

July 2004

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	4	43	192	423	591	766	936	901	693	883	692	577	365	178	74	10	0	0	0	0	7329
2	0	0	0	0	4	38	138	326	488	536	483	829	704	843	747	595	425	160	25	2	0	0	0	0	6344
3	0	0	0	0	5	42	111	336	504	721	722	878	885	700	739	473	188	137	40	3	0	0	0	0	6483
4	0	0	0	0	3	37	196	169	375	711	867	893	615	481	636	170	67	70	54	11	0	0	0	0	5358
5	0	0	0	0	2	23	76	159	377	466	901	982	978	802	738	595	426	245	82	3	0	0	0	0	6853
6	0	0	0	0	3	47	203	396	594	766	867	910	884	834	695	587	415	252	83	6	0	0	0	0	7541
7	0	0	0	0	9	65	230	400	593	762	891	965	903	928	797	403	115	59 ?	12 ?	4	0	0	0	0	7136
8	0	0	0	0	4	63	202	435	625	776	901	975	981	929	823	647	344	119	17	4	0	0	0	0	7847
9	0	0	0	0	4	50	209	399	605	772	892	934	688	602	521	498	432	259	83	10	0	0	0	0	6957
10	0	0	0	0	0	25	170	350	556	728	848	794	873	825	808	628	432	231	37	4	0	0	0	0	7312
11	0	0	0	0	3	32	103	279	375	604	717	889	938	911	702	580	370	170	30	1	0	0	0	0	6703
12	0	0	0	0	4	43	167	261	376	610	727	821	802	797	501	592	448	191	38	6	0	0	0	0	6386
13	0	0	0	0	0	34	139	323	575	713	855	912	953	928	653	405	282	144	67	4	0	0	0	0	6986
14	0	0	0	0	0	36	137	358	563	747	874	966	872	793	748	661	474	258	71	0	0	0	0	0	7559
15	0	0	0	0	0	47	217	426	603	781	915	989	1015	975	798	663	457	254	117	12	0	0	0	0	8269
16	0	0	0	0	0	20	163	399	583	776	917	824	962	895	758	667	346	198	68	4	0	0	0	0	7577
17	0	0	0	0	0	38	187	323	506	743	862	927	902	814	647	599	375	224	78	7	0	0	0	0	7232
18	0	0	0	0	0	1	127	273	556	534	727	778	1008	871	690	535	212	89	20	17	0	0	0	0	6440
19	0	0	0	0	0	14	147	375	467	757	752	545	474	333	478	463	108	48	58	4	0	0	0	0	5026
20	0	0	0	0	0	36	189	364	549	723	870	934	728	719	473	104	71	40	6 ?	1	0	0	0	0	5808
21	0	0	0	0	0	26	140	323	529	733	829	942	748	873	734	515	376	181	56	11	0	0	0	0	7016
22	0	0	0	0	0	30	155	344	550	693	808	752	854	867	751	495	358	226	28	2	0	0	0	0	6914
23	0	0	0	0	0	9	58	65	92	105	119	112	79	81 ?	96 ?	60	81	63	32	3	0	0	0	0	1056
24	0	0	0	0	0	9	110	248	535	559	750	810	507	876	537	341	343	164	46	8	0	0	0	0	5844
25	0	0	0	0	0	33	150	115	69	127	565	743	199	495	893	546	396	83	15	4	0	0	0	0	4433
26	0	0	0	0	0	12	85	327	575	643	893	874	1005	720	746	458	124	94	87	18	0	0	0	0	6661
27	0	0	0	0	0	30	165	369	574	783	846	887	885	786	245	416	270	228	57	1	0	0	0	0	6542
28	0	0	0	0	0	11	60	166	180	209	210	182	160	267	375	353	228	97	16	0	0	0	0	0	2512
29	0	0	0	0	0	19	25	78	106	261	761	732	410	659	772	484	255	140	38	3	0	0	0	0	4742
30	0	0	0	0	0	33	187	390	552	559	697	846	945	917	815	654	462	250	64	4	0	0	0	0	7376
31	0	0	0	0	0	19	69	313	448	564	531	730	776	718	708	412	224	299	35	4	0	0	0	0	5849
Avg	0	0	0	0	1	31	145	307	473	620	759	815	756	746	655	489	306	166	50	6	0	0	0	0	6326
S/D	0	0	0	0	2	15	53	103	159	197	196	203	258	213	177	157	131	75	27	5	0	0	0	0	1519
S/A	0	0	0	0	1.56	0.5	0.36	0.34	0.34	0.32	0.26	0.25	0.34	0.29	0.27	0.32	0.43	0.45	0.55	0.82	0	0	0	0	0.24
Min	0	0	0	0	0	1	25	65	69	105	119	112	79	81	96	60	67	40	6	0	0	0	0	0	1056
Max	0	0	0	0	9	65	230	435	625	783	936	989	1015	975	893	667	474	299	117	18	0	0	0	0	8269
n	0	0	0	0	18	358	367	372	372	372	372	372	370	365	366	370	367	367	366	101	0	0	0	0	5275

Daylight Data Recovery: 0.0% missing; 0.7% exceed the 15% QC threshold -- 5313 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.

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

July 2004

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	8	243	523	631	669	694	584	303	579	363	366	276	62	25	0	0	0	0	0	5325
2	0	0	0	0	0	14	75	225	273	197	115	366	262	437	382	393	390	126	1	0	0	0	0	0	3254
3	0	0	0	0	0	27	36	208	311	461	341	425	541	382	474	237	6	16	0	0	0	0	0	0	3464
4	0	0	0	0	0	3	60	14	40	354	484	479	156	63	253	2	0	0	6	3	0	0	0	0	1917
5	0	0	0	0	0	0	0	0	30	115	752	795	756	514	535	495	482	400	216	0	0	0	0	0	5091
6	0	0	0	0	0	130	409	549	640	682	651	612	542	532	435	457	469	387	193	6	0	0	0	0	6693
7	0	0	0	0	0	162	456	590	708	762	784	773	651	748	612	165	0 ?	0	2	0 ?	0	0	0	0	6413
8	0	0	0	0	0	240	557	711	753	787	753	791	799	793	770	664	296	34	3	0	0	0	0	0	7950
9	0	0	0	0	0	138	454	626	745	770	776	750	382	278	238	415	497	408	181	4	0	0	0	0	6664
10	0	0	0	0	0	12	208	355	507	566	493	324	470	387	525	506	430	294	31	0	0	0	0	0	5108
11	0	0	0	0	0	4	20	131	78	202	191	500	540	534	268	232	159	134	0	0	0	0	0	0	2993
12	0	0	0	0	0	12	73	112	124	303	331	383	350	339	202	424	506	209	0	0	0	0	0	0	3369
13	0	0	0	0	0	19	108	234	495	517	608	584	616	598	371	141	212	27	0	0	0	0	0	0	4530
14	0	0	0	0	0	38	81	354	512	646	665	533	368	319	503	700	655	468	190	0	0	0	0	0	6032
15	0	0	0	0	0	152	462	646	745	796	824	818	833	809	636	661	490	339	222	3	0	0	0	0	8437
16	0	0	0	0	0	17	259	526	626	742	737	504	667	612	606	626	324	279	139	2	0	0	0	0	6664
17	0	0	0	0	0	84	241	231	429	648	648	616	597	463	320	465	283	252	36	0	0	0	0	0	5314
18	0	0	0	0	0	0	67	154	606	211	288	323	656	515	413	220	12	0	1	0	0	0	0	0	3466
19	0	0	0	0	0	1	145	475	278	496	406	176	163	62	94	119	1	7	2	0	0	0	0	0	2425
20	0	0	0	0	0	68	300	451	518	553	595	584	346	320	141	14	4	0	0	0	0	0	0	0	3895
21	0	0	0	0	0	24	149	264	412	528	513	532	304	507	442	286	298	159	28	0	0	0	0	0	4444
22	0	0	0	0	0	31	181	304	396	404	422	318	408	487	418	202	165	126	1	0	0	0	0	0	3863
23	0	0	0	0	0	0	1	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	7
24	0	0	0	0	0	0	14	53	279	94	256	224	10	290	66	15	134	11	0	0	0	0	0	0	1447
25	0	0	0	0	0	14	56	8	1	1	116	256	1	40	588	396	332	0	0	0	0	0	0	0	1808
26	0	0	0	0	0	0	82	409	465	432	640	542	728	443	485	276	2	9	27	0	0	0	0	0	4543
27	0	0	0	0	0	66	349	533	597	743	702	660	579	471	5	407 ?	281	332	49	0	0	0	0	0	5776
28	0	0	0	0	0	0	0	16	3	0	1	0	0	1	44	77	26	0	0	0	0	0	0	0	169
29	0	0	0	0	0	1	0	0	0	33	364	240	2	205	473	371	89	14	0	0	0	0	0	0	1793
30	0	0	0	0	0	81	519	692	644	392	473	615	728	781	830	791	731	562	205	0	0	0	0	0	8043
31	0	0	0	0	0	35	93	395	337	357	183	369	434	425	618	312	176	427	25	0	0	0	0	0	4186
Avg	0	0	0	0	0	45	184	316	393	434	478	473	426	417	391	337	249	164	51	1	0	0	0	0	4358
S D	0	0	0	0	0	61	173	232	255	262	245	219	258	227	219	218	212	177	80	1	0	0	0	0	2200
S/A	0	0	0	0	5.01	1.36	0.94	0.73	0.65	0.6	0.51	0.46	0.61	0.54	0.56	0.65	0.85	1.08	1.56	2.45	0	0	0	0	0.5
Min	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Max	0	0	0	0	0	240	557	711	753	796	824	818	833	809	830	791	731	562	222	6	0	0	0	0	8437
n	0	0	0	0	18	358	369	372	372	372	372	372	371	370	370	368	364	372	372	100	0	0	0	0	5292

Daylight Data Recovery: 0.0% missing; 0.4% exceed the 15% QC threshold -- 5313 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25521E6 Calibration Factor: 8.034 $\mu\text{V}/\text{W}/\text{m}^2$ 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

July 2004

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	5 ?	43	121	144	167	204	267	292	373	300	340	284	199	152	72	10	0	0	0	0	2973	
2	0	0	0	0	5 ?	37	119	211	296	375	356	437	420	395	392	298	206	110	25	2	0	0	0	0	3684	
3	0	0	0	0	7 ?	39	104	223	280	319	382	428	317	311	301	278	184	131	40	3	0	0	0	0	3347	
4	0	0	0	0	4 ?	37	176	164	344	403	392	446	415	397	168	67	70	54	11	0	0	0	0	0	3546	
5	0	0	0	0	2 ?	23	76	159	350	354	174	160	187	283	251	221	158	104	47	3	0	0	0	0	2553	
6	0	0	0	0	3	31	85	128	157	191	226	262	301	281	284	231	149	113	51	6	0	0	0	0	2497	
7	0	0	0	0	?	47	98	113	116	125	136	166	219	178	247	273	101	53 ?	12	4	0	0	0	0	1888	
8	0	0	0	0	?	27	59	81	105	124	180	161	155	145	140	159	168	106	17	4	0	0	0	0	1631	
9	0	0	0	0	?	34	80	97	106	129	146	162	275	325	298	188	155	112	53	10	0	0	0	0	2171	
10	0	0	0	0	0	24	113	184	218	258	379	459	386	438	345	259	195	128	31	4	0	0	0	0	3421	
11	0	0	0	0	?	31	98	209	328	417	520	365	368	372	448	396	287	116	30	1	0	0	0	0	3987	
12	0	0	0	0	?	45	149	210	295	358	407	430	436	458	317	283	169	111	38	6	0	0	0	0	3711	
13	0	0	0	0	0	32	108	204	240	275	273	313	315	339	321	291	170	96 ?	67	5	0	0	0	0	3048	
14	0	0	0	0	0	35	112	191	225	218	248	408	465	447	292	151	114	94	42	1	0	0	0	0	3043	
15	0	0	0	0	0	28	77	98	111	125	134	155	158	181	236	182	180	137	83	12	0	0	0	0	1896	
16	0	0	0	0	0	18	92	152	169	168	219	298	265	281	214	210	165	103	48	4	0	0	0	0	2409	
17	0	0	0	0	0	28	129	212	215	216	245	295	286	350	370	256	210	136	71	7	0	0	0	0	3026	
18	0	0	0	0	0	1	79	197	158	349	449	431	329	351	319	356	203	89	20	15 ?	0	0	0	0	3347	
19	0	0	0	0	0	14	100	156	284	345	363	361	321	284	394	375	108	46	58	4	0	0	0	0	3213	
20	0	0	0	0	0	30	100	156	215	274	311	339	363	398	291	84	63	40	8	1	0	0	0	0	2673	
21	0	0	0	0	0	26	113	201	264	306	346	402	436	384	349	306	222	127	54	11	0	0	0	0	3550	
22	0	0	0	0	0	27	108	212	299	371	413	437	439	390	384	346	270	186	28	2	0	0	0	0	3912	
23	0	0	0	0	0	9	58	65	92	105	119	112	76	63	79	60	77	63	32	3	0	0	0	0	1013	
24	0	0	0	0	0	9	106	228	340	471	493	560	496	563	466	329	256	160	46	8	0	0	0	0	4532	
25	0	0	0	0	0	34	131	112	69	127	447	447	199	453	373	247	203	83	15	4	0	0	0	0	2942	
26	0	0	0	0	0	13	54	160	257	270	282	302	258	273	305	243	122	92	95 ?	18	0	0	0	0	2744	
27	0	0	0	0	0	24	76	126	188	180	181	212	282	315	238	189	119	104	48	1	0	0	0	0	2284	
28	0	0	0	0	0	11	59	158	178	209	210	182	160	267	337	292	213	97	16	0	0	0	0	0	2389	
29	0	0	0	0	0	19	24	78	106	232	396	477	410	458	341	188	196	134	38	3	0	0	0	0	3102	
30	0	0	0	0	0	21	51	75	134	235	239	208	186	143	89	83	69	60	34	4	0	0	0	0	1631	
31	0	0	0	0	0	18	45	129	213	263	345	345	315	284	163	166	155	160	30	4	0	0	0	0	2635	
Avg	0	0	0	0	1	26	94	156	210	258	299	323	311	327	301	238	166	107	42	6	0	0	0	0	2864	
S D	0	0	0	0	2	11	32	49	84	100	113	119	108	109	94	85	58	35	21	4	0	0	0	0	785	
S/A	0	0	0	0	2.03	0.43	0.35	0.32	0.4	0.39	0.38	0.37	0.35	0.33	0.31	0.35	0.35	0.32	0.5	0.78	0	0	0	0	0.27	
Min	0	0	0	0	0	1	24	65	69	105	119	112	76	63	79	60	63	40	8	0	0	0	0	0	1013	
Max	0	0	0	0	7	47	176	228	350	471	520	560	496	563	466	396	287	186	95	18	0	0	0	0	4532	
n	0	0	0	0	8	349	369	372	372	372	372	372	372	371	372	372	372	372	365	366	100	0	0	0	0	5276

Daylight Data Recovery: 0.0% missing; 0.7% exceed the 15% QC threshold -- 5313 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17880F3 Calibration Factor: 8.067 $\mu\text{V}/\text{W}/\text{m}^2$ 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

July 2004

Dry Bulb Temperature (Tower)
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	22.6	22	21.7	21.2	20.8	20.3	21	23	25.8	27.2	28.1	28.6	28.7	28.9	29.2	29.5	29	27.8	27.2	26.5	25.6	24.9	24.3	23.8	25.3
2	23.5	23.3	23.1	22.8	22.6	22.7	23.4	24.2	25.8	27.5	28	28.4	28.8	29.4	29.5	29.4	29.2	28.1	27.1	26.2	25.9	25.5	25.1	24.4	26
3	24.1	23.7	23.3	23	22.8	22.7	23.3	25	26.1	27	28.3	29	29.6	29.9	29.9	28.8	27.8	27.4	27	26.2	25.6	25.5	25.3	25.1	26.1
4	24.9	24.7	24.7	24.6	24.5	24.6	25.4	26.2	26.8	27.7	28.5	29.1	29.1	28	27.9	27.4	26.7	26.7	26.7	26.7	26.5	26.1	25.8	25.5	26.4
5	25.1	24.9	24.7	24.2	24.2	24.2	24.6	25.1	26	27	28.3	29.7	31.1	31.4	32	32.7	32.6	32.2	31.3	29.8	28.7	28.1	28	27.5	28.1
6	27.2	26.4	26	25.4	24.6	23.9	25.1	27.1	28.5	30.1	30.9	31.5	31.9	32.2	32.8	33.3	32.7	32.3	31.2	29.5	28.2	27.6	27	26.6	28.8
7	26.3	26	25.7	25.3	25	25.2	26.7	27.9	29.5	30.5	32	33.3	33.7	34	34.1	33.7	30.5	24	23.6	21.2	21.4	21.6	21.9	22.3	27.3
8	21.9	21.8	21.5	21.2	21.1	21.2	22.8	25.2	27.6	29.3	30.3	31	31.8	32.6	33.2	33.5	31.7	26	26.6	26.4	25.9	25.5	24.6	24.6	26.6
9	24.1	23.6	23.3	23.3	23.1	23.1	24	26.1	27.7	29.3	30.7	31.4	30.8	31.2	30.4	30.3	30.5	29.7	28.7	27.7	26.9	26.6	26.3	26.1	27.3
10	25.7	25.6	25.6	25.5	25.3	25.1	25.5	27	28.8	30.1	30.9	30.7	30.4	30.3	30	29.8	29.6	28.8	27.4	26.3	25.7	25.6	25.3	25.5	27.5
11	25.4	24.8	25.3	25.3	25.1	25.2	26	26.7	27.2	27.9	28.6	29	29.8	30.3	29.7	29.5	29.3	28.3	27.3	26.8	26.6	26.2	25.9	25.7	27.2
12	25.6	25.5	25.4	25.2	25.1	25.3	25.9	26.7	27.7	28.5	29.1	30.1	29.4	29.4	27.8	28.4	29.8	29.7	28.3	27.9	27.5	26.7	26.5	26.2	27.4
13	25.5	25.5	25.3	25.1	25	24.6	24.9	25.7	26.8	27.9	28.9	29.9	30.8	31.6	31.9	29.8	28	25.2	24.5	24.8	24.6	24.3	24.1	24.3	26.6
14	24.2	24.6	24.6	24.5	24.3	24.2	24.7	25.9	27.4	28.5	29.7	31	31.5	31.3	31.3	32	32.4	32.3	31.6	29.9	29	28.4	27.9	24.1	28.1
15	23.2	23.2	22.9	22.6	22.3	22.2	22.6	24.1	26.2	27.3	28.1	28.5	29	29.4	29.8	30	30	29.7	28.8	27.3	26.1	25	24	24	26.1
16	23.1	22.1	21.6	20.8	20	19.5	20.3	22.4	24.7	26.4	27.4	27.9	28.3	29.2	30.1	30.2	29.9	29.3	28.1	26.5	25.6	24.3	23.6	23.1	25.2
17	22.8	21.9	22	21.5	20.9	20.5	22.4	24	25.9	27.6	28.7	29.6	30.3	30.1	30.2	30.4	30.1	29.5	28.4	27.2	26.7	26.3	25	24.7	26.1
18	24.5	24.3	24.4	23.2	22.2	20.9	21.3	23.2	25	25.8	26.8	27.5	28.2	29	29	28.9	28.4	27.8	27.1	25.9	24.8	24.2	23.6	23.5	25.4
19	23.2	23.1	22.9	23.2	23.2	23.5	24.3	25.8	26.8	28.1	28.6	28.3	28.6	26.2	27.3	27.6	26.7	25.6	25.2	24.8	24.9	24.2	23.7	23.3	25.4
20	23.1	22.4	22	21.6	21.4	21.3	23	25.7	27.1	27.9	29.3	29.6	30	30.3	28.3	23.8	21.9	22.2	22.3	21.9	21.6	21.5	21.2	20.9	24.2
21	20.6	20.3	20.2	20.4	20.6	20.5	21.3	23.2	25.9	27.6	29.1	29.5	29.4	30.2	30.4	29.8	29.5	28.8	27.6	26.4	25.6	25.1	24.5	23.9	25.4
22	23.1	22.9	22.4	22.3	22.4	22.6	23.6	25.4	26.7	28.3	29.2	29.8	30	30.3	30.7	29.9	29.5	28.8	28	26.9	26.4	26.1	25.7	25.5	26.5
23	25.7	25.4	25.2	24.4	23.2	22.7	23.2	23.3	22.7	22.9	23	23.2	22.1	21.8	22.3	22.8	22.7	22.8	23.3	23.6	23.7	24.3	24.7	24.3	23.5
24	23.9	23.4	23.1	22.6	22.1	21.9	22.1	23.8	25.4	25.9	26.5	27.1	27.4	28	27.8	27.1	27.1	27	26.2	25.5	24.9	24.8	24.5	23.1	25.1
25	24.1	24.6	24.8	24.6	24.4	24.4	25.2	25.2	23.5	23.9	26.1	27.3	26.1	25.4	28.2	28.9	29	27.5	26.7	26	25.4	25	24.9	25.1	25.7
26	24.9	24.9	24.7	24.6	24.3	24.3	24.3	25.7	27.1	26.9	27.4	28	29.1	29	28.7	28.5	27.6	27.4	27.5	26.9	26.5	26.5	26.2	25.9	26.5
27	25.5	25.2	25	24.8	24.7	24.7	25.4	26.7	27.9	28.6	29.1	30.1	31	31	29.6	28.2	28.8	29.1	28.3	27.7	27.3	26.9	26.8	26.4	27.4
28	26.1	26.2	25.9	25.4	25.1	25.1	25.2	25.8	26.5	26.5	26.7	26.5	25.8	25.9	26.4	27	27.1	26.7	26.1	25.6	25.4	25.3	24.9	24.8	25.9
29	24.7	24.7	24.6	24.3	24.3	24.6	23.4	23	23.6	24.1	26.7	29.4	28.2	28.1	29.8	29.4	29	28.3	27.2	26.3	25.8	25.4	25.1	25	26.1
30	24.7	24.6	24.4	24.2	23.9	24	25.4	26.7	27.7	28.2	28.4	28.9	29.2	29.4	29.3	29.2	28.7	28.3	27.7	27.1	26.8	26.4	26.1	25.7	26.9
31	25.6	25.4	25.4	25.3	25.3	25.4	25.7	27	28	28.8	28.9	29.9	30	29.7	29.7	29.4	26.9	27.3	26.8	25.5	25.6	25.5	25.4	25.4	27
Avg	24.4	24.1	23.9	23.6	23.3	23.2	23.9	25.2	26.5	27.5	28.5	29.1	29.4	29.5	29.6	29.3	28.8	27.9	27.2	26.4	25.8	25.5	25.1	24.7	26.4
S D	1.4	1.5	1.6	1.6	1.6	1.7	1.6	1.5	1.5	1.7	1.7	1.8	2.1	2.3	2.2	2.4	2.4	2.1	1.9	1.6	1.5	1.5	1.4	1.2	
S/A	0.06	0.06	0.06	0.07	0.07	0.08	0.07	0.06	0.06	0.06	0.06	0.06	0.07	0.08	0.07	0.08	0.08	0.09	0.08	0.07	0.06	0.06	0.06	0.06	0.04
Min	20.6	20.3	20.2	20.4	20	19.5	20.3	22.4	22.7	22.9	23	23.2	22.1	21.8	22.3	22.8	21.9	22.2	22.3	21.2	21.4	21.5	21.2	20.9	23.5
Max	27.2	26.4	26	25.5	25.3	25.4	26.7	27.9	29.5	30.5	32	33.3	33.7	34	34.1	33.7	32.7	32.3	31.6	29.9	29	28.4	28	27.5	28.8
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: 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

July 2004

Relative Humidity (Tower)
Hourly and Daily Averages
Instrument: CSI HMP-35C
Percent

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	102.7	104.4	105 ?	?	?	?	?	98.8	86.9	80.8	75.8	74	74.1	69.1	66.6	66.8	73.4	81.4	85.9	92.4	95.3	98.3	99.5	100.3	86.6 ?
2	101.8	102.7	103.2	104.1	104.7 ?	?	104.1	101.8	96.9	89.7	87.8	88.6	84.1	77.3	79	79.1	82.6	87.8	92.2	92.5	95.1	97.1	99	101.8	93.6
3	102.8	104.1	104.9 ?	?	?	?	?	99.4	93.7	89.7	85	81.6	76.7	74.5	77.1	84.7	86.6	88.3	91.2	97.7	100	100.8	101.5	102.3	92.1 ?
4	102.6	103.1	103.5	103.9	104.4	104.2	102.6	99.1	95.4	89.9	84.6	80.4	83.6	88.1	89.5	88.7	94.8	97.9	99.8	99.3	99.1	100.5	101.3	101	96.5
5	99.8	100.6	100.1	100.4	99.9	101.7	102.4	100.6	96.2	91.8	86.9	81.9	75.6	75.3	73.4	70.9	71.5	73.3	78.2	85.5	89.9	91.3	91.6	93.2	88.8
6	91.7	94.1	94.9	97.3	99.2	100	96.2	85.5	79.2	71.4	65.8	61.6	59.8	57.8	57.9	57.8	58.9	60.6	67.9	77	84.2	84.5	87.1	95.1	78.6
7	99.2	99.9	98.4	96.9	96.5	95.6	90.1	86.3	80.8	77.3	71.9	64.1	62.7	58.8	62	61.8	67.5	89.2	97.1	101.8 ?	103.5 ?	103.9	101.5	99.6	86.1
8	102.4	103	104.1	105 ?	?	?	103.1 ?	99.1	89.1	75.4	68.3	60.9	62.1	60	59.7	60.5	69.9	85.1	81.5	86.2	92.4	95.9	99.7	100	84.7 ?
9	101.1	102.4	102.3	101.3	102	102.4	99.5	90.9	83.8	75.3	67.6	63	66.1	65.1	68.7	70.4	72.6	79.8	85.5	90.6	96.7	99.8	101.8	102.8	87.1
10	103.3	101.5	99.1	98.4	98	97.9	96.9	88	83.3	79	79.3	81.9	79.3	78.5	76.9	73.3	73.5	75.3	80.3	86	92.3	91.3	91.1	89.2	87.2
11	90.6	93.8	90.3	92.5	93.1	92.6	88.3	84	78.4	74.8	65.9	57.5	57.6	58.9	64.1	62.2	59.6	69.8	81.6	86.6	89.6	90.9	92.6	94.5	79.6
12	95.2	96.4	97.9	98.9	99.2	99.7	97.6	97.1	92.7	89.6	85.5	81.1	80.8	80.7	84.6	84.4	78.8	79.7	82.6	88.7	88.1	93.6	96.5	98.1	90.3
13	100.4	102	102	102.9	103.2	103.4	101.8	99.2	95.2	91	86.9	83.1	78.4	75.7	73.6	81.2	87.8	99.1	101.2	100.9	102.8	104.2	103.7	103.6	95.1
14	104.7	104.7	103.9	103.3	103.2	103.4	102.3	99.4	94	89.3	83.8	75	68.1	69.5	72.4	69	66.7	68.2	72.9	84.4	87.5	87.9	91.1	100	87.7
15	103.6	104.5	105 ?	?	?	104.7 ?	102.4	95.5	82.9	69	61.3	59	56.6	55	54.1	53.3	55.4	55.5	59.7	67.5	71.8	78	84	78.1	75.3 ?
16	81.1	87.8	88	90.1	93.2	94.5	91	80.8	72.8	66.5	59.5	57.7	55.1	50.9	45.9	43.8	45.5	49.7	59.5	68.1	70.5	78.6	80.4	83.2	70.6
17	86.4	90.9	90.5	93	96.7	100.1	98.5	94.6	81.2	76.6	64.5	55.8	51.6	52.7	53.6	54	57.8	61.2	70.5	81.9	86.5	87.3	93.5	92.2	78
18	91.3	94.8	98.3	101.5	104.9	104.6 ?	?	103.4	95.9	93.1	89	85.4	82.1	78.5	77	74.8	76.1	79.2	85.1	96.5	99.8	100.8	102.3	103	92.1
19	103.4	103.8	104.7	104.6	104.1	103.4	100.9	95.4	90.7	81.9	78.4	82.2	80.5	92	89.9	85.9	87.9	93.2	97.2	98.6	98	101.1	103	104	95.2
20	104.9	?	?	?	?	?	101.9 ?	90.5	81.3	79.7	74.8	73.4	69	69.7	81.6	91.5	99.8	97.6	99.4	103.1	104	104.7	104.9 ?	?	90.7 ?
21	?	?	104.7 ?	104.1	103.5	104.5	102.8	96.9	88.7	84.1	71.1	68.2	66.4	62.7	61.6	64.4	64.7	67.7	74.1	79.4	85.7	87.4	89.9	91.1	82.9
22	94.4	98.3	101.6	103.1	103.8	103.3	102.7	98.5	90.1	80.2	73.3	72	67.7	65.7	66.8	71.8	73	77.5	79.5	84.4	84.7	88.2	91.2	92.9	86
23	91.9	93.8	95.8	96	101.6	103.6	104.4	103	104.4	103.2	103.8	101.2	102.6	103.6	102.7	103	103.8	101.1	100.2	99.5	100.2	99.8	101.5	102.9	101
24	104.4	?	?	?	?	?	?	101.1	95.6	95.2	92.8	88.5	86	85.6	86.6	91.3	92.3	93	97.1	99.1	101.8	102.6	104.6	104.8 ?	95.7 ?
25	104.7	?	?	?	?	?	104.6 ?	103.8	104.4	102.8	96.9	95	96.9	100.2	93.8	87.4	85.6	90.7	95.1	99	101.4	102.9	103.3	102.6	98.5 ?
26	102.8	103.2	104	104.3	104.7 ?	?	?	101.1	95.4	95.9	94.2	90.6	82.5	82.4	85.9	89.2	94.2	96.5	96.9	99.1	101.4	99.1	99.3	100.5	96.5
27	102	102.7	103.3	104.1	104.5	104.2	102.7	98	91.1	85.1	80.5	78.1	76.3	77.1	82.9	93.2	88.3	85.9	91	92.3	92.7	96.6	96.9	97.9	92.8
28	99.9	100.4	101.5	103	104.3	104.4	103.9	101.9	100	99.7	99.3	100.1	100.6	98	97.1	94.1	92.6	95.2	97.2	99.5	99.4	99.3	100.9	101.8	99.8
29	102.2	102.3	103.2	104.2	104.2	104	102.1 ?	104.4 ?	103.4	101.8	93.5	80.8	82.5	84.4	75.1	74.6	79.5	83.2	88.2	94.1	96	97.7	100.5	102.3	94.3
30	103.6	104	104.5	104.7	104.8 ?	?	102	95.1	85.7	84.6	85	81.4	81.3	81.5	82	82.2	82.9	86.1	92.7	96.4	98.1	99.1	98.9	98.6	92.8
31	99.8	100.7	100.6	100.7	100.6	100.4	100.1	96.5	90.1	86.8	87.3	81.5	82.6	85.6	82.2	83.7	96.5	96.7	95.2	100.2	101.3	102.5	103.4	103.2	94.9
Avg	99.2	100	100.5	100.7	101.4	101.5	100.2	96.5	90.3	85.5	80.7	77	75.1	74.7	75	75.8	78.1	82.1	86.3	91.2	93.9	95.7	97.3	98	89.4
SD	6	4.6	4.8	4.3	3.7	3.5	4.4	6.2	8	9.9	11.7	12.5	12.9	14	13.6	14.2	14.4	13.6	11.8	9.5	8.5	7.3	6.4	6.4	7.4
S/A	0.06	0.05	0.05	0.04	0.04	0.03	0.04	0.06	0.09	0.12	0.14	0.16	0.17	0.19	0.18	0.19	0.18	0.17	0.14	0.1	0.09	0.08	0.07	0.06	0.08
Min	81.1	87.8	88	90.1	93.1	92.6	88.3	80.8	72.8	66.5	59.5	55.8	51.6	50.9	45.9	43.8	45.5	49.7	59.5	67.5	70.5	78	80.4	78.1	70.6
Max	104.9	104.7	105	105	104.9	104.7	104.6	104.4	104.4	103.2	103.8	101.2	102.6	103.6	102.7	103	103.8	101.1	101.2	103.1	104	104.7	104.9	104.8	101
n	357	324	306	292	273	254	291	365	372	372	372	372	372	372	372	372	372	372	372	362	363	372	366	356	8376

Data Recovery: 0.0% missing; 6.2% 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

July 2004

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	22.7	22.2	21.7	21.4	20.9	20.6	20.9	22.8	26.3	30.1	32.5	34	34.3	33.7	33.7	33.9	33.9	32.4	30	28.3	26.8	25.6	24.7	24	27.4
2	23.6	23.2	22.9	22.5	22.3	22.2	22.7	24	26.6	29.6	31.6	32.4	33.1	33.3	33.7	34	33.9	33	30.4	28.3	26.8	26	25.3	24.6	27.8
3	24	23.7	23.4	23.1	22.8	22.5	22.8	23.9	26.8	29.3	31.6	33.2	34	34.3	34.2	33.8	32	30	28.9	27.6	26.6	25.9	25.4	25.2	27.7
4	24.9	24.6	24.4	24.2	24.1	24.2	24.7	26.6	27.7	29.5	31.7	33.2	33.9	32.9	31.4	30.9	29	27.8	27.5	27.2	26.8	26.4	25.9	25.4	27.7
5	25.1	24.8	24.7	24.4	24.1	24.1	24.4	25	26.1	28	30	32.3	33.5	34.2	34.8	35.6	36.2	35.9	34.8	32.6	30.2	28.8	28.1	27.6	29.4
6	27.3	26.8	26	25.4	24.9	24.3	24.7	27	29.5	31.8	34	35.1	35.9	36.1	36.5	37.7	37.6	36.8	35.4	32.7	29.8	28	27.1	26.5	30.7
7	26.1	25.9	25.6	25.3	25	24.8	26	28.7	31.7	34.5	36.5	38.1	38.5	38	38.2	38.2	36.6	31.3	26.4	23.6	22.5	21.8	21.6	21.5	29.4
8	21.7	21.5	21.3	21	20.8	20.8	21.8	24.4	28.2	31.8	34.1	35.4	35.5	35.7	36.5	37.5	37.8	33	28.6	27.4	26.7	26.2	25.5	24.7	28.2
9	24.3	23.7	23.3	23.1	23	22.8	23.7	26	29.1	31.9	34.2	35.9	36.2	35.4	35.3	34.3	34.5	34.4	32.8	30.3	28.1	26.8	26.2	25.8	29.2
10	25.4	25.3	25.4	25.4	25.4	25.2	25.4	27.1	29.7	32.5	34.6	36	35.6	35.1	35	34.9	34.7	33.9	31.8	28.8	26.9	25.9	25.4	25.1	29.6
11	25.3	24.9	24.5	24.7	24.8	25	25.3	26.4	28.2	29.6	31.4	32.8	33.5	34.3	34.6	34.3	33.5	32.5	30.2	28.3	27.3	26.8	26.3	25.6	28.8
12	25.2	25.2	25	24.8	24.6	24.6	25.3	27	29	30.6	32.3	33.4	34	33.6	33.2	31.8	32.8	33.2	31.5	29.5	28.5	27.7	27.1	26.7	29
13	26.2	25.8	25.5	25.4	25.3	25	25.1	26.1	28.1	30.4	32	33.2	34	34.6	35.1	35.3	33.5	29.9	26.6	25.1	24.5	24.3	24.1	23.9	28.3
14	23.8	24	24.3	24.2	24.2	24.2	24.5	25.9	28.5	31.2	32.9	34.1	34.9	35	34.7	35	35.5	35.6	34.7	32.6	30.3	29.2	28.6	27.1	29.8
15	24.5	23.6	23.1	22.7	22.5	22.2	22.4	24	26.9	29.5	31.1	32	32.2	32.1	32.5	32.9	33.3	33	32.1	30.1	27.4	25.7	24.3	23.5	27.7
16	22.8	21.5	21	20.5	19.7	18.8	18.9	21.3	24.8	28.3	30.8	32.1	32	31.9	32.7	33.7	33.9	32.9	31.2	28.9	26.4	24.2	22.7	21.8	26.4
17	21.3	20.9	20.7	20.5	19.8	19.1	20	22.7	25.9	29	31.6	33	33.6	33.7	33.4	34.1	34.2	33.3	31.9	29.6	27.9	27.1	26.1	25.1	27.3
18	24.5	24.2	24.1	23.7	22.9	22.3	21.6	22.5	24.8	28.1	30.3	31.8	32.5	33.3	33.5	33.5	32.8	30.9	29.2	27.8	26.4	25.2	24.3	23.8	27.3
19	23.4	23.2	23	22.8	23.1	23.1	23.6	25.6	28.4	31	33.2	33.8	33.1	31.8	30.3	31	30.5	28.2	26.3	25.4	24.9	24.6	23.9	23.2	27
20	22.8	22.6	22.2	21.9	21.8	21.5	21.8	23.9	27.6	30.7	33.2	35	35.5	35.2	34.6	30.9	25.7	22.8	21.9	21.7	21.6	21.4	21.2	20.9	25.8
21	20.7	20.5	20.1	19.9	19.9	19.9	20.3	21.7	25.1	28.9	32	34	34.7	34.4	35.3	35.3	34.4	33.3	31.1	28.7	26.7	25.4	24.4	23.8	27.1
22	22.9	22.2	21.8	21.5	21.5	21.7	22.3	24.5	27.6	30.4	32.7	34.4	34.7	34.5	34.9	34.9	33.7	32.7	31	28.8	27.4	26.7	26.1	25.6	28.1
23	25.6	25.6	25.5	25.2	24.4	23.4	23	23.2	23.1	23	23.1	23.5	23.4	22.6	22.1	22.3	22.6	22.6	22.7	23.3	23.7	23.9	24.3	24.6	23.6
24	24.6	24.2	23.7	23.4	23	22.7	22.6	23.8	26.5	29.5	30.6	31.6	32.3	32.2	32.9	31.9	30.9	30.4	29.1	27.4	26.2	25.4	24.9	24.3	27.3
25	23.7	24.1	24.4	24.5	24.5	24.3	24.7	25.6	25.1	24.3	25	28.5	30	28	28.2	31.7	33.1	32	29.5	27.8	26.5	25.6	25	25.1	26.7
26	25.1	25	24.8	24.6	24.5	24.4	24.4	25.1	27.8	30.1	31.2	32.1	32.7	33.1	32.7	32.6	31.3	29.6	28.8	28.3	27.2	26.7	26.3	25.9	28.1
27	25.5	25.1	24.8	24.6	24.4	24.3	24.9	27	29.6	31.7	33.1	33.8	34.4	35	34.4	31.8	31.2	31.7	31.2	29.5	28.3	27.6	27.2	26.8	29.1
28	26.3	26.1	26.1	25.8	25.2	24.9	24.9	25.4	26.8	27.7	28.2	28.5	28.1	27.7	28	29	29.5	28.9	27.8	26.7	26	25.5	25.1	24.8	26.8
29	24.7	24.6	24.4	24.2	24.1	24	24.3	23.6	23.5	23.7	26.1	30.8	32.9	31.8	32.6	33.6	32.8	31.6	29.8	28	26.6	25.7	25	24.7	27.2
30	24.4	24.2	24	23.8	23.5	23.3	24	26.4	29.1	30.9	31.7	32.1	32.5	32.6	32.8	32.9	33	32.4	31.2	29.3	27.7	26.7	26.2	25.7	28.4
31	25.3	25.1	24.9	24.9	24.8	24.7	24.8	26.1	28.6	30.5	31.6	32.2	33.2	33.4	33.1	33.1	31.4	29	29.3	27.7	26.3	25.6	25.2	25	28.2
Avg	24.3	24	23.8	23.5	23.3	23.1	23.4	25	27.3	29.6	31.5	32.8	33.4	33.2	33.3	33.3	32.8	31.4	29.8	28.1	26.7	25.9	25.3	24.8	27.9
S D	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.9	2.5	2.7	2.6	2.6	2.8	3	2.9	3.1	3.2	3	2.5	1.9	1.7	1.6	1.6	1.4
S/A	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.07	0.07	0.08	0.09	0.08	0.08	0.09	0.09	0.09	0.1	0.1	0.1	0.09	0.07	0.07	0.06	0.06	0.05
Min	20.7	20.5	20.1	19.9	19.7	18.8	18.9	21.3	23.1	23	23.1	23.5	23.4	22.6	22.1	22.3	22.6	22.6	21.9	21.7	21.6	21.4	21.2	20.9	23.6
Max	27.3	26.8	26.1	25.8	25.4	25.2	26	28.7	31.7	34.5	36.5	38.1	38.5	38	38.2	38.2	37.8	36.8	35.4	32.7	30.3	29.2	28.6	27.6	30.7
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% missing; 0.0% 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

July 2004

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	0.3	0.1	0.7	0.2	0.1	0.5	0.4	1	0.5	1.2	1.6	1.4	1.9	2.5	2.5	2.2	2.4	2.7	1.9	1.5	1.2	1.4	1.2	1.4	1.3
2	1.6	1.2	0.8	0.1	0.2	0.2	1.4	1.7	1.4	0.9	1.1	2.2	2.8	2.9	3.2	3.2	2.9	2.9	1.8	2	0.7	0.7	0.3	0.2	1.5
3	0.6	0.7	0.7	0.3	0.1	0	0	0.4	1.7	2.3	2	2.3	2.2	3.7	4	4.2	3.9	2.6	2.2	2.2	2.5	1.9	1.8	1.5	1.8
4	1.8	1.2	1.1	0.9	0.8	0.6	1	1.6	2.2	3	3.3	2.9	3.8	4.9	4.4	3.4	2.3	2.6	2.1	2	2.4	2.2	1.5	1.5	2.2
5	1.5	1.8	2.1	1.5	1.2	1.5	2.3	2.5	3	2.6	2.9	3	3.2	3.8	3.4	2.9	2.9	2.6	2	1.4	1.2	1.5	1.3	1.8	2.2
6	2.1	1.4	1.6	1.7	1.7	1.6	1.6	2.9	3.2	2.8	2.9	2.3	2.4	2.4	1.5	1.6	1.8	1.5	1.6	0.7	0.5	0.8	0.8	1.3	1.8
7	1.2	1.3	1.5	1.6	1.4	1.3	1.4	1.1	0.6	1	1.2	1.6	2.6	3.3	3.4	3.4	3.5	2.4	5.2	2.7	2.7	0.8	1.2	1.7	2
8	2.6	0.6	0	0	0.2	0.1	0.4	0.8	0.7	1.3	1.9	2.4	2.3	2.6	2.7	2.2	3.8	3.5	1.1	0.6	1.7	2.2	1.8	2.1	1.6
9	1	1.3	1.6	1.9	1.8	1.9	1.6	1	1.4	1.3	1.8	1.5	2	1.9	3	2.7	2.2	2.8	2.6	1.8	1.3	1.2	1	0.9	1.7
10	0.7	0.8	0.9	0.6	1.1	0.8	1.2	1.6	1.7	2.3	2.2	3	3.5	3.5	3.7	3.2	2.4	2.1	2.2	1.8	2.2	1.4	1.2	1.5	1.9
11	0.9	0.3	1.3	1.2	1.2	0.7	1.8	2.5	2.7	2.8	2.9	2.9	2.4	2.8	3.4	3.4	3.4	2.9	2.1	2.4	2.1	1.7	0.8	0.9	2.1
12	1.6	1.2	1.4	0.6	0.6	1.4	1.4	1.3	2.2	2.6	3.2	3.2	4.5	4.4	3.6	3.4	3.4	3.2	2.2	2.5	2.8	2.7	2.9	2.5	2.4
13	2	2.3	2.7	2.3	2.5	2.2	2.9	2.9	3.1	3.4	3.5	3.2	3.7	3.8	3.8	3	3.1	1.9	0.9	0.9	0	0.8	0.4	0.1	2.3
14	0.1	0.6	1.3	1.5	1.9	1.4	1.8	2.3	1.9	2.3	2.8	3.5	4.3	4.6	4.1	3.5	3.2	2.8	1.5	2.2	3	3.3	2.3	1.6	2.4
15	0.8	0.3	0	0.5	0.9	1.5	1.6	2	2.3	2.9	3	3.1	3.8	4.1	4.1	3.5	3	2.1	2	1.5	0.7	0.7	1	1.4	2
16	0.1	1.2	1.7	1.2	1	0.8	1.1	1.6	1.5	1.5	1.9	2.3	3.1	2.9	2.3	2.5	1.5	1.4	1	1	0.4	0	0.2	0.3	1.3
17	0.4	1.5	1	0.6	0.3	0.2	1.2	1.1	1.4	1.8	2.6	3	3	3.9	2.9	3.2	2.6	2.8	3	2.6	1.9	1.2	0.3	1.2	1.8
18	0.6	1	1.1	4.4	2.3	3.3	0.5	0.5	1	0.9	1.4	1.7	2.2	2.2	2.7	2.4	1.8	1	0.9	1.5	1.6	1.1	1	0.9	1.6
19	0.9	1.1	0.7	0.8	1.3	1.3	0.9	1.3	1.3	1.6	1.8	2.2	2	3.5	2.7	3.5	3.1	1.9	1.7	1.6	1.3	0.3	0.1	0.2	1.5
20	0.8	0.5	0.2	0.8	0.3	0.1	0.4	0.4	1	1	1	1.7	1.9	1.7	3.8	3.4	2.9	1.8	1	0.7	0.8	0.2	0.3	0.3	1.1
21	0.3	0.4	0.4	0.7	0.8	0	0.4	0.6	1	1.3	1.4	1.8	2.3	1.5	2.2	2.1	2	1.7	1.6	1.8	1	0.6	0.8	0.5	1.1
22	0.1	0.2	0.1	0.2	0.7	0.5	0.5	1.2	2	1.8	1.6	1.8	3	2.8	2.7	3.5	3.4	3.4	2.5	2.5	2.6	1.7	1	1	1.7
23	1.2	1.1	1.2	1.7	1.1	0.4	0.7	3.2	2.4	2.1	1.3	2.1	2.6	3.4	3.3	2	2.1	3	2.4	1	0.2	0.5	1.1	1.2	1.7
24	1.1	0.4	0.4	0.7	0.5	1	0.9	0.4	0.8	2	2.1	2.3	2.3	2.4	2.4	2	2.1	1.1	1	0.7	0.5	0.2	1.8	1.7	1.3
25	0.7	0.2	0.8	1	0.5	0.5	0.6	1.5	1.4	1.9	1.2	2.7	2.5	2.3	2.5	2.9	2.8	2.7	2.4	1.9	1.7	1.1	0.8	0.6	1.6
26	0	0.9	0.3	0.4	0.1	0.3	1	0.9	2.3	3.3	3.3	3.2	3.4	4	4.7	4.2	2.9	2.4	2.4	2	1.2	1.1	1	0.9	1.9
27	0.8	1.1	0.9	1.1	1.2	1.1	1.7	2.7	2.6	3.1	3	3	3	3.5	3.5	3.1	3.3	3.6	2.6	2.4	2.3	2.1	2.4	2.2	2.3
28	2	2.1	1.9	1.6	1	1.1	1.3	1.3	1.9	2	2.3	3.2	3.1	2.9	3.2	3.3	2.4	2.1	2.4	1.5	1.1	1.2	1.7	1.4	2
29	1.5	1.5	0.6	0.8	0.2	1.4	3.6	1.2	2.4	2.7	1.2	1.1	2.8	2.9	2.9	3.3	2.1	1.8	1.7	1.6	1.1	0.9	1.4	1.1	1.8
30	1.1	0.9	0.4	0.3	0.1	0.8	1.3	2.6	2.8	2.7	3.5	4	4.6	4.6	5	4.7	4.8	4.6	3.6	2.9	2.4	1.5	1.4	1.7	2.6
31	1.8	1.6	1.8	1.7	1.6	0.3	1	2.9	4.3	4.2	4.3	3.7	3.8	4.8	5.6	4.9	3.8	2.8	3.3	1.5	0.8	0.8	1	0.8	2.6
Avg	1	1	1	1.1	0.9	0.9	1.2	1.6	1.9	2.1	2.3	2.5	2.9	3.2	3.3	3.1	2.8	2.5	2.1	1.7	1.5	1.2	1.2	1.2	1.8
S D	0.7	0.6	0.7	0.9	0.7	0.7	0.8	0.8	0.9	0.8	0.9	0.7	0.8	0.9	0.9	0.8	0.7	0.8	0.9	0.7	0.8	0.8	0.7	0.6	0.4
S/A	0.65	0.57	0.65	0.81	0.73	0.78	0.62	0.53	0.46	0.39	0.39	0.29	0.26	0.28	0.27	0.24	0.26	0.31	0.43	0.38	0.57	0.62	0.57	0.53	0.22
Min	0	0.1	0	0	0.1	0	0	0.4	0.5	0.9	1	1.1	1.9	1.5	1.5	1.6	1.5	1	0.9	0.6	0	0	0.1	0.1	1.1
Max	2.6	2.3	2.7	4.4	2.5	3.3	3.6	3.2	4.3	4.2	4.3	4	4.6	4.9	5.6	4.9	4.8	4.6	5.2	2.9	3	3.3	2.9	2.5	2.6
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

July 2004

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	274	289	292	306	321	237	245	245	79	84	89	169	164	159	146	136	165	134	127	194	197	219	226	226	165
2	222	202	186	167	171	186	204	232	211	240	122	122	144	157	168	165	178	187	206	232	237	175	134	257	182
3	230	197	237	256	251	315	333	56	95	95	112	130	147	83	87	109	126	131	98	89	97	115	116	124	111
4	127	105	118	111	103	138	143	147	143	148	153	160	135	135	144	143	135	126	139	159	162	172	185	198	144
5	194	201	214	207	202	219	227	233	243	252	247	249	244	244	247	255	248	238	225	224	211	212	219	229	234
6	239	254	256	272	280	289	312	350	3	16	6	349	348	347	319	298	284	283	255	227	218	222	207	207	310
7	214	218	220	228	240	262	279	274	239	222	192	190	191	185	178	179	323	21	69	248	145	125	129	233	202
8	153	168	299	300	270	236	224	230	230	205	175	165	188	202	194	180	131	120	137	169	244	260	217	231	183
9	242	249	248	245	257	273	280	298	327	344	36	52	102	92	131	104	138	133	125	132	133	136	137	138	139
10	205	215	226	255	233	230	249	297	17	37	46	43	41	51	65	66	61	57	57	69	77	107	124	107	58
11	138	86	80	62	74	93	89	98	102	105	94	111	113	105	122	120	103	98	119	123	125	125	125	121	107
12	127	116	127	136	120	130	165	190	189	195	167	175	162	168	195	168	180	189	191	202	205	200	214	217	179
13	215	213	219	227	231	233	231	237	243	241	244	248	246	243	246	11	85	135	149	332	222	165	188	251	233
14	161	204	216	225	228	226	228	240	237	243	230	240	258	254	246	235	229	218	196	192	198	205	276	357	233
15	73	152	250	258	266	282	283	279	269	277	270	264	243	251	250	249	258	274	286	300	290	244	256	275	264
16	272	263	266	281	287	282	279	289	310	291	275	245	247	255	282	250	260	258	241	227	220	210	248	199	265
17	181	239	235	238	232	223	222	220	211	174	169	198	176	149	142	145	164	156	155	153	156	183	231	166	172
18	146	100	105	123	135	270	96	85	64	183	189	242	244	251	259	257	265	285	243	186	222	234	238	233	218
19	263	281	302	36	2	63	22	63	64	12	39	58	55	77	68	76	86	98	121	117	102	173	189	341	67
20	340	283	289	269	289	310	41	53	42	74	54	91	84	115	109	67	338	262	43	285	171	57	250	315	61
21	297	283	318	325	335	326	321	332	324	5	29	58	49	59	60	66	73	80	97	103	129	130	143	187	58
22	202	230	200	237	230	220	205	212	231	249	213	182	172	163	175	136	131	146	150	146	153	180	187	182	170
23	193	209	204	217	220	180	205	223	221	204	207	192	188	149	122	114	109	117	120	117	119	141	216	239	173
24	239	251	229	268	281	272	279	329	285	256	253	256	222	231	244	250	246	247	266	264	252	109	114	144	244
25	108	97	82	74	51	51	43	155	124	69	60	63	92	98	65	71	72	75	71	69	61	63	74	71	77
26	51	68	61	28	358	29	75	72	76	100	102	114	100	109	118	123	104	102	107	81	99	127	129	153	104
27	202	215	226	211	192	205	203	209	197	186	184	188	194	164	184	177	179	182	178	168	173	183	190	198	187
28	201	208	218	210	199	201	208	202	171	185	185	161	171	173	187	188	198	197	201	206	234	132	159	174	188
29	177	179	187	222	162	162	195	144	208	242	132	65	142	135	170	163	185	186	166	140	140	142	146	144	169
30	142	142	140	149	164	117	124	130	114	111	105	97	103	104	109	106	110	110	113	117	127	126	129	127	113
31	126	126	127	125	120	122	120	120	126	127	128	125	116	105	106	117	134	130	130	127	123	118	123	130	122
Avg	187	202	210	209	223	235	221	215	184	180	155	159	162	152	154	140	145	145	137	156	158	170	177	189	167
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

July 2004

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	0.7	0.2	1.5	0.8	0.4	1.1	1.2	2.1	1.5	2.4	3.1	2.9	3.8	4.3	4.4	3.6	4.1	4.4	3	2.5	2.5	2.3	2.1	2.3	2.4
2	2.5	2.1	1.6	0.3	0.6	1	2.5	3	2.7	2	2.2	4.2	4.8	4.7	5.5	5.4	5	4.8	3.1	3.2	1.5	1.4	0.8	0.5	2.7
3	1.2	1.3	1.3	0.7	0.3	0.1	0.2	1.3	2.9	3.9	3.5	4	4	5.5	6.1	6.5	6.3	4	3.8	3.7	4.1	3.2	2.7	2.5	3
4	2.8	2.1	1.9	1.6	1.5	1.2	1.8	2.7	3.5	4.6	5	5	5.9	7.9	7.1	5.6	3.7	4	3.2	3.5	4.1	3.7	3	2.8	3.7
5	2.8	3.1	3.4	2.5	2.1	2.4	3.8	4.2	5	4.5	4.8	5.2	5.5	5.8	5.5	4.8	4.6	4.1	3.2	2.3	2	2.5	2.2	2.8	3.7
6	3.4	2.1	2.3	3.2	3.1	3.3	3.4	5.1	5.4	5.2	5.3	4.5	4.8	4.9	3.4	3.5	3.6	3.1	2.5	1.2	1.1	1.3	1.6	2.3	3.3
7	2	2	2.4	2.3	2	2	2.5	2.4	1.6	2.2	2.7	3	4.9	5.5	6.5	6.3	7.1	4.5	8.8	5.5	4.3	1.8	2	3	3.6
8	4.4	1.7	0.2	0.2	0.6	0.3	0.9	1.6	1.7	2.4	3.2	4	4.3	4.3	4.6	3.8	5.9	6.1	1.9	1.4	2.7	4	2.7	3.2	2.8
9	1.6	2.1	2.4	3.1	3	3.3	3	2.3	3	2.8	3.3	2.9	3.5	3.2	4.8	4.4	3.5	4.3	3.9	2.6	2	1.9	1.6	1.4	2.9
10	1.4	1.4	1.6	0.9	1.7	1.3	2.1	3.2	3.1	3.7	4.1	5.4	5.8	6.1	6.4	5.3	4.1	3.5	3.6	3.2	3.5	2.3	2	2.4	3.3
11	1.5	0.6	2	1.9	1.9	1.4	3.1	4	4.2	4.3	4.5	4.8	4.4	4.7	5.3	5.1	5.6	4.6	3.5	3.8	3.3	2.7	1.5	1.5	3.3
12	2.4	1.9	2.2	1.3	1.1	2.2	2.4	2.4	3.9	4.6	5.8	5.6	7.5	7.4	6.3	6	6.1	5.8	4	4.2	5	5	5	4.4	4.3
13	3.4	3.9	4.5	3.7	4.1	3.6	4.6	4.9	5	5.7	5.8	5.4	6.3	6.5	5.9	5.7	4.9	3.7	1.9	2.3	0.5	1.9	1.5	0.4	4
14	0.6	1.4	2.2	2.4	2.7	2.3	2.8	3.6	3.2	3.9	4.7	5.8	7.2	7.9	6.5	5.6	5.3	4.5	2.8	4.3	5.3	5.5	4.3	3.2	4.1
15	1.6	1	0.3	1.1	1.6	3.1	3.4	3.8	4.5	5.4	5.7	5.5	6.2	6.9	6.9	5.9	5.5	4.3	4	3	1.6	1	1.5	2.3	3.6
16	0.5	1.7	2.8	2.4	2	1.7	2.1	3.5	3.1	3	3.7	3.9	5.1	5.3	4.6	4.4	2.9	2.6	1.6	1.4	0.9	0.1	0.7	0.8	2.5
17	1	2.6	1.5	1	0.7	0.7	2	1.9	2.4	3.3	4.5	5.2	5.2	6.4	4.7	5.1	4.8	4.8	5.1	4.4	3.4	2.5	0.7	2.2	3.2
18	1.2	1.7	2	7.3	4.5	5.4	1.4	1.5	2.3	1.8	2.7	3.2	4.3	4.1	5.1	4.2	3.4	2	1.6	2.8	2.6	2	1.6	1.5	2.9
19	1.6	2.1	1.6	1.6	2.2	2.2	1.7	2.4	2.6	2.9	3.5	3.7	3.6	5.7	4.7	5.6	5	3.3	2.8	2.6	2.4	0.8	0.5	0.4	2.7
20	1.5	1.2	0.6	1.8	0.9	0.6	1.3	1.3	2.1	2.4	2.3	3.2	3.6	3.2	6.5	6	5.2	3.2	2	1.7	1.8	0.7	0.8	0.9	2.3
21	1	1.3	1.1	1.6	1.8	0.5	1.3	1.8	2.3	2.9	2.9	3.2	4.2	3.1	3.6	3.5	3.4	2.9	2.8	2.8	1.7	1.2	1.5	1.4	2.2
22	0.4	0.7	0.3	0.5	1	1	1.3	2.3	3.2	3.3	3.1	3.4	4.8	5	4.7	5.2	5.5	5.5	4.3	4	4.3	3.1	2.1	2.1	3
23	2.3	2.1	2.3	3.1	2.2	1.4	1.7	5.2	4	4	2.7	4.1	4.7	6.1	5.5	4.1	3.9	5.1	4.3	2.3	0.6	1.3	2.2	2	3.2
24	2	1	1.1	1.9	1.5	2.2	2.3	1.4	2	3.5	3.9	3.9	3.7	4	4	3.5	3.3	2.1	1.9	1.4	1.2	0.4	3.3	3.4	2.5
25	1.8	0.6	1.5	2	1.3	1.3	1.6	2.7	2.7	3.2	2.3	4.3	4.1	3.7	4.1	4.6	5	4.7	4.2	3.5	3.2	2.4	2.1	1.3	2.8
26	0.3	1.9	1.3	1.3	0.6	1.1	2	2	4	5.1	5.1	4.9	5.5	6.3	7.2	6.4	4.5	4	4.1	3.3	2.1	1.9	1.9	1.7	3.3
27	1.6	2	1.8	2.1	2.4	2.2	3	4.5	4.6	5.5	5.2	5.5	5.1	6	6.4	5.5	5.9	6.6	5.1	4.5	4.2	4.3	4.3	3.9	4.3
28	3.7	4	3.2	3.1	2.1	2.3	2.4	2.6	3.5	3.7	4	5.6	5.7	5.2	5.9	5.9	4.1	3.8	4.4	2.9	2.1	2	2.7	2.7	3.7
29	2.7	3	1.6	1.7	0.8	2.8	6.3	2.4	4.6	4.7	2.7	2.4	4.9	4.7	5.3	5.6	3.9	3.6	2.9	2.5	1.9	1.6	2.2	1.9	3.2
30	1.9	1.5	0.9	0.8	0.2	1.3	2.1	4.1	4.3	4.6	5.7	6.6	7.5	7.6	8.2	7.6	8.2	7.8	6.1	4.8	3.9	2.6	2.3	2.7	4.3
31	2.8	2.5	2.8	2.7	2.9	0.9	1.7	4.8	6.6	6.4	6.9	6.1	6.4	7.5	8.6	8.2	6.3	4.8	5.5	2.6	1.7	1.7	1.8	1.7	4.3
Avg	1.9	1.8	1.8	2	1.7	1.8	2.3	2.9	3.4	3.8	4	4.4	5.1	5.5	5.6	5.3	4.9	4.3	3.6	3	2.6	2.2	2.1	2.1	3.3
S D	1	0.9	1	1.4	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.1	1.1	1.4	1.3	1.1	1.2	1.3	1.5	1.1	1.3	1.3	1.1	1	0.6
S/A	0.54	0.48	0.52	0.69	0.61	0.63	0.51	0.41	0.36	0.31	0.31	0.25	0.22	0.25	0.22	0.22	0.25	0.29	0.41	0.35	0.5	0.57	0.5	0.47	0.19
Min	0.3	0.2	0.2	0.2	0.2	0.1	0.2	1.3	1.5	1.8	2.2	2.4	3.5	3.1	3.4	3.5	2.9	2	1.6	1.2	0.5	0.1	0.5	0.4	2.2
Max	4.4	4	4.5	7.3	4.5	5.4	6.3	5.2	6.6	6.4	6.9	6.6	7.5	7.9	8.6	8.2	8.2	7.8	8.8	5.5	5.3	5.5	5	4.4	4.3
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% 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

July 2004

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	1019	1019	1019	1019	1019	1019	1019	1019	1020	1020	1020	1019	1019	1018	1018	1018	1017	1016	1016	1017	1017	1017	1018	1017	1018	
2	1017	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1015	1015	1014	1014	1013	1013	1013	1013	1013	1014	1014	1013	1013	1015
3	1014	1013	1013	1012	1012	1013	1013	1013	1013	1013	1014	1013	1013	1013	1012	1012	1012	1012	1013	1013	1013	1013	1013	1013	1013	1013
4	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1012	1012	1011	1011	1011	1011	1011	1011	1011	1012	1012	1012
5	1012	1011	1011	1011	1011	1012	1012	1013	1013	1013	1013	1013	1012	1012	1012	1011	1011	1011	1011	1011	1011	1011	1012	1012	1012	1012
6	1011	1010	1010	1011	1011	1012	1012	1013	1013	1013	1013	1013	1013	1013	1013	1012	1012	1011	1011	1011	1011	1011	1012	1012	1011	1012
7	1011	1010	1010	1010	1010	1010	1010	1011	1011	1010	1010	1010	1010	1009	1008	1008	1009	1009	1009	1009	1010	1010	1009	1010	1010	1010
8	1009	1009	1009	1009	1010	1010	1011	1011	1012	1012	1012	1012	1012	1011	1011	1011	1010	1011	1011	1011	1011	1012	1012	1012	1012	1011
9	1013	1013	1013	1013	1014	1015	1015	1015	1015	1016	1016	1016	1016	1016	1016	1015	1015	1015	1015	1015	1016	1016	1016	1016	1016	1015
10	1016	1015	1015	1015	1015	1015	1016	1016	1016	1017	1017	1017	1017	1017	1017	1016	1017	1017	1017	1017	1017	1017	1017	1017	1017	1016
11	1016	1016	1016	1016	1017	1017	1017	1017	1018	1018	1018	1018	1018	1018	1017	1017	1017	1016	1016	1016	1016	1017	1017	1017	1016	1017
12	1016	1016	1015	1015	1015	1015	1016	1016	1016	1016	1016	1015	1015	1014	1014	1013	1013	1012	1011	1011	1011	1011	1011	1011	1011	1014
13	1010	1009	1009	1009	1009	1009	1009	1009	1009	1009	1009	1009	1009	1008	1008	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007	1008
14	1006	1006	1005	1004	1004	1004	1004	1004	1004	1004	1004	1004	1004	1003	1003	1002	1001	1000	1000	1000	1000	1001	1002	1003	1003	
15	1002	1002	1002	1002	1002	1003	1004	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1006	1007	1007	1007	1005	
16	1007	1006	1006	1006	1006	1007	1008	1009	1009	1009	1009	1009	1009	1008	1008	1008	1008	1008	1008	1008	1009	1009	1010	1010	1010	1008
17	1010	1010	1009	1009	1009	1009	1010	1011	1011	1011	1011	1011	1011	1010	1010	1009	1009	1009	1009	1009	1009	1009	1010	1010	1009	1010
18	1009	1008	1007	1006	1007	1007	1007	1007	1007	1007	1007	1006	1006	1006	1005	1005	1005	1005	1005	1005	1005	1006	1006	1006	1006	1006
19	1006	1006	1006	1006	1006	1006	1007	1007	1008	1008	1008	1008	1008	1008	1008	1008	1008	1008	1008	1008	1009	1010	1010	1010	1010	1008
20	1010	1009	1009	1010	1010	1011	1011	1012	1012	1013	1013	1012	1012	1012	1011	1012	1012	1011	1012	1012	1013	1013	1013	1013	1012	1012
21	1013	1012	1012	1012	1013	1013	1014	1014	1014	1014	1014	1014	1014	1014	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013
22	1013	1012	1012	1012	1013	1013	1013	1013	1013	1013	1013	1013	1012	1011	1011	1011	1010	1010	1010	1010	1010	1011	1011	1011	1011	1012
23	1010	1010	1010	1010	1010	1010	1010	1011	1011	1011	1012	1012	1012	1011	1011	1011	1011	1011	1011	1011	1012	1012	1012	1012	1011	1011
24	1012	1012	1012	1012	1013	1013	1014	1014	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1016	1016	1017	1017	1017	1017	1015
25	1017	1017	1016	1016	1017	1017	1017	1018	1018	1018	1018	1018	1018	1018	1017	1017	1017	1017	1016	1017	1017	1017	1018	1018	1018	1017
26	1017	1016	1016	1016	1017	1017	1017	1017	1018	1017	1017	1017	1016	1016	1015	1015	1015	1014	1014	1014	1015	1015	1015	1015	1015	1016
27	1014	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015	1014	1014	1014	1013	1013	1012	1012	1013	1013	1013	1014	1014	1014	1014
28	1013	1013	1013	1013	1013	1013	1013	1014	1014	1015	1015	1015	1014	1014	1014	1013	1013	1012	1013	1013	1014	1014	1015	1015	1015	1014
29	1015	1015	1014	1015	1015	1016	1017	1017	1017	1016	1017	1017	1017	1017	1016	1016	1016	1016	1016	1016	1017	1018	1018	1018	1018	1016
30	1018	1018	1018	1017	1018	1018	1018	1019	1019	1019	1019	1019	1019	1019	1018	1017	1017	1017	1017	1017	1017	1018	1018	1018	1018	1018
31	1018	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1016	1016	1015	1015	1015	1015	1016	1016	1016	1016	1016	1016	1017
Avg	1012	1012	1012	1012	1012	1012	1013	1013	1013	1013	1013	1013	1013	1013	1012	1012	1012	1012	1012	1012	1012	1013	1013	1013	1013	1012
SD	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
S/A	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
Min	1002	1002	1002	1002	1002	1003	1004	1004	1004	1004	1004	1004	1004	1003	1003	1002	1001	1000	1000	1000	1000	1001	1002	1003	1003	1003
Max	1019	1019	1019	1019	1019	1019	1019	1019	1020	1020	1020	1019	1019	1018	1018	1018	1017	1017	1017	1017	1018	1018	1018	1018	1018	1018
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: 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

July 2004

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	12.7	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
2	12.8	12.8	12.8	12.7	12.7	12.7	13	13.3	13.2	13.2	13.2	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
3	12.8	12.8	12.7	12.7	12.7	12.7	12.9	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	13
4	12.8	12.8	12.8	12.7	12.7	12.7	13.1	13.3	13.2	13.2	13.2	13.1	13.1	13.2	13.2	13.2	13.1	13	12.9	12.9	12.8	12.8	12.8	12.8	13
5	12.8	12.8	12.8	12.7	12.7	12.7	12.8	13.1	13.3	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13	12.9	12.9	12.8	12.8	12.8	12.8	12.9
6	12.8	12.8	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	13.1	13	12.9	12.9	12.8	12.8	12.8	12.8	12.9
7	12.8	12.7	12.7	12.7	12.7	12.7	13.1	13.2	13.1	13.1	13	13	13	13	13	13	13	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.9
8	12.7	12.7	12.7	12.7	12.7	12.7	13	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.9	12.8	12.8	12.8	12.8	12.8	12.9
9	12.8	12.7	12.7	12.7	12.7	12.7	13	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.9
10	12.8	12.8	12.7	12.7	12.7	12.7	13	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.9
11	12.8	12.7	12.7	12.7	12.7	12.7	12.8	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13	12.9	12.8	12.8	12.8	12.8	12.8	12.9
12	12.8	12.8	12.7	12.7	12.7	12.7	13	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.8	13
13	12.8	12.8	12.7	12.7	12.7	12.7	13	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.8	12.8	12.8	12.8	12.8	13
14	12.8	12.8	12.8	12.7	12.7	12.7	13	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.9	12.9	12.8	12.8	12.8	12.8	12.9
15	12.8	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.2	13.2	13.2	13.1	13.2	13.2	13.1	13.2	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	13
16	12.8	12.8	12.8	12.7	12.7	12.7	13.1	13.4	13.3	13.2	13.2	13.1	13.2	13.2	13.1	13.1	13.1	13.1	12.9	12.9	12.8	12.8	12.8	12.8	13
17	12.8	12.8	12.7	12.7	12.7	12.7	13.2	13.3	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	13
18	12.8	12.8	12.8	12.8	12.7	12.7	12.9	13.3	13.3	13.2	13.2	13.2	13.1	13.1	13.1	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	13
19	12.8	12.8	12.7	12.7	12.7	12.7	12.9	13.3	13.2	13.1	13.1	13.1	13.1	13.2	13.2	13.2	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.9
20	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	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.9
21	12.7	12.7	12.7	12.7	12.6	12.7	13	13.4	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.9
22	12.8	12.8	12.7	12.7	12.7	12.7	13	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.2	12.9	12.8	12.8	12.8	12.8	12.8	13
23	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9	13.1	13.1	13.2	13.1	13	13.1	12.9	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.8
24	12.7	12.7	12.7	12.7	12.7	12.7	12.9	13.3	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.2	13.2	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.9
25	12.8	12.8	12.8	12.8	12.8	12.8	13	13.1	12.9	13.1	13.3	13.2	13.2	13.3	13.2	13.2	13.1	13	12.9	12.8	12.8	12.8	12.8	12.8	13
26	12.8	12.8	12.7	12.7	12.7	12.7	12.8	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.2	13	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.9
27	12.8	12.8	12.7	12.7	12.7	12.7	13	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.2	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.8	13
28	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13	13.2	13.2	13.2	13.2	13.3	13.3	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13
29	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.8	13.2	13.3	13.2	13.1	13.1	13.2	13.1	13.1	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.9
30	12.8	12.8	12.8	12.7	12.7	12.7	13	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13
31	12.8	12.8	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	13.1	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.9
Avg	12.8	12.8	12.7	12.7	12.7	12.7	13	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.8	13
SD	0	0	0	0	0	0	0.1	0.2	0.1	0	0	0	0	0.1	0	0.1	0.1	0.1	0	0	0	0	0	0	0
StA	0	0	0	0	0	0	0.01	0.01	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	0	0
Min	12.7	12.7	12.7	12.7	12.6	12.7	12.7	12.7	12.9	13.1	13	13	13	13	13	12.9	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.8
Max	12.8	12.8	12.8	12.8	12.8	12.8	13.2	13.4	13.3	13.3	13.3	13.2	13.3	13.3	13.3	13.2	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	13
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