	0	0	10	45	105	152	298	284	436	437	281	103	12	0	0	0	0	0	0	2165
22	0	0	0	0	0	0	0	6	12 ?	34	52	95	51 ?	80	61 ?	95	23	9	0	0	0	0	0	0	520 ?
23	0	0	0	0	0	0	0	20	154	325	277	438	449	285	204	147	121	12	0	0	0	0	0	0	2432
24	0	0	0	0	0	0	0	40	121 ?	?	526	588	624	423	467	299	63	5	0	0	0	0	0	0	3155 ?
25	0	0	0	0	0	0	0	38	120 ?	428 ?	481	522	411	535	466	293	105	13	0	0	0	0	0	0	3411 ?
26	0	0	0	0	0	0	0	25	94	205	227	537	514	469	431	156	59	7	0	0	0	0	0	0	2725
27	0	0	0	0	0	0	0	12	73	?	436 ?	384	562	410 ?	?	?	95 ?	21	0	0	0	0	0	0	1993 ?
28	0	0	0	0	0	0	0	49	134 ?	?	?	?	?	?	?	?	94 ?	11	0	0	0	0	0	0	288 ?
29	0	0	0	0	0	0	0	45	128 ?	?	?	?	470 ?	472 ?	269	133	50	9	0	0	0	0	0	0	1576 ?
30	0	0	0	0	0	0	0	1	21 ?	34 ?	100	170	144	85	61	58	17	4	0	0	0	0	0	0	696
31	0	0	0	0	0	0	0	30	112	186 ?	?	623	641	577	480	342	86	13	0	0	0	0	0	0	3091 ?
Avg	0	0	0	0	0	0	0	25	104	217	304	370	390	355	282	156	56	5	0	0	0	0	0	0	2102 ?
S D	0	0	0	0	0	0	0	13	50	104	136	155	159	148	140	88	31	5	0	0	0	0	0	0	927
S/A	0	0	0	0	0	0	0	0.52	0.48	0.48	0.45	0.42	0.41	0.42	0.5	0.56	0.56	1.04	0	0	0	0	0	0	0.44
Min	0	0	0	0	0	0	0	1	12	34	52	70	39	42	33	28	4	0	0	0	0	0	0	0	288
Max	0	0	0	0	0	0	0	49	196	428	526	623	641	577	480	342	121	21	0	0	0	0	0	0	3731
n	0	0	0	0	0	0	0	293	314	288	302	323	305	322	278	296	358	70	0	0	0	0	0	0	3151

Daylight Data Recovery: 0.0% missing; 15.1% exceed the 15% QC threshold -- 3710 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31256F3 Calibration Factor: 7.561 μV/W/m² Calibration Date: 08/2003

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.

January 2005

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	6	12	11	15	10	6	5	0?	0	0	0	0	0	0	0	0	0	67?
2	0	0	0	0	0	0	0	4	6	8	9	6	6	2	1?	0?	0	0	0	0	0	0	0	0	0	41?
3	0	0	0	0	0	0	0	1	0	4	6	3	5?	4	2?	0?	0	0	0	0	0	0	0	0	0	25?
4	0	0	0	0	0	0	0	0	0	3	6?	4?	5?	4?	2?	0?	1	0	0	0	0	0	0	0	0	25?
5	0	0	0	0	0	0	0	1	6	3	7	3	2	2	6?	0?	0	0	0	0	0	0	0	0	0	31?
6	0	0	0	0	0	0	0	0	0	2	3	6	0	1	1	0	0	0	0	0	0	0	0	0	0	14
7	0	0	0	0	0	0	0	0	1	1	3	4	3	5	0?	0?	0	0	0	0	0	0	0	0	0	17?
8	0	0	0	0	0	0	0	0	0	0	1	0	7?	1?	0	0	0	0	0	0	0	0	0	0	0	10
9	0	0	0	0	0	0	0	0	0	0	2	1?	0	0	1?	?	0	0	0	0	0	0	0	0	0	4?
10	0	0	0	0	0	0	0	2	2	11?	8	0	1	2	548?	470	202	0	0	0	0	0	0	0	0	1245?
11	0	0	0	0	0	0	0	53	2	34	110	265	71	5	32	19	1	0	0	0	0	0	0	0	0	592
12	0	0	0	0	0	0	0	29	214	395	338	366	193	419	294	49	150	0	0	0	0	0	0	0	0	2447
13	0	0	0	0	0	0	0	35	113	212	158	128	80	223	540	452	54	0	0	0	0	0	0	0	0	1995
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	1
15	0	0	0	0	0	0	0	0	0	7	15	11	62	79	17	0	0	0	0	0	0	0	0	0	0	191
16	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
17	0	0	0	0	0	0	0	68	610	798	900	942	961	947	899	803	552	185	0	0	0	0	0	0	0	7665
18	0	0	0	0	0	0	0	325	719	867	937	972	979	965	923	828	583	140	0	0	0	0	0	0	0	8238
19	0	0	0	0	0	0	0	109	270	63	5	0	0	13	0	0	0	0	0	0	0	0	0	0	0	461
20	0	0	0	0	0	0	0	2	61	136	312	19	240	363	545	217	6	0	0	0	0	0	0	0	0	1901
21	0	0	0	0	0	0	0	0	0	1	4	19	1	405	787	722	491	132	0	0	0	0	0	0	0	2563
22	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	7	0	0	0	0	0	0	0	0	0	10
23	0	0	0	0	0	0	0	1	349	483	42	267	299	59	20	57	332	58	0	0	0	0	0	0	0	1966
24	0	0	0	0	0	0	0	200	399?	734?	808	748	877	271	690	568	5	0	0	0	0	0	0	0	0	5302?
25	0	0	0	0	0	0	0	144	392?	660?	586	402	16	679	754	548	375	97	0	0	0	0	0	0	0	4653
26	0	0	0	0	0	0	0	9	29	63	41	526	412	458	603	39	0	7	0	0	0	0	0	0	0	2187
27	0	0	0	0	0	0	0	0	6	?	357?	154	405	642?	?	595?	404	145	0	0	0	0	0	0	0	2707?
28	0	0	0	0	0	0	0	126	271?	?	?	?	?	?	?	?	356	14	0	0	0	0	0	0	0	766?
29	0	0	0	0	0	0	0	70	171?	?	?	?	?	185?	293	67	0	0	0	0	0	0	0	0	0	792?
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
31	0	0	0	0	0	0	0	1	0	12?	?	819	799	721	701	544	37	0	0	0	0	0	0	0	0	3633?
Avg	0	0	0	0	0	0	0	38	117	161	167	196	187	219	257	204	114	25	0	0	0	0	0	0	0	1598?
S/D	0	0	0	0	0	0	0	74	195	279	291	311	311	304	341	292	190	54	0	0	0	0	0	0	0	2235
S/A	0	0	0	0	0	0	0	1.94	1.66	1.73	1.74	1.59	1.66	1.39	1.33	1.43	1.66	2.13	0	0	0	0	0	0	0	1.4
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	1
Max	0	0	0	0	0	0	0	325	719	867	937	972	979	965	923	828	583	185	0	0	0	0	0	0	0	8238
n	0	0	0	0	0	0	0	293	332	303	316	335	333	342	296	305	366	70	0	0	0	0	0	0	0	3295

Daylight Data Recovery: 0.0% missing; 11.2% exceed the 15% QC threshold -- 3710 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25521E6 Calibration Factor: 8.034 μV/W/m² Calibration Date: 06/2002

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

January 2005

Diffuse Solar Radiation (Shadow Band) on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	0	28	119	261 ?	350 ?	405 ?	384 ?	360	212	33 ?	18	0	0	0	0	0	0	0	2169 ?
2	0	0	0	0	0	0	0	36 ?	149 ?	225 ?	311	365	366 ?	330 ?	197 ?	98 ?	35	0	0	0	0	0	0	0	2112 ?
3	0	0	0	0	0	0	0	32	93	187	257	282	286 ?	338 ?	216 ?	98 ?	32	0	0	0	0	0	0	0	1820 ?
4	0	0	0	0	0	0	0	7	50	160 ?	279 ?	280 ?	?	347 ?	188 ?	98 ?	52	0	0	0	0	0	0	0	1462 ?
5	0	0	0	0	0	0	0	35	130	245	340 ?	361 ?	353 ?	305	342 ?	108 ?	35	0	0	0	0	0	0	0	2255 ?
6	0	0	0	0	0	0	0	15	88	179	281	362 ?	313	264	174	98	35	0	0	0	0	0	0	0	1809
7	0	0	0	0	0	0	0	20	123	234	355 ?	401 ?	387	390 ?	192 ?	89 ?	42	0	0	0	0	0	0	0	2234 ?
8	0	0	0	0	0	0	0	17	55	126	138	156	422 ?	287 ?	117	80	4	0	0	0	0	0	0	0	1401 ?
9	0	0	0	0	0	0	0	18	78	174	272 ?	301 ?	285	255	245 ?	?	24	2	0	0	0	0	0	0	1653 ?
10	0	0	0	0	0	0	0	32	69	258 ?	353 ?	236	273	274 ?	91 ?	78	39	0	0	0	0	0	0	0	1703 ?
11	0	0	0	0	0	0	0	29 ?	78	167	258	287	243	223	219	138	45	5	0	0	0	0	0	0	1691
12	0	0	0	0	0	0	0	22	69	158	212	236	260	174	172	115	46	1	0	0	0	0	0	0	1464
13	0	0	0	0	0	0	0	27	112	159	229	212	255	254	118	90	33	4	0	0	0	0	0	0	1493
14	0	0	0	0	0	0	0	17	40	70	87 ?	?	?	39 ?	30	28	9	1	0	0	0	0	0	0	321 ?
15	0	0	0	0	0	0	0	22	69	160	225	211	287	291	221	111	35	4	0	0	0	0	0	0	1635
16	0	0	0	0	0	0	0	5	23	45	67	70	34	42	37	40	22	5	0	0	0	0	0	0	389
17	0	0	0	0	0	0	0	15	43	56	57	57	55	52	47	38	21	4	0	0	0	0	0	0	446
18	0	0	0	0	0	0	0	15	35	48	52	54	53	50	45	37	20	3	0	0	0	0	0	0	412
19	0	0	0	0	0	0	0	38	123	213	209	185	178	225	105	47	16	3	0	0	0	0	0	0	1340
20	0	0	0	0	0	0	0	24	119	202	191	274	309	233	110	98	41	4	0	0	0	0	0	0	1605
21	0	0	0	0	0	0	0	9	40	92	133	252	266	205	72	51	26	8	0	0	0	0	0	0	1154
22	0	0	0	0	0	0	0	7	13	33	50	95	45	80	49	93	23	9	0	0	0	0	0	0	497
23	0	0	0	0	0	0	0	21	53	132	249	264	256	248	194	131	61	9	0	0	0	0	0	0	1617
24	0	0	0	0	0	0	0	15	26 ?	45 ?	50	98	65	239	163	96	61	5	0	0	0	0	0	0	863 ?
25	0	0	0	0	0	0	0	18	38 ?	50 ?	119	235	390	118	72	76	27	8	0	0	0	0	0	0	1151
26	0	0	0	0	0	0	0	27	77	157	188	157	195	145	86	133	59	7	0	0	0	0	0	0	1232
27	0	0	0	0	0	0	0	12	69	?	182 ?	257	258	108 ?	?	39 ?	25	9	0	0	0	0	0	0	959 ?
28	0	0	0	0	0	0	0	20	37 ?	?	?	?	?	?	?	?	44	8	0	0	0	0	0	0	109 ?
29	0	0	0	0	0	0	0	21	37 ?	?	?	?	258 ?	233	201	129	50	9	0	0	0	0	0	0	937 ?
30	0	0	0	0	0	0	0	1	18	29 ?	100	170	144	85	61	58	17	4	0	0	0	0	0	0	688
31	0	0	0	0	0	0	0	31	112	172 ?	?	110	122	131	116	131	74	12	0	0	0	0	0	0	1010 ?
Avg	0	0	0	0	0	0	0	20	70	144	200	228	241	211	141	85	35	4	0	0	0	0	0	0	1278 ?
S D	0	0	0	0	0	0	0	9	38	73	101	103	115	104	77	34	16	4	0	0	0	0	0	0	602
S/A	0	0	0	0	0	0	0	0.46	0.54	0.51	0.5	0.45	0.48	0.49	0.55	0.4	0.48	0.9	0	0	0	0	0	0	0.47
Min	0	0	0	0	0	0	0	1	13	29	50	54	34	39	30	28	4	0	0	0	0	0	0	0	109
Max	0	0	0	0	0	0	0	38	149	261	355	405	422	390	342	138	74	12	0	0	0	0	0	0	2255
n	0	0	0	0	0	0	0	271	324	282	282	292	297	314	291	305	367	70	0	0	0	0	0	0	3099

Daylight Data Recovery: 0.0% missing; 16.5% exceed the 15% QC threshold -- 3710 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17880F3 Calibration Factor: 8.067 μV/W/m² Calibration Date: 07/2002

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

January 2005

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	10.3	10.1	10.1	10	9.9	10	9.8	9.3	9.8	11.9	14.1	16.9	18.5	19.6	19.8	18.7	16.8	15.2	13.6	12.3	11.7	11.4	10.6	10	12.9
2	9.1	9.1	9.1	8.7	9	8.1	8.3	8.5	9.8	11.6	13.5	15.3	16.7	17.5	16.7	15.9	14.3	12.7	11.9	11.4	11.2	11.1	10.6	10	11.7
3	9.4	9.1	8.8	9.2	9.7	9.1	8.5	9.1	9.3	10.8	12.9	16	18.3	19.4	20	19.4	18.2	16.7	15.6	15	14.4	14	13.7	13.5	13.3
4	13.9	13.7	13.9	13.6	13.7	14.8	15.1	15.2	15.3	16	18.1	19.8	21.3	22.4	22.9	23.2	22.5	20.6	19.3	19.2	18	16.9	16	15.5	17.5
5	15.6	15.8	15.8	15	14	13.8	14.7	14.7	15.3	16.9	18.2	19.8	20.9	21.3	22	21.8	20.8	19.5	16.3	11.1	10.4	9.9	9.6	9.1	15.9
6	9.2	10	12.9	14.3	14	13.4	13.9	13.5	14.3	15.8	17.5	19.2	20.8	21.2	21.4	21.4	20.8	19.8	19.1	18.3	18	17.6	17.4	17.3	16.7
7	17.5	17.5	17.1	17.1	16.9	16.1	15	14.1	12.1	11.1	11.4	11.4	11.1	11.6	11.4	10	9.1	8.1	7.8	7.8	8.3	8.6	9.1	9.3	12.1
8	9.5	9.6	9.9	9.9	9.9	10.4	10.4	10.5	11.1	12.9	14.3	16.5	19.3	20.9	20.8	21	19.1	16.7	16	15.6	14.9	12.3	10.4	9.5	13.8
9	8.6	7.7	6.9	6.3	5.9	5.6	5.3	5.3	6	7.1	8.2	9.5	9.3	9.2	9.3	9.2	8.4	7.1	6.5	5.9	5.6	5.4	4.9	4.4	7
10	3.9	3.6	3.3	2.9	3.8	4.9	5	4.8	5.9	8	10.4	9.5	9.9	10.9	13.5	14.9	15.6	13.6	11.1	10.8	9.7	8.8	8.5	8.4	8.4
11	8.6	8.6	8.5	8.1	7.8	7.1	6.7	6.9	7.5	8.4	10.4	12.5	13.2	13.1	12.8	12.3	11.7	11	10.4	9.9	9.4	8.8	8.7	8	9.6
12	8.9	9.8	9.9	9.7	9.2	9	9.1	8.6	9.9	12.4	15.2	17.2	18.7	20.2	20.9	20.5	19.8	18	17.4	16.9	16.6	16.9	16.5	16.3	14.5
13	16.1	16.1	15.9	15.7	15.9	15.8	15.2	15.4	16.6	18.9	20.5	21.8	21.4	22.4	23.2	23	21.8	20.5	20	19.8	19.8	20.3	20.3	20.4	19
14	20.4	20	19.6	19.4	19.6	19.7	19.9	20.3	20.7	20.8	17.3	11.4	9.3	8	6.8	6.2	6.4	6.5	6.7	6.9	6.8	6.7	6.5	6.2	13
15	5.8	5.3	4.6	4.2	3.8	3.5	3.1	2.8	3	3.4	3.9	3.9	4.2	4.7	4.4	4.1	3.7	3.2	2.8	2.5	2.7	3	2.9	2.4	3.7
16	2.2	2.5	2.8	3.1	3.5	3.7	3.4	3.3	3.4	3.9	4.9	5.5	5.4	5.4	5.2	4.8	5	4.8	4.5	4.2	4.2	4	3.8	3.5	4
17	2.9	2.3	1.7	1.6	1.5	1	0.1	-0.7	-1.2	-1.4	-0.8	-0.7	-0.2	0.1	0.5	0.4	0.3	-0.9	-1.6	-2.2	-2.8	-3.3	-3.7	-4.3	-0.5
18	-5.6	-6.4	-6.9	-7.3	-7.5	-7.7	-7.9	-7.9	-7.3	-6.7	-5.8	-5.1	-4.3	-3.8	-3	-2.8	-3	-3.9	-4.4	-5	-5.3	-6	-6.4	-6.9	-5.7
19	-6.8	-7.7	-8	-8.2	-8.3	-8.4	-8.9	-8.7	-5.9	-3.8	-3	-2.5	-2	-1.5	-1.1	-2.4	-4.2	-3.8	-2.6	-2.6	-2.6	-2.3	-2.5	-3.2	-4.6
20	-3.4	-3.7	-3.9	-3.5	-3.2	-2.6	-2.7	-2.9	-1.7	0.7	2.6	3.8	5	5.8	5.5	4.9	3.9	2.9	2.2	1.7	1.8	1.9	1.6	1.2	0.8
21	0.5	0.1	0	0	-0.1	-0.1	-0.2	-0.5	-0.6	-0.3	0.2	0.4	0.6	0.6	0.6	-0.3	-1	-2	-2.5	-2.9	-3.2	-3.6	-3.7	-3.7	-0.9
22	-4.2	-4.4	-4.5	-4.4	-4.3	-3.8	-3.4	-2.8	-2.1	-1.3	-0.5	-0.5	0.6	2	2.4	3.1	4	5.4	2.4	0.4	-0.1	0	0.7	0.8	-0.6
23	0.8	0.5	0.4	0.1	-0.3	-1.2	-3.2	-5.4	-6.2	-6.2	-6.4	-6.3	-5.8	-5.5	-5.1	-4.6	-4.2	-4.8	-5.1	-5.1	-5.1	-5.8	-6.3	-6.6	-4.1
24	-6.9	-7.1	-7.4	-7.6	-8	-8.6	-8.8	-8.7	-6.9	-5.4	-3.7	-2.3	-1.2	-1.1	-0.2	0.1	-0.4	-0.4	-0.9	-0.5	0.1	0.5	0.6	0.3	-3.5
25	0.3	0.2	0.4	0	-0.9	-0.6	-0.8	-1.5	0.2	1.9	3.7	5.2	4.8	5.8	5.5	5.2	4.8	2.9	1.6	1.5	1.3	1.2	1.1	0.8	1.9
26	0.9	1.2	1.7	2.3	2.3	2.5	3.5	4	4.9	6.3	6.8	9.1	10.9	12	13.6	14.1	14	13.4	12.2	10.4	7.3	6.9	6.9	6.2	7.2
27	5.5	4.8	4.3	3.7	2.3	1.1	0.1	-0.9	-1.8	-2	-2.4	-3	-2.8	-2.4	-1.8	-1.9	-2.6	-3.6	-4.2	-4.5	-4.5	-4.7	-5.5	-6	-1.4
28	-6.2	-6.4	-6.5	-6.8	-7.2	-7.5	-7.6	-7.6	-6.7	-5.5	-4.4	-3.4	-2.6	-2.3	-2.6	-3.1	-3.3	-4	-4.4	-4.8	-5	-4.9	-4.8	-4.9	-5.1
29	-4.6	-4.1	-3.8	-3.6	-3.7	-4	-4.5	-4.3	-2.9	-0.4	2.3	4	4.7	5.5	5.1	3.8	3.1	2.6	2.2	1.6	1.5	1.5	1.4	1.7	0.2
30	2.4	2.9	3.5	4.2	5.2	6.4	7.3	6	4.5	2.9	3.3	3.2	2.9	3.1	3.2	3.1	2.7	2.2	1.9	1.4	1.2	0.9	0.4	0.7	3.1
31	1.2	1.4	1.3	1.2	0.8	0.6	0.1	-0.1	0.3	1.4	2.9	4.1	5	5.4	5.3	5.1	3.9	2.6	1.6	1.3	1.5	1.7	1.6	1.3	2.1
Avg	4.7	4.6	4.6	4.5	4.4	4.3	4.1	3.9	4.4	5.5	6.6	7.5	8.2	8.8	9	8.7	8.1	7.2	6.4	5.8	5.4	5.1	4.9	4.6	5.9
SD	7.6	7.7	7.8	7.8	7.8	7.8	8	8	7.9	8	8.1	8.4	8.7	9	9	9.1	8.8	8.4	8.1	7.8	7.6	7.5	7.4	7.5	7.6
S/A	1.61	1.68	1.7	1.74	1.79	1.84	1.96	2.07	1.79	1.46	1.22	1.13	1.07	1.02	1	1.04	1.08	1.17	1.27	1.36	1.41	1.46	1.53	1.64	1.3
Min	-6.9	-7.7	-8	-8.2	-8.3	-8.6	-8.9	-8.7	-7.3	-6.7	-6.4	-6.3	-5.8	-5.5	-5.1	-4.6	-4.2	-4.8	-5.1	-5.1	-5.3	-6	-6.4	-6.9	-5.7
Max	20.4	20	19.6	19.4	19.6	19.7	19.9	20.3	20.7	20.8	20.5	21.8	21.4	22.4	23.2	23.2	22.5	20.6	20	19.8	19.8	20.3	20.3	20.4	19
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% 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

January 2005

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	92.9	93.4	91.7	92.4	92.9	93.4	95.2	96.9	95.7	89.7	82.9	75.3	71.8	70.2	70.8	74.5	79.7	85.6	91.7	96.1	97.5	98.3	99.9	101.6	88.7	
2	103.1	104.8 ?	?	?	?	?	?	104.6 ?	101.6	97.9	92.9	87.9	82.6	75.2	80.5	83.8	88.9	95.6	99.2	101.1	100.6	99.9	102	104.5	95.1 ?	
3	?	?	?	?	?	?	?	?	?	?	?	95.9	83.7	79.5	75.2	77.5	79.5	85.2	91.3	95.7	98.5	99.8	99.3	99.5	89.3 ?	
4	97.6	96.8	95.8	96.4	96.1	92.1	91.3	91.1	91.7	90.2	83.4	78.2	73.6	70.1	68.4	67.2	70.8	78.5	82.3	82.1	86.8	91.2	95	96.6	86	
5	96.4	95.6	95.6	97.8	100.8	101.4	98.8	97.8	96	90	85.7	78.7	73.5	72.3	69.3	69.7	73.9	79.3	88.1	101.5	104	?	?	?	88.9 ?	
6	?	?	?	102.7	102.7	104.3	104.1	104.6	104	101.3	97.1	91.4	81.4	76.8	75.5	75.7	77.4	80.3	82.7	87.4	89.5	90.9	91.9	92.3	91.1 ?	
7	91.2	91.9	94	94.6	94.4	79.1	69.5	67.2	77.9	79.2	71.8	73.1	67.7	65.7	71.1	85.8	88.3	88.5	90.2	95.1	94.2	92.7	93.3	96.1	83.9	
8	94.8	95.8	97.4	99.3	99.9	99.7	101.3	102.8 ?	?	?	?	?	97.5	87.3	85	83.1	91.8	96.8	100	101.6	102	90.7	83.5	80.7	94.6 ?	
9	77.3	79.8	83.1	86.3	89.1	91.3	93.2	94.2	91.9	89.5	85.5	80.2	81	81.6	81.4	81.4	84.7	91.9	95.9	99.4	101.7	102.8	104.4	104.8 ?	89.7	
10	?	?	?	?	?	?	?	?	?	103.3 ?	99.9	103.8	103.2	100.5	91.5	85.7	78.3	84.4	99.6	96.6	98.8	99.5	98.6	99.5	96.2 ?	
11	98.8	99.8	100.5	100	101.7	104	104.6 ?	?	104.9 ?	104.8 ?	99.1	83.3	79.2	79.4	81.5	87.9	93.5	98	100.4	101.8	103.1	104.5	105 ?	?	97.1 ?	
12	?	?	?	?	?	?	?	?	?	102.1 ?	97.4	91.6	85	78.5	75.2	77.2	80.2	87.8	92.1	92.5	92.8	91.9	94.7	95.7	89 ?	
13	97.5	100.1	101.2	101.1	101	102.5	104.4 ?	?	103.7 ?	98	92	87.1	90.9	84.8	77	77.6	84.5	93.3	97.6	99.9	101.2	100.1	99.7	99	95.4	
14	99.1	101.1	101	99.8	98.1	97.1	95.2	90.7	90.5	92.7	100.1	104.4	104.7 ?	104.3	103.9	100.7	99.9	99	96.9	94	88.4	85.9	83.4	84.7	96.5	
15	86.8	87	88.9	89.1	87.1	85.8	81.1	83.5	84.5	83.9	83.8	85.1	82.5	74	75.2	80.4	81.5	83.6	85.3	87.8	90.9	92.5	93.9	94.3	85.4	
16	95.6	97	97.7	98.1	98.4	98.8	99.9	100.4	101.8	102.3	101.6	100.1	99.1	97.6	97.9	101.9	101.1	101.3	100.9	99.9	99.3	98.3	97.1	95.2	99.2	
17	96.2	96.2	98.3	99.3	97.9	84.4	75	63.4	61.2	52.2	50	47.3	45.4	41.3	37.2	33.9	36.4	38.6	40.4	40.4	40.2	41.8	39.6	45.5	58.4	
18	46.9	48.7	46.3	47.7	48.3	47.9	47.9	48.2	47	42.4	39	35	34.6	32.9	32	32.6	36.6	39.8	43	47.4	53.3	57.7	61.4	43.7		
19	63.7	70.8	72.6	73.1	75.4	77	84.6	86.6	71.9	65	73.8	67.7	58	50.7	44.5	61.1	99.7	103.7	102	100.6	98.2	90.5	86.8	85	77.6	
20	84	83.8	84.5	81.9	80.2	78.3	79.8	80.8	79.1	72.4	70.3	69.9	67	63.9	65.7	73	82	87.4	87.4	87.7	87.6	87	86.3	90.7	79.6	
21	100.3	104.3 ?	?	?	?	?	104.6 ?	101.6	96.3	88.6	81.4	84.1	73.4	68.4	62.6	56.8	54.4	55.7	62.2	62.8	61.9	65.3	69.8	69.1	76.2 ?	
22	71.5	71.6	71.9	78.2	81.8	84.9	86.8	88	89.9	91	92.4	100.4	103.9	104.6	104.9 ?	?	?	?	?	?	?	?	?	104.7 ?	89.2 ?	
23	103.5	103.3	99.8	97.5	95.1	91.6	76.3	68.5	59.5	57.1	64.6	64.1	63.5	65.9	68.3	68.7	67	70.9	67.9	68.6	59.6	59.6	59.2	60.2	73.3	
24	60.4	61.3	63	65	67.7	71.5	72.9	72.1	61.9	51.5	44.1	39.7	36.9	37.8	38.6	43	45.6	45.7	54.4	60.5	56.6	53.6	56.1	58.7	54.9	
25	55.4	53.3	54	54.6	59.8	63.1	68.9	71.7	66.4	61.9	55.4	51	53.5	50.8	56.9	56.3	59.7	72.8	82.8	90.3	89.8	92	94.9	97.3	67.2	
26	97.7	96.6	98.2	97.7	97.9	97.4	94.3	91.9	87.1	81.6	81.8	71.5	62.8	58.7	55.5	54.6	56.9	61.1	66.4	74.1	83.5	82.6	80.8	80.1	79.6	
27	80.9	82.4	83.1	86.3	88.4	84.9	80.3	79.6	80.4	77	74.9	75.9	74.1	70.1	63.1	59.6	62.9	68.2	70.8	69.1	71.3	70.9	71.1	62.5	74.5	
28	59.1	60.2	59.8	59.1	61.9	67.5	71.2	68.8	63.7	64	54.4	44.6	45.9	51.7	54.6	65.9	71.1	78.4	78.9	75.1	77.8	75.1	76.4	78.1	65.1	
29	77.9	77.6	78.2	80.3	81	81.9	84.9	86.3	82	78.4	77.1	73.7	71.7	68.3	70.9	78.4	84.1	88	92	96.2	97.9	99.2	102.1	104	83.8	
30	104.1	104.8 ?	?	?	?	104.7	104.7 ?	?	?	?	?	?	?	?	?	104.8 ?	103.5	104.7 ?	?	?	104.1	104	102.3	97.3	90.2	102.4 ?
31	84.6	87.1	86.6	83.5	85.4	87.4	91	91.8	90.6	88	83.8	80.8	78.4	77.2	77	77.6	82.8	89.6	94.5	96.3	96.8	96.8	97.6	99.9	87.7	
Avg	85.8	86.9	85.1	86.5	87.3	87.4	87.5	85.3	83.9	82	79.1	76.6	74.2	71.3	71.5	72.5	76.5	80.2	83.9	86.7	87.4	86.5	86.8	87.3	83.2 ?	
S/D	16.5	16.4	16.1	15.7	14.8	14.1	14.3	14.8	16.1	17.6	17.6	18.8	18.8	18.2	18.7	17.6	18.2	17.9	17.4	17.4	17.7	17	16.8	16.5	13.8	
S/A	0.19	0.19	0.19	0.18	0.17	0.16	0.16	0.17	0.19	0.21	0.22	0.24	0.25	0.25	0.26	0.24	0.24	0.22	0.21	0.2	0.2	0.2	0.19	0.19	0.17	
Min	46.9	48.7	46.3	47.7	48.3	47.9	47.9	48.2	47	42.4	39	35	34.6	32.9	32	32.6	36.6	39.8	40.4	40.2	41.8	39.6	45.5	43.7		
Max	104.1	104.8	101.2	102.7	102.7	104.7	104.7	104.6	104.9	104.8	101.6	104.4	104.7	104.6	104.9	103.5	104.7	103.7	102	104.1	104	104.5	105	104.8	102.4	
n	324	311	288	298	300	310	299	291	298	314	335	348	355	360	353	360	356	348	348	359	360	348	338	337	7939	

Data Recovery: 0.0% missing; 11.1% 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

January 2005

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	9.1	9.2	9.3	9.3	9.5	9.7	9.6	9.3	9.7	11.8	14.8	18	21.1	22.6	22.7	22.3	20.3	17.5	14.8	12.9	11.6	10.8	10.3	9.7	13.6
2	9	8.4	8.2	8.2	8	7.9	7.8	7.8	8.8	10.6	13.3	16	18.1	20	20	19.4	17.7	15.2	13	11.7	11	10.7	10.3	9.8	12.1
3	9.3	8.9	8.7	8.5	8.8	9	8.6	8.4	9	10.4	12.5	15.1	17.6	20.8	22	21.8	20.3	18.2	16.2	15.1	14.4	13.9	13.4	13.2	13.5
4	13.3	13.3	13.4	13.6	13.6	14	14.6	15.2	15.5	16	18.1	20.7	22.5	24	24.9	25.3	24.9	22.9	20.5	19.5	18.8	17.4	16.4	15.8	18.1
5	15.7	15.7	15.6	15.2	14.4	13.7	13.7	14.4	14.9	16.7	18.5	20.4	21.9	22.6	23.2	23.7	22.7	20.9	19.1	16.1	13.3	11.9	11.1	10.5	16.9
6	10	9.7	10.5	12	12.9	12.9	12.9	13.1	13.3	14.4	16.6	18.9	21.2	22	22.4	22.5	22.1	20.9	19.6	18.8	18.1	17.6	17.2	17	16.5
7	16.9	17	16.9	16.7	16.8	16.6	15.7	14.2	13.4	13.2	13.5	14.3	14.8	14.7	14.9	13.9	12.1	10.1	8.6	7.9	7.8	8.5	9	9.5	13.2
8	9.8	10	10.4	10.4	10.4	10.7	11	11.1	11.3	12.2	13.7	15.6	18.1	21.4	22.2	21.9	21.5	18.8	16.8	15.8	14.9	13.7	11.7	10	14.3
9	9	7.9	6.9	6.2	5.6	5	4.6	4.7	5.1	6.4	8.2	11.4	12.8	12.6	12.3	12.6	11.8	9.5	7.1	5.9	5.2	4.8	4.2	3.7	7.7
10	3.1	2.7	2.5	2.2	2.5	3.7	4	3.9	4.8	6.9	10.2	12.2	12	12.4	13.8	15.5	16.2	15.1	12.3	10.5	9.7	8.6	7.8	7.4	8.3
11	7.5	7.8	7.7	7.2	6.7	5.9	5.6	5.6	6.4	7.4	9.1	12.2	14.8	15.4	15.3	14.8	13.7	12.3	10.9	9.8	9.1	8.4	7.9	7.5	9.5
12	7.6	8.4	8.9	9.2	9.1	8.7	8.5	8.4	9.1	11.5	14.3	17.5	19.5	21.2	22.4	22.4	21.7	20.1	18.6	17.8	17.1	17	17	16.8	14.7
13	16.6	16.4	16.2	15.9	15.7	15.6	15.3	15.1	15.5	17.8	20.2	22.2	23.2	23.6	24.7	25.2	24.6	22.7	21.1	20.4	20	20.2	20.3	20.5	19.5
14	20.6	20.5	20.3	19.8	19.6	19.6	19.8	20.1	20.5	21	20.7	17	12.7	10.4	8.8	7.5	6.6	6.3	6.1	6.3	6.7	6.8	6.7	6.5	13.8
15	6.1	5.4	4.6	3.8	3.2	2.8	2.4	2.1	2.5	3.4	4.4	5.1	5.5	6.3	6.5	6	5.3	4.5	3.7	3	2.8	3	3.2	2.8	4.1
16	2.5	2.5	2.8	3.2	3.5	3.8	4	4	3.9	3.8	4.2	4.8	5.6	5.9	6	5.6	5.2	5	4.7	4.3	4.1	4.3	4.3	4.1	4.3
17	3.9	3.3	2.1	1.8	1.8	1.8	1.2	0.4	0	0.8	1.9	2.8	3.3	3.6	3.6	3.4	2.8	1.1	-1.4	-2.8	-3.7	-4.6	-4.9	-5.3	0.7
18	-5.7	-6.5	-7.2	-7.8	-8.2	-8.5	-8.8	-8.9	-7.8	-5.8	-4	-2.5	-1.4	-0.8	-0.5	-0.3	-0.5	-2	-4.4	-5.9	-6.8	-7.7	-8.5	-8.8	-5.4
19	-9.1	-9.4	-9.6	-9.8	-10.1	-10.4	-10.7	-10.6	-8.7	-4.8	-2.6	-1.6	-1	-0.5	0.1	-0.2	-1.5	-2.7	-2.8	-2.4	-2.4	-2.2	-2.3	-3	-4.9
20	-3.6	-4.1	-4.7	-5.1	-4.9	-4.5	-3.9	-3.5	-2.8	-0.4	3	5.4	6.8	8.8	9.7	9.1	7	4.8	3.5	2.4	1.8	1.8	1.9	1.8	1.3
21	1.5	1	0.7	0.6	0.5	0.4	0.4	0.3	0.1	0.2	0.7	1.3	2.1	2.6	3.2	3.1	2.3	0.4	-2	-3.3	-4.2	-4.8	-5.3	-5.4	-0.1
22	-5.6	-5.8	-6	-5.8	-5.3	-4.7	-4	-3.1	-2.4	-1.6	-0.6	0.2	0.7	1.5	2.5	3.2	3.9	4.6	4.9	3.3	1.7	1	0.9	1	-0.6
23	0.9	0.8	0.5	0.2	0.1	-0.1	-0.9	-2.7	-4.5	-4.1	-3.7	-3.7	-3.2	-3.1	-3.3	-3.2	-3	-3.4	-4.8	-5.7	-6	-6.1	-6.5	-7.1	-3
24	-7.6	-7.9	-8.3	-8.7	-9.1	-9.7	-10.1	-10.4	-8.6	-5.3	-2.5	-0.1	2	3.1	2.9	3.4	2.8	1.2	0.3	-0.2	-0.2	0.2	0.5	0.4	-3
25	-0.2	-0.8	-0.5	-0.2	-1.4	-1.8	-1.9	-2.8	-1.5	1.7	5	8.4	9.7	9.7	10.1	9.4	8.5	6.5	3.5	1.8	1	0.6	0.3	0	2.7
26	-0.2	-0.1	0.1	0.4	0.9	1.1	1.7	2.6	3.7	5.2	7.1	8.9	12.2	13.9	15	15.8	15.4	14.7	13.3	11.1	8.7	6.9	6.4	6.7	7.1
27	6.5	5.7	5.2	4.7	4.2	3.1	2	0.9	0	-0.1	0.8	1	0.5	0.8	1	1.2	0.7	-0.9	-3.3	-4.6	-5.3	-5.6	-6	-6.5	0.3
28	-6.9	-7.2	-7.4	-7.7	-8	-8.3	-8.6	-8.6	-7.2	-5	-2.7	-0.9	0.6	1.5	1.6	1.1	0.3	-1.3	-3.6	-4.8	-5.5	-5.8	-6	-5.9	-4.4
29	-5.5	-4.7	-4.1	-3.7	-3.4	-3.8	-4.7	-5.2	-3.8	-0.8	2.9	6.4	8.5	9.4	9.4	8	5.9	4.3	3.4	2.8	2.5	2.2	2.1	1.9	1.3
30	2.1	2.6	3	3.6	4.3	5.1	6.1	6.8	6.3	5.2	4.4	4.5	4.4	4.3	4.2	4.1	3.9	3.4	2.9	2.5	2.1	1.8	1.5	1.1	3.8
31	1.2	1.6	1.7	1.8	1.5	1.4	0.9	0	0	1.2	3.8	6.2	7.9	8.7	8.9	8.7	7.9	5.6	3.5	2.2	2	2.1	2.2	1.9	3.5
Avg	4.4	4.3	4.1	4	4	3.9	3.8	3.6	4.1	5.5	7.3	9	10.1	10.9	11.3	11.2	10.4	8.9	7.3	6.2	5.5	5.1	4.7	4.4	6.4
S D	7.9	7.9	8	8	8	8.1	8.1	8.2	8	7.6	7.6	7.8	8.2	8.6	8.8	8.9	8.7	8.4	8.3	8.1	8	7.9	7.8	7.8	7.6
S/A	1.77	1.86	1.93	1.98	2.03	2.07	2.16	2.26	1.95	1.39	1.04	0.87	0.81	0.78	0.78	0.79	0.84	0.95	1.13	1.31	1.45	1.55	1.64	1.75	1.18
Min	-9.1	-9.4	-9.6	-9.8	-10.1	-10.4	-10.7	-10.6	-8.7	-5.8	-4	-3.7	-3.2	-3.1	-3.3	-3.2	-3	-3.4	-4.8	-5.9	-6.8	-7.7	-8.5	-8.8	-5.4
Max	20.6	20.5	20.3	19.8	19.6	19.6	19.8	20.1	20.5	21	20.7	22.2	23.2	24	24.9	25.3	24.9	22.9	21.1	20.4	20	20.2	20.3	20.5	19.5
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

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

January 2005

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	2.5	2.4	2.1	3.1	3.2	2.4	2	1.8	2.7	2.1	2	0.7	0.7	1.4	0.7	1.5	1.3	0.6	0.6	0.6	0.5	1	1.2	0.6	1.6
2	0.4	0.3	0.4	0.2	0.1	1.4	2.2	1.8	1.4	2	1.9	2.1	1.7	2.4	2.4	2.1	1.9	1.5	1.3	1.3	1.3	1.3	0.4	0.1	1.3
3	0	0	0.1	0.1	0.2	0	0.1	0	0.1	0.2	0.4	1.8	1.9	2	2.3	2.3	1.5	1.1	1.5	2.1	2.2	2.3	2.4	2.1	1.1
4	2.6	2.8	2.9	2.6	2.9	4.2	4.8	4.4	3.8	4	4.6	4.3	5.1	4.1	3.5	3.3	2	1.2	1.4	1.8	1.1	1.2	1.9	2.2	3
5	1.3	1.6	1.2	0.9	1.1	1.6	2.7	2.1	2.9	4.8	4.3	5.9	7.6	6.2	5.5	4.7	2.9	1.9	1.8	2.4	2.6	2.1	1.4	1.3	2.9
6	0.5	0.8	2.3	2.3	2.4	2.3	2.5	2.7	2.6	3.9	4.5	4.5	6.4	5.7	4.8	4	3	2.2	2.4	2.9	3.5	3.2	2.9	2.9	3.1
7	3.5	3.3	2.8	2.9	2.1	1.9	1.3	1.1	3.7	4.4	4.3	4.3	4.3	3.2	3.8	3.7	3.5	3.2	2.6	1.8	3.1	3.6	2.6	2.2	3
8	2.2	1.6	1.6	1.3	1.4	0.4	0.6	1.3	1.5	2.9	2.2	4	4.9	6.3	5.2	4.3	4	2.6	1.3	0.8	0.5	4.6	2.7	3.3	2.6
9	3.7	2.8	3.2	3.6	1.9	1.7	1.8	1.4	2.2	2.6	2.9	2.3	2	2.4	2.3	2.2	2.2	1.5	1.6	1.9	1.8	0.7	0.2	0.2	2
10	0	0	0	0	0	0.1	0.1	0.4	1.7	2.6	4	4.1	4	3.4	2.7	2.1	0.9	0.8	0.9	2.4	1.5	1.8	1.3	0.9	1.5
11	0.9	1.5	1.6	1.4	0.7	0.6	1.2	1.1	1.7	2.2	3.1	3.6	2.4	2.3	3	3.2	2.3	1.6	0.6	0.6	0.2	0	0	0.2	1.5
12	0.9	0.3	0.7	0.5	0.1	0	0.1	0.1	0.7	1.5	2.8	3.2	3	3.1	3.1	2	1.8	2.3	2.2	2.4	2.8	2.4	1.5	1.5	1.6
13	1.7	2.4	2	2.5	2.5	1.3	1.5	1.9	2.7	3.4	3.7	4.6	5.4	5.4	5.9	5.4	5	5	5.1	5.1	4.9	6.3	5.7	6.2	4
14	5.9	6.5	6.9	6.4	6.8	6.4	5.8	6.7	7.4	6.4	6.6	7.5	6.1	5.6	5.8	6	4.6	4.2	4	4.2	4.4	4.9	4.7	4.4	5.8
15	4.1	4.1	3.5	3.7	3.6	3.8	3.7	3.7	4.4	5.1	5.5	5.6	5.3	5.6	5.8	5.1	4.7	4.7	4.7	4.5	4.1	4	4.2	4.2	4.5
16	4.6	4.5	4.4	4.7	4.4	4.6	4.7	4.9	4.7	4	4.9	5.4	5.6	5.6	5.6	4.4	4.4	4.6	3.5	3.4	3.8	3.2	2.7	3	4.4
17	3.2	2.1	1.5	2.4	2.7	4.9	4.5	4.7	4.7	4.8	4.7	5	4.6	4.2	3.6	3.7	2.6	2.6	2.6	2.5	2.1	2.5	3	3.5	3.5
18	4.3	4.5	4.4	4.6	4.5	4.2	4.1	3.9	4.9	5	4.6	4.6	4.2	4.7	4.1	3.3	2.8	2.1	1.8	1.2	1	0.8	1	1.2	3.4
19	0.7	1.3	1.7	0.9	0.8	0.4	0.4	0.3	0.6	1.5	2.6	3.4	3.8	4	3.5	4.4	2.6	2	2.7	3.2	2.9	3	3	3	2.2
20	2.7	1.6	1.3	1.6	1.6	1.6	1.3	1	0.5	0.9	1.5	0.7	1.6	1.7	2.5	2.2	1.9	1.9	1.6	1.1	0.6	0.6	1.3	1.2	1.4
21	0.9	1.1	1.1	1.3	1.4	1.7	2.6	3	3.2	3.6	4	4.5	4.1	4.5	5	5.1	4	3.4	2.5	2.3	1.6	1.6	1.9	2	2.8
22	2	1.2	2	1.6	1.5	1.6	1.1	1	0.5	0.2	0.2	1.1	0.7	1	1.6	1.6	1.8	2.4	2.7	2.9	2	2.3	3.5	4.3	1.7
23	2.6	2.6	3	2.6	2.4	4.8	5.4	6.7	6.2	6.7	5.7	6.4	6.4	5.6	5.1	5.3	4.9	4.7	4.1	3.7	4.9	5.3	5	4.6	4.8
24	4.3	3.3	3	2.7	2	2.1	1.8	1.5	1.8	3.3	3.1	2.6	2.2	2.1	2.3	2.8	2.1	2	1.9	1.7	2.2	2.5	2.2	1.4	2.4
25	1.7	2.2	1.9	1.6	1	1.1	0.6	0.7	1.6	2.3	1	1	1.6	1.7	2.6	3.1	1.9	2.2	2.9	2.4	2.5	2.2	2.2	1.6	1.8
26	2.4	2.3	1.8	2.5	2	2.5	2.8	2.6	2.9	2.9	2.8	3.8	3.8	3.6	3	3.2	3	1.6	0.9	0.7	1.2	1.5	2.5	3.5	2.5
27	3	3.1	3.7	4.8	5.1	5.3	6.4	5.8	6.3	6.7	6.7	6.5	6	6.1	5	5.4	5	4.8	4.1	3.7	3.6	3.2	3.9	4.2	4.9
28	3.9	4.1	3.5	3.8	3.4	3.6	3.3	3.5	3.8	4.1	4.7	4.5	4.1	3.7	4.3	4.5	3.5	3.1	2.8	2.7	2.7	2.3	2	1.6	3.5
29	1.7	2.1	2	2	1.9	2.6	2.5	2.4	2.9	2.8	2.8	2.1	2.4	2.5	2.7	2.7	1.7	1.5	1.1	1.7	1.4	1	1.7	1.6	2.1
30	1.4	2.1	1.4	1.4	2.1	2.8	1.6	1.6	2.1	2.3	2.1	3.3	3.3	3.5	4	4.8	3.9	3.4	3.5	4.3	3.9	5.1	5	4.7	3.1
31	4.8	5.1	4.7	4.1	4.3	4.6	4	3.7	4.4	4.7	5.3	4.8	4.6	4.7	4.5	4.3	4.5	4.2	3.7	3.9	3.5	3.6	3.2	3.8	4.3
Avg	2.4	2.4	2.4	2.4	2.3	2.5	2.5	2.5	2.9	3.4	3.5	3.8	3.9	3.8	3.7	3.6	3	2.6	2.4	2.5	2.4	2.6	2.5	2.5	2.8
SD	1.5	1.5	1.5	1.5	1.6	1.7	1.8	1.9	1.8	1.7	1.7	1.8	1.8	1.6	1.4	1.3	1.2	1.3	1.2	1.2	1.3	1.5	1.4	1.6	1.2
S/A	0.64	0.65	0.63	0.64	0.71	0.7	0.71	0.75	0.63	0.51	0.47	0.46	0.47	0.42	0.37	0.35	0.42	0.49	0.51	0.5	0.55	0.6	0.57	0.63	0.43
Min	0	0	0	0	0	0	0.1	0	0.1	0.2	0.2	0.7	0.7	1	0.7	1.5	0.9	0.6	0.6	0.6	0.2	0	0	0.1	1.1
Max	5.9	6.5	6.9	6.4	6.8	6.4	6.4	6.7	7.4	6.7	6.7	7.5	7.6	6.3	5.9	6	5	5	5.1	5.1	4.9	6.3	5.7	6.2	5.8
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% failed QC -- 8928 total measurements.

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

January 2005

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	225	231	225	230	228	238	244	249	261	254	261	293	234	246	195	137	157	127	122	68	126	126	113	109	225
2	64	85	33	38	32	43	64	66	60	59	62	61	64	65	58	72	82	81	95	97	108	119	191	211	71
3	265	271	145	159	227	165	157	227	194	211	216	220	211	188	186	171	185	182	192	185	192	194	186	191	191
4	199	205	208	209	217	225	227	229	233	234	252	253	260	263	258	254	231	208	200	220	191	157	178	213	230
5	207	208	201	201	191	203	212	205	214	229	224	232	241	243	240	237	235	221	58	59	56	68	83	107	223
6	130	174	189	199	184	184	188	185	189	191	200	205	218	212	210	214	207	194	193	182	191	203	209	215	200
7	227	229	230	237	275	291	295	307	44	52	46	60	63	46	62	59	71	70	72	68	70	72	66	64	57
8	69	65	61	61	58	357	122	152	170	205	206	207	211	222	226	233	285	283	289	285	311	0	5	6	243
9	12	9	21	40	29	356	7	32	46	47	67	45	42	35	63	44	50	52	72	68	78	44	5	313	39
10	0	308	358	148	160	152	162	178	185	217	233	234	231	232	250	261	275	329	67	56	62	69	75	95	227
11	86	87	76	69	95	67	49	60	44	57	68	81	88	91	90	101	96	97	89	98	124	282	313	156	81
12	159	164	196	200	194	203	149	181	195	216	222	222	216	202	212	191	162	167	170	163	179	184	174	169	192
13	151	163	171	163	161	151	137	150	166	179	179	177	166	172	178	177	170	165	168	163	167	169	169	169	169
14	173	163	166	170	171	174	180	181	179	177	301	349	327	327	336	344	354	354	359	346	345	350	353	354	278
15	354	347	346	340	358	8	11	1	355	359	26	24	24	28	32	21	12	6	3	4	3	356	360	352	7
16	354	353	354	360	12	5	1	356	344	345	349	0	350	348	353	354	353	341	340	347	341	331	320	313	350
17	308	319	299	298	301	319	323	313	311	316	319	325	308	310	312	320	305	300	300	300	299	312	308	323	312
18	319	314	316	313	313	312	311	312	313	315	319	316	325	331	329	318	314	321	330	322	334	301	296	291	317
19	19	267	283	290	279	300	261	256	164	199	200	200	205	244	245	254	211	187	211	229	246	257	259	259	236
20	270	280	277	292	300	287	276	246	274	289	290	334	33	23	61	64	49	52	51	43	27	344	329	347	342
21	357	31	34	3	0	3	2	7	357	356	359	25	4	357	10	354	8	12	12	9	6	350	13	9	5
22	30	19	357	355	357	347	352	345	31	3	292	92	98	158	234	220	181	226	287	295	296	261	273	293	298
23	307	296	308	308	304	302	294	296	299	302	304	303	307	299	302	311	305	306	301	300	312	310	308	308	304
24	307	305	308	307	300	293	294	298	311	316	348	331	306	237	204	203	211	193	174	197	207	203	203	212	272
25	242	262	284	291	292	314	317	289	345	33	45	149	197	225	131	154	136	122	122	133	145	145	146	154	158
26	161	165	181	187	183	178	183	182	198	196	194	229	222	231	234	252	258	273	285	26	51	13	24	30	209
27	16	6	3	356	351	352	353	357	358	2	345	357	5	357	6	357	1	2	358	353	350	2	10	8	359
28	6	6	3	4	7	5	7	2	356	19	12	18	35	44	42	45	21	32	9	350	17	23	1	339	15
29	314	316	320	327	326	341	350	13	25	29	45	48	52	64	62	62	54	51	48	68	72	66	69	67	29
30	78	85	87	95	102	102	139	282	312	334	306	318	317	327	323	331	320	312	317	322	326	327	341	336	333
31	343	341	343	340	341	343	340	342	344	341	340	351	353	358	359	360	350	3	356	351	355	354	2	3	349
Avg	325	318	317	316	317	322	319	314	321	319	320	325	305	303	319	324	336	350	354	353	353	343	339	334	310
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% 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

January 2005

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	3.5	3.4	3.4	4.2	4.6	3.7	3	2.6	4.3	3.7	3.4	1.9	2	2.7	1.6	2.4	2.1	1.1	0.9	1	1	1.5	1.6	0.9	2.5
2	0.6	0.6	0.6	0.4	0.3	2.3	3.4	3.1	2.7	3.6	3	3.3	3	3.5	3.8	3.3	3	2.3	2	1.9	2.1	2.2	0.8	0.5	2.2
3	0.1	0.1	0.3	0.5	0.5	0.1	0.5	0.4	0.6	1.2	1.4	3.3	3.4	3.3	3.9	3.6	2.7	2.1	2.5	3.4	3.6	3.9	3.7	3.3	2
4	4.4	4.4	5	4.4	4.5	6.6	7.6	6.8	5.7	6	7.3	7.1	7.9	7.1	5.5	5.2	3.1	2	2.2	2.8	1.8	1.9	3.1	3.4	4.8
5	2.3	2.7	2.3	1.7	1.7	2.7	4.4	3.6	5	7.5	7.2	9.2	11.9	9.8	9.1	7.5	4.5	3.2	2.9	4	4.3	3.2	2.4	2	4.8
6	1.3	1.9	4	3.9	4	3.7	4.5	4.4	4.5	6.6	7.4	7.6	11.3	10.2	8.3	6.8	5	3.6	4	4.8	6.2	5.3	4.6	4.6	5.4
7	5	4.7	3.9	4.4	3.6	4.1	2.6	2.1	6.2	6.9	7	6.8	6.7	5.5	5.8	5.9	5.7	5	4.1	3.1	4.9	5.3	4.1	4	4.9
8	3.7	2.7	2.9	2.4	2.5	1.2	1.2	2.2	3.1	5.4	3.9	6.7	8.3	10.3	7.9	6.5	7.4	5.1	3	2	1.4	8.4	5.1	5.6	4.5
9	6.3	5.2	5.8	5.9	3.5	2.8	3.3	2.8	3.7	4.5	4.9	4.1	3.6	4.1	4	3.7	3.4	2.6	2.7	3.3	3.1	1.3	0.6	0.6	3.6
10	0	0.2	0	0.2	0.3	0.6	0.5	1.2	3.3	4.3	6.3	6	6.3	5.4	4.8	3.9	2.3	1.4	1.6	3.9	2.6	2.7	2	1.7	2.6
11	1.6	2.2	2.6	2.1	1.1	1	1.7	1.9	2.5	3.6	4.9	5.6	3.9	3.7	4.5	5	3.6	2.5	1.2	0.9	0.7	0.1	0.1	0.5	2.4
12	2	1.3	1.8	1.6	0.9	0.4	0.3	0.9	2.1	2.9	4.4	5	5.2	5.3	4.9	3.3	2.9	3.8	3.7	3.7	4.8	4.1	2.5	2.5	2.9
13	2.8	3.8	3.6	4	3.7	2.4	2.4	3.2	4.4	5.6	6.4	8.3	8.8	9	10.1	9.2	8.4	8.3	8.4	8.4	8.6	10.6	10	10.4	6.7
14	9.8	10.8	11.6	10.7	10.7	10.1	9.4	10.9	12.1	10.7	11.7	12.7	11.5	9.7	10.6	10.8	8.1	7.5	6.8	7.1	7.5	8.5	7.6	7.1	9.8
15	6.9	6.5	5.7	6	6.4	6.8	6.5	6.4	7.5	8.8	9.6	9.7	9.5	9.6	9.6	8.7	8.5	8.1	7.8	7.7	7.5	6.8	7	6.9	7.7
16	7.6	7.5	7.6	8	7.8	8.4	8.3	8.1	7.6	6.7	8.2	9.5	9.5	9.4	9.5	7.6	7.7	7.3	6.2	5.8	6.7	5.9	5.6	6.4	7.6
17	6.8	4.6	3.5	5.2	5.4	9.8	8.4	9	9.5	9.3	8.8	9.2	8.8	8.5	7.2	7.2	5.6	5.3	5	5.1	4.7	5.1	6.1	6.5	6.9
18	8.5	8.8	9.1	9.6	8.7	8.7	7.9	8.1	8.9	9	8.4	8.7	7.7	8.3	7.4	6.4	5.8	4.6	3.4	2.4	2	1.6	2.2	2.5	6.6
19	1.5	1.9	3	1.8	1.4	1	0.8	0.8	1.1	2.7	4.3	5.5	6.3	6.4	5.7	6.6	4.3	3.6	4.7	4.6	4.7	4.9	4.5	4.6	3.6
20	4.5	3	2.5	2.9	2.8	3	2.3	1.5	1.4	2.4	3.4	1.7	3.2	3	3.8	3.6	3.1	3.1	2.5	1.7	1.2	1.4	2.5	2.2	2.6
21	1.6	2.1	2.2	2.6	2.7	3.3	4.8	5.3	5.6	5.7	6.9	7.7	6.9	7.4	8.2	8.7	7	5.9	4.6	4.1	3.2	2.9	3.7	3.6	4.9
22	3.5	2.5	3.4	3	2.5	2.5	1.9	1.9	1.3	0.7	0.8	2	1.7	2.3	3.2	3.1	3.4	4.5	5.8	6.4	4.6	4.3	7.1	9.1	3.4
23	5.4	5.7	6.9	6	5.5	9.6	11.3	13.8	12.9	13.1	11.2	12.7	12.2	11.6	10.5	11.3	10.1	9.3	8.2	7.7	9.8	10.1	9.4	9.3	9.7
24	8.6	7.1	6.3	5.5	4.3	4.6	3.6	3.1	4	6.3	5.3	4.8	4.3	3.8	4.3	4.5	3.6	3.5	3	2.8	3.7	4.2	3.8	2.5	4.5
25	3	3.3	3.5	3.1	1.9	2.2	1.4	1.3	2.8	3.9	2.1	2.2	2.8	3.3	4.3	4.8	3.1	3.7	4.3	3.8	4.2	3.7	3.4	2.6	3.1
26	3.7	3.7	3.2	3.9	3.3	3.6	4.1	4.1	4.5	4.8	4.5	5.8	5.8	5.7	4.9	5.1	4.6	3	1.6	1.2	1.9	2.5	4.2	6.2	4
27	5.6	5.7	6.2	7.9	9.5	8.9	10.1	9.6	10.5	11.3	11.6	11.4	10.2	10.1	8.8	9.3	8.5	8.3	7.2	6.3	5.9	5.7	6.5	7.2	8.4
28	7.2	7.5	6.1	6.5	5.9	6.2	6.1	6.1	6.5	7.3	7.6	7.6	7	6.3	6.9	7.4	6	5.6	5	4.7	5	4.7	3.6	3	6.1
29	3.5	4	4	3.9	4	4.4	3.9	4.3	5.2	4.9	5.1	3.9	4.2	4.4	4.4	4.6	2.8	2.4	2	2.9	2.4	2	2.8	2.8	3.7
30	2.6	3.7	2.6	2.6	3.5	5	3.3	3.6	4.3	4.3	4.4	6.6	6.5	7.1	7.7	8.8	7.5	7.2	7.4	8.3	7.4	8.9	9	7.6	5.8
31	8.2	8.3	7.8	6.7	7.5	7.6	6.7	6.4	7.2	7.6	8.8	7.8	8.2	7.8	7.6	7.5	7.6	7.2	6.6	6.5	6	6.4	5.5	6.4	7.2
Avg	4.3	4.2	4.2	4.2	4	4.4	4.4	4.5	5.2	5.8	6.1	6.6	6.7	6.6	6.4	6.2	5.2	4.6	4.2	4.3	4.3	4.5	4.4	4.4	5
S D	2.7	2.6	2.6	2.6	2.7	3	3.1	3.3	3.2	2.9	2.8	3	3	2.7	2.4	2.4	2.3	2.3	2.2	2.2	2.4	2.7	2.6	2.7	2.2
S/A	0.63	0.63	0.61	0.62	0.67	0.69	0.69	0.74	0.61	0.5	0.46	0.46	0.45	0.42	0.38	0.38	0.44	0.5	0.52	0.51	0.55	0.6	0.59	0.62	0.44
Min	0	0.1	0	0.2	0.3	0.1	0.3	0.4	0.6	0.7	0.8	1.7	1.7	2.3	1.6	2.4	2.1	1.1	0.9	0.9	0.7	0.1	0.1	0.5	2
Max	9.8	10.8	11.6	10.7	10.7	10.1	11.3	13.8	12.9	13.1	11.7	12.7	12.2	11.6	10.6	11.3	10.1	9.3	8.4	8.4	9.8	10.6	10	10.4	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% 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

January 2005

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	1026	1026	1026	1025	1025	1025	1026	1027	1027	1028	1028	1028	1027	1026	1026	1026	1027	1027	1028	1028	1029	1029	1029	1029	1027	
2	1029	1029	1029	1029	1029	1030	1031	1031	1032	1032	1032	1032	1031	1031	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030
3	1029	1028	1028	1028	1028	1028	1028	1028	1028	1029	1028	1027	1026	1026	1025	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1026
4	1023	1022	1022	1021	1021	1021	1021	1021	1021	1022	1022	1021	1020	1019	1019	1019	1020	1020	1020	1020	1020	1020	1020	1019	1021	
5	1018	1018	1017	1017	1016	1016	1016	1017	1017	1017	1017	1016	1015	1014	1014	1014	1014	1014	1015	1015	1015	1015	1014	1013	1016	
6	1012	1012	1012	1012	1011	1012	1012	1012	1012	1012	1012	1011	1010	1009	1009	1009	1009	1010	1010	1010	1010	1011	1011	1012	1011	
7	1012	1013	1014	1014	1015	1017	1018	1019	1021	1023	1024	1024	1023	1023	1023	1024	1024	1025	1025	1025	1025	1024	1024	1023	1021	
8	1022	1022	1021	1020	1020	1020	1020	1019	1019	1018	1019	1018	1017	1016	1016	1017	1018	1019	1020	1021	1022	1023	1024	1024	1020	
9	1024	1024	1025	1024	1025	1026	1027	1027	1027	1028	1028	1027	1026	1026	1025	1025	1025	1025	1025	1025	1024	1024	1024	1023	1025	
10	1023	1022	1022	1021	1020	1020	1020	1020	1020	1020	1019	1019	1017	1017	1016	1017	1017	1018	1019	1020	1020	1020	1021	1021	1019	
11	1022	1021	1021	1021	1021	1021	1022	1022	1023	1023	1023	1021	1021	1020	1019	1019	1019	1018	1018	1019	1019	1019	1019	1018	1020	
12	1018	1018	1018	1018	1018	1019	1019	1020	1020	1021	1021	1021	1020	1019	1019	1019	1020	1020	1021	1021	1021	1021	1021	1021	1020	
13	1021	1021	1021	1020	1020	1020	1021	1021	1021	1022	1021	1020	1019	1017	1017	1017	1016	1016	1016	1016	1015	1015	1015	1015	1018	
14	1014	1013	1012	1012	1011	1011	1011	1011	1011	1011	1012	1014	1015	1017	1019	1020	1022	1023	1024	1025	1026	1027	1028	1028	1017	
15	1028	1029	1030	1031	1031	1031	1032	1033	1034	1035	1035	1035	1034	1034	1034	1034	1033	1033	1033	1033	1033	1033	1032	1032	1033	
16	1030	1029	1028	1028	1027	1026	1026	1025	1025	1025	1023	1021	1020	1019	1018	1018	1018	1018	1018	1018	1018	1018	1019	1020	1022	
17	1020	1020	1021	1021	1022	1022	1023	1024	1026	1026	1027	1026	1025	1025	1025	1025	1025	1026	1027	1028	1028	1029	1030	1030	1025	
18	1031	1031	1031	1032	1032	1033	1034	1035	1036	1036	1036	1036	1035	1034	1034	1034	1034	1035	1035	1035	1035	1034	1035	1035	1034	
19	1033	1032	1032	1032	1031	1030	1030	1029	1028	1028	1027	1025	1023	1021	1020	1020	1019	1018	1017	1017	1016	1016	1016	1015	1024	
20	1014	1014	1013	1014	1014	1014	1015	1015	1015	1015	1016	1015	1013	1013	1012	1012	1012	1012	1013	1012	1012	1012	1013	1013	1013	
21	1012	1012	1012	1012	1012	1012	1013	1014	1015	1016	1017	1018	1018	1018	1018	1019	1020	1020	1021	1022	1022	1023	1023	1023	1017	
22	1023	1022	1021	1021	1020	1020	1019	1019	1017	1016	1015	1012	1009	1006	1005	1003	1001	999	1000	1000	1000	999	999	999	1010	
23	1000	1000	1000	1001	1001	1002	1004	1006	1007	1008	1009	1010	1010	1010	1011	1012	1013	1015	1016	1017	1018	1018	1019	1020	1009	
24	1020	1020	1021	1021	1021	1022	1023	1023	1023	1024	1023	1022	1021	1019	1018	1017	1016	1015	1014	1013	1012	1012	1012	1011	1018	
25	1011	1011	1012	1012	1013	1013	1014	1014	1014	1014	1015	1014	1013	1012	1011	1011	1011	1011	1011	1011	1011	1011	1010	1010	1012	
26	1009	1008	1007	1007	1006	1005	1005	1004	1004	1004	1003	1003	1002	1001	1001	1002	1002	1003	1004	1005	1006	1007	1008	1009	1005	
27	1009	1010	1012	1013	1015	1016	1018	1020	1021	1022	1024	1025	1025	1025	1026	1027	1028	1029	1030	1031	1032	1033	1033	1034	1023	
28	1034	1034	1034	1035	1035	1036	1037	1037	1038	1038	1038	1038	1037	1037	1037	1037	1038	1038	1038	1038	1038	1037	1037	1036	1037	
29	1036	1035	1035	1034	1034	1034	1033	1032	1032	1032	1031	1031	1030	1028	1027	1027	1026	1026	1025	1024	1023	1022	1021	1020	1029	
30	1019	1017	1016	1015	1013	1012	1012	1012	1012	1012	1011	1011	1010	1010	1010	1011	1011	1012	1013	1013	1014	1014	1014	1015	1013	
31	1015	1015	1016	1016	1017	1018	1019	1020	1021	1022	1022	1022	1022	1022	1022	1023	1023	1023	1024	1024	1024	1024	1025	1024	1021	
Avg	1020	1020	1020	1020	1020	1020	1021	1021	1022	1022	1022	1021	1020	1020	1020	1020	1020	1020	1020	1021	1021	1021	1021	1021	1021	
S D	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	8		
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
Min	1000	1000	1000	1001	1001	1002	1004	1004	1004	1004	1003	1003	1002	1001	1001	1002	1001	999	1000	1000	1000	999	999	999	1005	
Max	1036	1035	1035	1035	1035	1036	1037	1037	1038	1038	1038	1038	1037	1037	1037	1037	1038	1038	1038	1038	1037	1037	1036	1036	1037	
n	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% 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

January 2005

Battery Voltage (CR10)
Hourly and Daily Averages
Instrument: CSI
Volts DC

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.7	13.7	13.6	13.6	13.5	13.4	13.4	13.4	13.4	13.3	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13
2	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.9	13.7	13.7	13.6	13.5	13.5	13.5	13.5	13.5	13.3	12.8	12.8	12.8	12.8	12.7	12.7	12.7	13
3	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.7	13.2	13.6	13.6	13.6	13.5	13.4	13.4	13.4	13	12.8	12.8	12.8	12.8	12.7	12.7	12.7	13
4	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.7	13.2	13.4	13.4	13.4	13.3	13.3	13.3	13.1	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9
5	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.8	13.5	13.5	13.5	13.4	13.4	13.4	13.4	13	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13
6	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.4	13.5	13.5	13.4	13.4	13.4	13	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9
7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.7	13.5	13.6	13.6	13.6	13.6	13.6	13.6	13.7	13.2	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13
8	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	13	13	13.2	13.4	13.4	13.2	13.1	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.8
9	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.7	13.5	13.8	13.7	13.7	13.7	13.6	13.6	13.4	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13
10	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.7	12.8	13.6	13.7	13.6	13.6	13.6	13.6	13.6	13.1	12.8	12.8	12.8	12.8	12.7	12.7	12.7	13
11	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.7	13.6	13.6	13.6	13.5	13.5	13.4	13.4	13.4	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13
12	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.7	13.3	13.5	13.4	13.4	13.4	13.4	13.3	13.3	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.9
13	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.7	12.6	12.6	12.7	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6
14	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.4	12.6	13.2	13.7	13.6	13.8	13.8	13.8	13.5	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
15	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.7	12.8	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6
16	12.5	12.4	12.4	12.4	12.4	12.4	12.4	12.5	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13.1
17	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13.3	14.2	14.1	14.1	14.1	14	14	14	14	14	12.9	12.8	12.7	12.7	12.7	12.6	12.6	13.2
18	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13.6	14	13.9	13.9	13.8	13.8	13.7	13.8	13.1	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13.1
19	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.7	13.1	13.5	14	14	13.9	13.9	13.9	14	12.9	12.8	12.7	12.7	12.7	12.6	12.6	13
20	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13.6	14	13.9	13.9	13.8	13.8	13.7	13.8	13.1	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13.1
21	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.7	13.1	13.5	14	14	13.9	13.9	13.9	14	12.9	12.8	12.7	12.7	12.7	12.6	12.6	13
22	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6	12.8	12.8	12.7	13	12.7	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.6
23	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	13.5	13.5	14	14	14.1	14.1	14.1	14.1	13.9	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1
24	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.5	14.2	14.1	14	14	13.9	13.9	13.9	13.9	13.3	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13.2
25	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13.2	14	13.9	13.8	13.7	13.8	13.7	13.7	13.8	13.8	12.9	12.8	12.7	12.7	12.7	12.7	12.7	13.1
26	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13	13.8	13.6	13.7	13.6	13.6	13.6	13.5	13	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13
27	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.8	13.9	14	14	14	14	14	14	14	13	12.8	12.7	12.7	12.7	12.6	12.6	13.1
28	12.6	12.6	12.5	12.5	12.5	12.5	12.5	13.3	14.1	14.1	14.1	14	14	14	14	14	14	12.9	12.8	12.7	12.7	12.7	12.7	12.6	13.2
29	12.6	12.6	12.6	12.6	12.5	12.5	12.5	13.3	14	14	13.9	13.8	13.8	13.8	13.8	13.8	13	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13.1
30	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.8	13.2	13.3	13.1	13	12.9	12.8	12.7	12.6	12.6	12.5	12.5	12.5	12.5	12.7
31	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6	13.2	13.7	13.8	13.8	13.8	13.7	13.8	13.8	13.4	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13
Avg	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.8	13.3	13.5	13.6	13.6	13.6	13.6	13.5	13.5	13.2	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13
S D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0	0.02	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Min	12.5	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.5	12.5	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6
Max	12.7	12.7	12.7	12.7	12.7	12.7	12.6	13.5	14.2	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14	13	12.8	12.8	12.8	12.8	12.8	12.8	13.2
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% missing; 0.0% 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.

Prepared by: Afshin M. Andreas, NREL