

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

**July 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	5	48	178	328	539	722	854	927	928	871	674	463	398	165	62	4	0	0	0	0	7165
2	0	0	0	0	2	32	146	185	510	394	256	253	314	482	363	156	54 ?	41 ?	12	7	0	0	0	0	3205
3	0	0	0	0	4	66	149	260	386	675	647	833	920	639	631	649	460	265	77	15	0	0	0	0	6677
4	0	0	0	0	5	49	200	385	578	754	884	887	971	917	792	562	315	225	78	8	0	0	0	0	7611
5	0	0	0	0	?	58	138	156	389	617	731	823	882	872	470	364	191	85	88	35	0	0	0	0	5899
6	0	0	0	0	4	52	207	393	573	751	878	833	894	788	413	317	353	116	63	11	0	0	0	0	6626
7	0	0	0	0	3	41	191	279	331	407	772	791	800	535	246	485	428	166	48	5	0	0	0	0	5527
8	0	0	0	0	2	13	136	322	306	579	715	850	847	628	610	671	487	284	91	2	0	0	0	0	6543
9	0	0	0	0	3	49	209	406	590	732	828	859	776	605	663	542	428	265	95	17	0	0	0	0	7069
10	0	0	0	0	2	41	187	343	479	678	825	601	272	657	474	387	46 ?	60	5 ?	1	0	0	0	0	5058
11	0	0	0	0	3	22	91	185	288	417	598	825	671	636	631	474	344	148	54	7	0	0	0	0	5392
12	0	0	0	0	5	57	196	349	525	650	748	674	672	756	585	252	161	119	97	1	0	0	0	0	5846
13	0	0	0	0	0	3	55	133	116	511	678	422	572	611	469	297	396	244	74	5	0	0	0	0	4586
14	0	0	0	0	2	48	238	341	575	594	778	763	587	273	440	351	73	35 ?	22	6	0	0	0	0	5126
15	0	0	0	0	0	23	105	202	304	659	770	849	598	779	395	495	65	102	48	5	79	0	0	0	5399
16	0	0	0	0	0	23	153	261	297	549	756	867	904	763	718	474	232	99	30	1	0	0	0	0	6127
17	0	0	0	0	0	25	78	324	233	639	842	860	913	726	643	639	100	?	3 ?	3	0	0	0	0	6028 ?
18	0	0	0	0	0	31	172	280	590	728	668	815	771	812	693	469	354	80	45	6	0	0	0	0	6515
19	0	0	0	0	0	17	175	368	426	555	593	846	835	892	768	522	344	233	43	2	0	0	0	0	6618
20	0	0	0	0	0	39	101	204	505	728	709	720	970	910	646	660	336	133	111	26 ?	0	0	0	0	6797
21	0	0	0	0	0	34	155	329	518	700	852	909	931	842	130	213	386	170	59	4	0	0	0	0	6232
22	0	0	0	0	0	28	154	355	568	679	851	636	968	822	649	333 ?	?	37 ?	26	2	0	0	0	0	6110 ?
23	0	0	0	0	0	18	120	318	536	697	769	614	353	314	439	569	428	244	70	5	0	0	0	0	5492
24	0	0	0	0	0	29	172	353	615	785	865	899	976	928	719	590	475	245	67	8	0	0	0	0	7727
25	0	0	0	0	0	39	131	131	146	712	860	889	936	877	762	603	412	218	61	6	0	0	0	0	6781
26	0	0	0	0	0	23	142	308	518	696	827	906	881	641	518	569	408	214	57	6	0	0	0	0	6715
27	0	0	0	0	0	18	100	319	528	697	829	909	927	884	757	584	391	204	51	2	0	0	0	0	7202
28	0	0	0	0	0	24	136	213	323	326	577	837	932	635	760	608	409	211	45	2	0	0	0	0	6037
29	0	0	0	0	0	12	?	?	?	81	179	299	597	765	374	200	172	72 ?	6	0	0	0	0	0	2757 ?
30	0	0	0	0	0	12	56	96	234	453	607	664	381	?	?	106 ?	103	40	16	2	0	0	0	0	2771 ?
31	0	0	0	0	0	18	93	137	308	368	267	106	127	230	142	79	59	64	21	2	0	0	0	0	2021
Avg	0	0	0	0	1	32	145	275	428	598	710	741	745	703	552	441	294	153	52	7	0	0	0	0	5795
S D	0	0	0	0	2	16	46	89	144	160	183	209	240	190	184	172	149	80	29	8	0	0	0	0	1430
S/A	0	0	0	0	1.4	0.49	0.32	0.32	0.34	0.27	0.26	0.28	0.32	0.27	0.33	0.39	0.51	0.53	0.57	1.15	0	0	0	0	0.25
Min	0	0	0	0	0	3	55	96	116	81	179	106	127	230	130	79	46	35	3	0	0	0	0	0	2021
Max	0	0	0	0	5	66	238	406	615	785	884	927	976	928	792	671	487	284	111	35	0	0	0	0	7727
n	0	0	0	0	17	356	359	360	360	372	372	372	368	359	360	357	348	343	359	100	0	0	0	0	5163

Daylight Data Recovery: 0.0% missing; 2.8% exceed the 15% QC threshold -- 5314 total daylight measurements.

Instrument: Eppley PSP    Serial Number: 31256F3    Calibration Factor: 7.561 μV/W/m<sup>2</sup>    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 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	60	241	244	404	512	552	547	519	517	361	229	304	85	54	0	0	0	0	0	4626
2	0	0	0	0	0	1	28	11	170	31	2	1	13	101	88	0	0	0	0	0	0	0	0	0	447
3	0	0	0	0	0	95	115	58	101	345	225	401	509	225	331	521	567	447	142	11	0	0	0	0	4094
4	0	0	0	0	0	78	348	499	621	668	706	567	750	740	687	504	265	336	192	4	0	0	0	0	6964
5	0	0	0	0	0	57	12	0	105	211	217	335	469	458	165	105	42	0	63	3	0	0	0	0	2242
6	0	0	0	0	0	161	425	570	654	710	701	453	539	372	125	71	190	2	0	0	0	0	0	0	4973
7	0	0	0	0	0	47	258	110	31	72	267	203	208	61	33	138	340	35	4	0	0	0	0	0	1807
8	0	0	0	0	0	0	83	158	163	344	427	502	466	170	247	762	749	644	390	7	0	0	0	0	5110
9	0	0	0	0	0	168	439	598	618	549	497	438	301	188	301	317	343	275	155	3	0	0	0	0	5191
10	0	0	0	0	0	57	241	323	303	410	501	234	1	233	107	126	0	1	0	1	0	0	0	0	2538
11	0	0	0	0	0	0	0	3	14	42	142	319	147	184	264	213	127	11	4	0	0	0	0	0	1471
12	0	0	0	0	0	50	257	392	422	383	414	236	90	227	100	6	0	32	139	0	0	0	0	0	2747
13	0	0	0	0	1	2	1	2	0	223	276	34	85	126	73	11	172	190	53	0	0	0	0	0	1248
14	0	0	0	0	0	116	337	335	426	198	356	293	40	0	40	55	0	0	0	0	0	0	0	0	2197
15	0	0	0	0	0	0	3	18	42	320	377	397	191	378	112	333	0	0	16	0	0	0	0	0	2189
16	0	0	0	0	0	1	65	19	4	130	421	549	613	477	515	346	98	0	0	0	0	0	0	0	3238
17	0	0	0	0	0	0	0	206	1	440	612	576	563	319	368	599	10	0	2	1	0	0	0	0	3697
18	0	0	0	0	0	45	339	223	524	450	122	312	429	485	449	321	262	4	11	0	0	0	0	0	3977
19	0	0	0	0	0	17	316	430	128	84	125	355	363	535	447	320	271	284	42	0	0	0	0	0	3716
20	0	0	0	0	0	50	10	36	314	471	294	297	754	702	394	424	230	79	98	0	0	0	0	0	4153
21	0	0	0	0	0	42	192	314	392	468	490	551	568	525	11	40	180	140	61	0	0	0	0	0	3975
22	0	0	0	0	0	19	193	339	453	526	567	225	613	449	302	74 ?	0	1	9	0	0	0	0	0	3768
23	0	0	0	0	0	1	104	322	496	509	399	203	78	70	102	379	496	449	209	0	0	0	0	0	3816
24	0	0	0	0	0	49	218	519	727	737	768	682	790	757	494	499	609	464	199	0	0	0	0	0	7513
25	0	0	0	0	0	104	62	2	19	590	692	630	683	628	581	542	440	292	98	0	0	0	0	0	5363
26	0	0	0	0	0	1	159	316	468	564	616	607	520	301	266	461	415	281	95	0	0	0	0	0	5071
27	0	0	0	0	0	0	4	280	517	569	630	635	627	636	601	497	366	251	66	0	0	0	0	0	5678
28	0	0	0	0	0	23	150	26	64	16	127	467	572	186	508	521	435	296	50	0	0	0	0	0	3441
29	0	0	0	0	0	1	0	0	0	0	9	67	184	5	0	0	0	0	0	0	0	0	0	0	267
30	0	0	0	0	0	1	1	1	12	42	80	137	38	0	0	1	1	0	0	0	0	0	0	0	314
31	0	0	0	0	0	0	2	4	41	31	17	0	0	0	0	0	0	0	0	0	0	0	0	0	95
Avg	0	0	0	0	0	40	148	205	266	343	375	361	374	330	260	271	223	148	69	1	0	0	0	0	3417
S D	0	0	0	0	0	48	141	195	239	230	230	201	261	229	204	222	213	183	89	2	0	0	0	0	1907
S/A	0	0	0	0	5.54	1.18	0.95	0.95	0.9	0.67	0.61	0.56	0.7	0.69	0.78	0.82	0.96	1.23	1.28	2.49	0	0	0	0	0.56
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	95
Max	0	0	0	0	1	168	439	598	727	737	768	682	790	757	687	762	749	644	390	11	0	0	0	0	7513
n	0	0	0	0	19	358	372	372	372	372	372	372	367	370	372	365	369	370	372	101	0	0	0	0	5295

Daylight Data Recovery: 0.0% missing; 0.4% exceed the 15% QC threshold -- 5314 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 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	7 ?	42	121	227	284	307	342	381	405	372	358	309	239	140	54	4	0	0	0	0	3592
2	0	0	0	0	1	32	141	180	399	369	256	253	305	386	283	136	50	34	12	7	0	0	0	0	2844
3	0	0	0	0	5 ?	53	114	232	315	389	428	423	400	417	332	267	149	103	49	14	0	0	0	0	3690
4	0	0	0	0	6 ?	39	98	148	175	204	220	308	205	193	186	187	155	106	47	8	0	0	0	0	2284
5	0	0	0	0	?	53	136	156	316	429	522	467	397	422	319	282	166	85	69 ?	?	0	0	0	0	3820
6	0	0	0	0	4	33	84	124	154	170	216	365	336	410	298	261	243	116	43	11	0	0	0	0	2867
7	0	0	0	0	3	34	119	232	310	343	513	579	581	474	216	377	241	155	48	5	0	0	0	0	4229
8	0	0	0	0	2	13	108	250	193	296	305	333	354	457	386	115	70	52	26	2	0	0	0	0	2963
9	0	0	0	0	?	31	86	129	198	287	361	412	462	415	392	314	241	170	72	17	0	0	0	0	3587
10	0	0	0	0	1	32	113	201	288	349	359	359	272	432	379	293	39	58	6 ?	2	0	0	0	0	3183
11	0	0	0	0	?	22	91	185	283	392	463	499	517	456	391	319	267	145	53	7	0	0	0	0	4090
12	0	0	0	0	?	47	113	147	235	316	338	423	565	515	478	247	161	109	71	1	0	0	0	0	3766
13	0	0	0	0	0	2	55	133	116	318	411	388	480	474	399	291	300	173	63	5	0	0	0	0	3608
14	0	0	0	0	?	35	148	179	300	418	422	454	539	273	408	310	65	33	22	6	0	0	0	0	3613
15	0	0	0	0	0	23	105	199	278	396	421	437	401	396	302	247	62	102	46	5	0	0	0	0	3418
16	0	0	0	0	0	22	134	256	297	444	357	309	276	296	265	218	172	99	30	1	0	0	0	0	3178
17	0	0	0	0	0	27	78	231	233	267	269	277	334	403	329	202	86	?	3 ?	3	0	0	0	0	2743 ?
18	0	0	0	0	0	23	94	183	249	351	528	471	319	334	302	230	203	78	44	6	0	0	0	0	3416
19	0	0	0	0	0	16	90	177	347	477	459	461	439	369	376	282	199	139	35	2	0	0	0	0	3867
20	0	0	0	0	0	36	99	182	301	346	410	385	199	221	290	363	207	114	95	26 ?	0	0	0	0	3273
21	0	0	0	0	0	33	109	198	281	337	406	362	362	332	119	189	297	130	49	4	0	0	0	0	3209
22	0	0	0	0	0	27	105	208	288	259	328	424	350	393	395	257 ?	?	32	26	2	0	0	0	0	3093 ?
23	0	0	0	0	0	18	97	186	229	300	414	422	292	231	362	309	165	92	37	4	0	0	0	0	3157
24	0	0	0	0	0	28	110	126	155	194	152	204	155	173	273	231	149	89	40	8	0	0	0	0	2087
25	0	0	0	0	0	35	121	131	130	242	224	253	241	259	255	200	168	116	45	6	0	0	0	0	2428
26	0	0	0	0	0	25	102	171	227	248	260	293	331	322	265	232	183	120	43	6	0	0	0	0	2828
27	0	0	0	0	0	20	98	189	208	248	254	267	268	237	220	221	195	121	41	2	0	0	0	0	2590
28	0	0	0	0	0	22	109	204	286	315	456	352	317	432	298	225	174	110	36	1	0	0	0	0	3338
29	0	0	0	0	0	11	?	?	30 ?	81	179	295	536	565	370	200	172	66	6	0	0	0	0	0	2512 ?
30	0	0	0	0	0	12	56	96	228	422	534	521	336	39 ?	?	75	103	40	16	2	0	0	0	0	2481 ?
31	0	0	0	0	0	18	93	137	281	342	249	106	127	230	142	79	59	64	21	2	0	0	0	0	1950
Avg	0	0	0	0	1	28	104	180	246	318	357	370	358	353	313	241	166	100	40	6	0	0	0	0	3152
S D	0	0	0	0	2	12	21	41	76	87	108	100	118	115	83	73	73	40	21	5	0	0	0	0	582
S/A	0	0	0	0	1.86	0.43	0.2	0.23	0.31	0.27	0.3	0.27	0.33	0.33	0.26	0.3	0.44	0.4	0.53	0.96	0	0	0	0	0.18
Min	0	0	0	0	0	2	55	96	30	81	152	106	127	39	119	75	39	32	3	0	0	0	0	0	1950
Max	0	0	0	0	7	53	148	256	399	477	534	579	581	565	478	377	300	173	95	26	0	0	0	0	4229
n	0	0	0	0	10	346	359	360	368	372	372	372	368	364	360	364	360	354	356	96	0	0	0	0	5182

Daylight Data Recovery: 0.0% missing; 2.5% exceed the 15% QC threshold -- 5314 total daylight measurements.

Instrument: Eppley PSP    Serial Number: 17880F3    Calibration Factor: 8.067 μV/W/m<sup>2</sup>    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 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	23.7	23.6	23.4	23.2	23	23	23.8	25.5	27.8	29.8	30.9	31.3	32.4	33	33	33	33.1	31.9	29.9	28.6	28.3	27.9	27.5	27.1	28.1
2	26.7	26.5	25.8	25.3	24.5	24.4	24.9	25.6	26.9	27.6	27.3	27.4	27.5	26.7	26.8	25.3	22.5	22.7	22.6	22	21.9	21.7	21.5	21.1	24.8
3	21	21.2	21.3	21.4	21.3	21.6	22.4	23.5	24.3	25.6	25.8	26.3	27	26.8	26.7	26.6	26	25.6	24.7	23.5	22.7	22.4	22.2	22	23.8
4	22	21.2	20.7	20.7	20.8	20.6	22.1	23.6	24.9	26.3	27	27.6	27.8	28.6	28.7	28.3	27.3	26.4	25.3	23.8	23.1	22.9	22.6	22.1	24.4
5	22.2	21.9	21.8	21.9	22	22.4	23.4	24.2	25.1	26.5	27.5	28.3	29.1	29.7	29.6	28.6	28.9	28.2	27.4	26.4	25.7	25.4	25.1	25	25.7
6	24.9	24.8	24.3	24.1	24	24	24.7	25.9	27.1	28.5	29.3	30.3	31.3	32	31.8	29.8	29	27.9	27.5	27.1	26.7	26.6	26.2	26.1	27.2
7	25.7	25.6	25.1	25	24.7	25.1	26.4	27.7	28.1	28.6	29.6	29.9	30.9	30	28.4	28.5	28.5	27.4	26.5	26	25.9	26	26.6	26.8	27.2
8	26.8	26.8	26.8	26.6	26.7	26.9	27.2	28	27.1	27.9	28.4	28.9	28.9	28	27.4	28	28.1	28.2	27.8	26.1	24.6	23.6	23.4	22.8	26.9
9	23.2	22.8	22.6	22.5	22.3	22.5	23.7	25.3	26.6	27.9	29	29.3	29.8	30.1	30.6	30.5	30.5	30.1	29.4	28	26.8	26.3	25.4	25.3	26.7
10	24.5	23.8	23.4	23.1	22.9	22.9	23.7	25.4	26.6	29.4	31.1	31.1	31.5	31.9	31.1	31.2	27.1	24.5	24	23.7	24.1	24.7	24.3	24.4	26.3
11	24.3	24.6	24.7	24.4	24.1	24	24.1	24.5	25.5	26.4	27.6	29.3	30.1	30.7	30.9	30.8	30.9	30.4	29.5	28.6	27.6	27.5	26.7	26.2	27.2
12	25.7	25.2	24.9	24.5	24.3	24.2	25.2	26.5	28.2	28.9	29.5	30.1	30.4	30.8	30.5	29.1	28.3	28.5	28.8	27.7	27.5	27.4	27.3	26.9	27.5
13	26	25.5	25.3	25.2	23.7	23.1	22.7	23.8	23.8	24.5	27.2	27.5	27	27.4	27	26.4	27	26.7	26	25	24.5	24.3	24.2	24	25.3
14	23.6	23.2	23	22.7	22.6	22.9	24.1	25.2	26.5	27.3	28.2	28.8	28.5	27.3	27.5	28.5	27.5	26.4	25.5	24.9	24.4	24.1	24.1	24.8	25.5
15	25.1	25.1	25.1	24.3	24.4	24.3	24.5	24.9	25.6	27.3	29	29.9	30.1	31	28.6	29.3	27.4	26.7	25.8	25.3	24.9	24.9	25.2	25.1	26.4
16	25.1	25.1	25	24.8	24.6	24.6	25.3	26.3	26.8	28.1	29.3	30.4	31.6	31.9	32.7	32.5	32.1	30.4	29.1	28.3	27.9	27.8	27.8	27.5	28.1
17	27	26.4	25.9	25.5	25.3	25.1	25.6	27.1	27.7	29	30.3	31.3	32	32.4	30.3	31.2	29.4	24.5	23.2	23.6	24.2	24.8	25.1	25.4	27.2
18	25.5	25.5	25.5	25.2	25	24.8	25.6	26.4	27.8	29.2	30	30.8	31.8	32.5	33.3	33.2	33.2	31.8	29.9	27.7	26.8	26.3	25.9	25.7	28.3
19	25.3	24.9	24.5	24.4	24.5	24.4	25	26.2	27.5	28.7	29.6	31	31.7	32	32.7	33	32.6	32.5	31.4	30.1	29.6	29.1	28.3	27.5	28.6
20	26.3	25.3	24.8	24.4	24	24	24.6	25.1	27	29	29.3	29.9	31.1	31.8	32.5	29.9	29.2	27.5	28.3	27.3	26.8	26.5	26.1	25.2	27.3
21	25.1	24.9	25	24.8	24.5	24.6	25.3	27	28.5	29.8	30.3	30.6	32.1	32.8	31.7	29.1	31	30.5	29.5	28.6	28.2	27.2	27.1	26.5	28.1
22	26	25.8	25.3	25.2	24.9	24.5	25.1	26.1	27.6	28.6	30.1	30.8	31.6	32.3	32.8	29.2	23.6	23.5	24.1	24	24.2	24.1	23.9	23.9	26.6
23	23.9	23.8	23.7	23.7	23.7	23.5	23.9	25.7	28.2	30.5	31.7	31.4	27.7	29	29.4	29.6	29.4	28.9	28	26.6	25.9	25.3	24.7	24.2	26.8
24	24.1	23.8	23	22.5	22.3	22.6	23.8	26	27.4	28.2	28.6	29	29.2	29.8	29.4	28.8	28.4	27.5	26.5	25.3	24.8	24.6	23.4	23.2	25.9
25	23.5	23.3	22.2	21.7	21.6	21.4	22.7	23.4	23	24.5	26.8	27.8	29.6	30.1	30.3	30.9	30.5	30.3	29.7	28.5	27.6	26.8	26.5	26.5	26.2
26	26.4	26.1	26.1	25.8	25.7	26	26.7	28	29.3	31.1	32.5	33	33.7	34.3	34.1	34	32.8	31.6	30.5	29.3	28.8	28.5	28	27.5	29.6
27	27.2	27	27	27.1	27.1	27	27.3	28.1	30.6	32.1	33.4	34.2	34.8	35.4	36.3	36.1	35.3	34.3	33.2	31.8	30.8	29.6	28.6	24.4	30.8
28	23.9	23.4	23	22.6	22.7	23.3	24.7	25.8	26.7	27.1	27.6	28.6	29.6	29.4	29.2	29.3	28.8	28.1	26.7	25.8	25.3	25.3	25.2	25.2	26.1
29	24.8	24.8	24.9	24.3	23.9	23.6	23.6	23.8	23.9	24.2	24.2	25	27.8	28.9	28.5	27.9	27.9	27	25.4	23.8	23.1	23.3	23.1	23	25
30	23.1	22.8	22.6	22.8	22.9	23	23.5	24.1	25	26.4	27.7	28.5	28.3	23.3	22.5	22.3	23.4	23.8	23.8	23.7	23.5	23.5	23.6	23.7	24.1
31	23.5	23.3	23.2	23.1	23	23.1	23.6	24.3	25.3	26.5	25.4	24	23.8	23.2	23.3	23	23.2	23.2	23.2	23.2	23.1	23	23	22.9	23.6
Avg	24.7	24.5	24.2	24	23.8	23.8	24.5	25.6	26.7	27.9	28.8	29.4	30	30.1	29.9	29.5	28.8	28	27.2	26.3	25.8	25.5	25.2	24.9	26.6
S D	1.5	1.5	1.6	1.5	1.5	1.4	1.3	1.4	1.7	1.9	2	2.1	2.3	2.8	3	3	3.1	2.9	2.7	2.4	2.2	2	1.9	1.7	1.6
S/A	0.06	0.06	0.07	0.06	0.06	0.06	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.09	0.1	0.1	0.11	0.11	0.1	0.09	0.09	0.08	0.08	0.07	0.06
Min	21	21.2	20.7	20.7	20.8	20.6	22.1	23.4	23	24.2	24.2	24	23.8	23.2	22.5	22.3	22.5	22.7	22.6	22	21.9	21.7	21.5	21.1	23.6
Max	27.2	27	27	27.1	27.1	27	27.3	28.1	30.6	32.1	33.4	34.2	34.8	35.4	36.3	36.1	35.3	34.3	33.2	31.8	30.8	29.6	28.6	27.5	30.8
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 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	?	?	?	?	?	?	?	102.2	94	85.5	78.6	74.1	66.8	66.5	67.1	69.3	70.4	78.2	87.6	93.1	96.9	98.1	97	97.6	83.7 ?	
2	99.6	100.9	103.6	101.3	99.8	99.4	100.8	95.2	88	87.2	88.9	89.4	89.2	96.1	92	85.5	101.2	102.2	102.7	104.7 ?	104.3	103.4	103.3	104.3 ?	97.6	
3	?	?	?	?	?	?	?	103.5	100.5	97.5	90.5	88.6	86	84.6	85.5	85.1	84.8	83.1	82	83.1	89	94.3	97.5	98.4	99.6	90.7 ?
4	101.7	103.3	104.1	104.9 ?	?	?	?	102.3	97	91.5	84.3	78.9	79	77	71.8	74.2	79	83.4	85.6	88.4	92	96.5	98.3	100.5	102.4	90.7 ?
5	102.4	103.8	104.2	103.1	102	102.9	99.8	94.3	91.9	89.8	86.8	84.2	83.1	81.6	83.1	90.6	89.2	89.9	97.9	97	99.1	99.4	99.6	101	94.9	
6	103	101.1	101.4	103.7	104.4	103.8	101.1	96.3	92.6	88.2	84.1	80	75.1	72.3	74.3	85.8	87.3	90.6	91	92.2	93.3	94.8	96.4	97.3	92.1	
7	99.5	99.7	101.5	102.5	104.1	103.3	96.2	85.5	85.6	84	79.3	75.4	71.8	73	78.2	78.9	80.7	87.1	91.8	95.4	96.5	99.5	101.5	99.3	90.4	
8	98.6	99	96	96.2	96	96	95.3	93	96.6	92.1	85	77.7	75.7	79.1	79.7	73.2	69.4	67.6	68.7	76.5	85.9	90.8	92.5	96.9	86.6	
9	95.9	99	102.1	102.8	103.5	102.1	97.1	89.8	82.8	75	65.2	65.1	63.1	62.1	60.8	62	65	65.1	68	76.3	85.7	86.6	90.8	91.2	81.6	
10	96.2	100.8	103.4	104.8 ?	?	?	?	103.7 ?	97.7	92.6	78	69.4	68.1	65.2	63	67.9	65.4	85.1	100	101.9	102.3	102.2	100	102.7	104.5	89.8 ?
11	104.9 ?	104.9 ?	104.8	105	105 ?	104.9 ?	104.3	103.1	101.1	99.4	95.7	85.9	80.8	79.3	71.5	72.5	75	76.5	82.4	86.6	91.9	92.4	96.5	98.6	92.6 ?	
12	99.3	100.2	101.1	103.4	104.8 ?	?	?	103.7	99.3	93.1	89.4	86.2	83.2	80.8	80	80.5	87.8	92.2	92.9	93.3	97.5	99.3	100.3	101.4	97.1	94.2
13	96.3	101.9	102.8	101	98.7	99.1	97.7	97	94.7	92.3	81.8	82.4	90	86.6	86.8	93.2	92.6	90.6	93.1	97.6	98.9	100	100.2	100	94.8	
14	101.7	103.3	104.4	104.8	104.8	104.2	100.6	95.7	91	90.1	88.3	82.9	85	91.4	89.4	88.9	91.1	94	97.3	99.1	101.2	100.7	101.4	102.6	96.4	
15	102.4	102.7	103.8	104.7 ?	?	?	?	104.2 ?	101.5	94	86.7	83.2	82.4	79.3	90.5	84.7	93	97.9	95.4	99.5	100.2	98.7	101	103.3	95.7 ?	
16	104.6	105 ?	?	?	?	?	?	103.5	101.6	97.5	92.6	88	82.5	80.1	74.6	75.9	78.7	89.2	91.1	91.5	96.4	98.8	99.4	99.8	92.1 ?	
17	100	101.1	102.5	102.9	103.6	104.2	102	97.8	95.6	90.2	83.6	77.7	75.6	75.6	85.4	82.4	93.1	98.4 ?	?	?	?	?	104.5	104.2	94 ?	
18	104.9 ?	?	?	?	?	?	?	103.8	100.9	97.3	92.1	89.7	87.4	83.2	80.5	74.5	75.9	76.8	82.9	91.1	90.5	93.4	96.6	99.4	98.4	90.5 ?
19	99.5	101.4	102.8	103	103.2	104.6	103	99.2	96.6	93.8	90.3	85.7	83.7	83.3	81	79.9	81	82.2	88.2	94.6	95.3	96.4	99.5	98.8	93.6	
20	96	98.8	99.2	100	101.3	101.2	100.3	98.9	93.9	86.2	84.9	83.4	81	77.8	76.6	81	85.4	90.3	90.7	92.5	94	96	97.9	101.8	92	
21	103.6	104.6	104.4	104.3	104.3	104	103.3	99.5	96	91.7	87.8	83.8	77.5	72.5	76.6	90.7	84.2	86	87.8	92.4	94.9	93.5	96.1	98.3	93.2	
22	99.3	97.4	99	100.3	101.9	103.6	103.1	100	96	93.8	88.6	85.7	80.3	78.8	77.4	88.1	104.1 ?	?	103.6	104.1	105 ?	?	?	?	95.5 ?	
23	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	89 ?
24	102.4	102	103.9	?	?	104.3	100.7	91.5	80	69.8	60.1	57.7	55.8	55.7	58.3	60.7	62	64.1	65.7	71.2	73.4	75.2	82.2	83.9	76.4	
25	80.9	83.8	90.5	96	97.6	99.6	96.2	96.7	100.5	95.2	83.4	79.7	74.5	74.4	76.4	74.3	78	80	84.3	90.4	92.4	94.8	98.6	100.4	88.3	
26	100.7	101.5	102	103.8	104.3	104.1	101.2	96.7	92.2	83.5	74.3	71.3	71.7	71.6	73.2	75.5	79.6	86.5	93.1	99.7	102.9	103.7	104.1	104.8 ?	91.8	
27	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	81.2 ?
28	99.5	103.4	104.6 ?	?	?	?	?	103.9 ?	101.6	96.7	94	90.2	85.1	82.7	86.1	84.3	81	79.8	84.3	93.2	97.4	99.2	99.5	100.1	99.7	93.6 ?
29	102	102.1	101.1	102.6	101.5	101.7	104.1 ?	102.9 ?	103.2	103.8	103.9	102	89.3	83.8	87.4	91	92	95.2	103.3	104.8 ?	?	?	?	?	98.9 ?	
30	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	95.8 ?
31	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	102.5 ?
Avg	99.8	100.9	101.9	102.4	102.3	102.4	101.2	98.4	94.8	89.6	84.5	81.6	78.7	79.2	78.8	80.4	82.9	85.6	89.5	93.3	95.4	95.6	97.8	99.5	91.6 ?	
S D	4.8	4.2	3.3	2.6	2.7	2.4	2.8	4.5	5.5	7.1	9	9	8.2	10.9	10	10	10	9.9	9.8	8.2	6.8	7.6	6.7	4.5	5.4	
S/A	0.05	0.04	0.03	0.03	0.03	0.02	0.03	0.05	0.06	0.08	0.11	0.11	0.1	0.14	0.13	0.12	0.12	0.12	0.11	0.09	0.07	0.08	0.07	0.05	0.06	
Min	80.9	83.8	90.5	96	96	96	95.3	85.5	80	69.8	60.1	57.7	55.8	55.7	58.3	60.7	62	64.1	65.7	71.2	73.4	71.2	73.5	83.9	76.4	
Max	104.9	105	104.8	105	105	104.9	104.3	104.6	103.2	103.8	103.9	102.7	90	104.8	104.9	104.9	104.1	102.2	103.6	104.8	105	103.7	104.5	104.8	102.5	
n	283	270	268	226	201	210	271	328	366	372	372	366	360	363	360	355	338	332	334	325	314	312	323	319	7571	

Data Recovery: 0.0% missing; 15.2% 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.

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

**July 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	23.7	23.4	23.3	23.2	23	23	23.5	25.3	28.2	32.3	34.6	35.7	36.2	36.9	37.6	37.4	37.6	36.9	34.3	31.5	29.4	28.5	27.9	27.4	30
2	27.1	26.7	26.3	25.5	24.8	24.5	24.8	25.7	27.2	30.1	30.3	30	30	30	30.6	29.6	26.5	23.8	22.8	22.5	22	21.6	21.1	20.8	26
3	20.7	20.8	21	21.1	21.1	21	21.6	23	24.9	27.2	29.2	30.1	31	31.3	31.2	31.3	31.2	30.5	29	26.3	24	22.8	22.1	21.7	25.6
4	21.3	21.1	20.7	20.3	20.2	20.2	21	23.5	26.4	28.9	30.9	32.3	32.6	32.8	33.6	34	33.2	31.2	29.6	27.1	24.5	23.2	22.6	22	26.4
5	21.6	21.5	21.2	21.1	21.2	21.5	22.6	24	25.4	27.8	30.4	32.1	33.1	33.6	34.3	33	32	31	29.5	28.6	27	25.9	25.3	24.8	27
6	24.6	24.6	24.5	24.1	23.9	23.8	24.6	26.6	29	31.6	33.4	34.5	35	35.7	36.2	35.2	33.6	32	30	28.6	27.6	27	26.5	26	29.1
7	25.7	25.6	25.2	24.6	24.5	24.3	25.1	27.6	29.4	30.7	32.4	34.1	35.1	35.3	33.4	31.8	32	31.5	29.5	27.8	26.9	26.5	26.4	26.6	28.8
8	26.6	26.7	26.6	26.5	26.5	26.8	27.2	28.5	29.5	29.8	30.8	31.6	31.9	31.9	31.4	31.7	32.1	32.1	31.4	29.2	25.8	23.9	22.8	22.1	28.5
9	21.9	22.1	21.9	21.8	21.7	21.7	22.9	25.5	28.4	30.5	32.6	33.8	33.9	34.1	34.2	34.5	34.6	34	32.7	30.5	28	26.3	25.3	24.4	28.2
10	24.3	23.8	23.2	22.9	22.7	22.7	23.2	25.1	27.7	30.7	34.3	36.5	36.2	35.8	36.3	35.6	33.4	28.5	25.4	24	23.6	23.6	23.8	23.9	27.8
11	24	24.2	24.3	24.3	24.1	23.9	23.9	24.4	25.5	27.1	29	31.3	33.6	34.4	34.9	34.6	34.6	33.7	32.1	30.3	28.8	27.8	27.2	26.7	28.5
12	26.1	25.6	25.1	24.7	24.3	24.1	24.8	26.9	29.5	31.7	32.9	33.7	34.1	34.5	34.9	33.8	31.8	30.5	30.4	29.9	28.4	27.7	27.3	27.1	29.2
13	26.8	26.1	25.7	25.5	25.2	23.7	22.7	23.2	24.4	25.1	28	31	31	31.1	31.2	30.3	29.8	30.5	29.6	27.4	25.6	24.7	24.2	24	26.9
14	23.7	23.3	22.8	22.5	22.3	22.3	23.5	26	28.5	30.9	32.4	33.5	33.7	32.5	31.1	31.6	30.7	28.4	26.9	25.8	24.9	24.1	23.9	24.1	27.1
15	24.7	25	25.1	24.9	24.5	24.5	24.5	24.8	25.6	27.9	31.6	33.6	34.6	34.7	34.7	33.4	32	29.4	28	26.9	25.8	25	24.8	24.8	27.9
16	24.8	24.9	24.9	24.9	24.7	24.6	24.9	26.5	27.9	29.6	32.2	34.2	35.3	35.9	36.5	37.4	36.7	34.7	32.2	30.2	28.9	28.1	27.8	27.5	29.8
17	27.2	26.7	26.1	25.6	25.3	25	25.2	26.4	28.9	30	32.8	34.4	35.4	36.3	35.8	35.3	34.6	30.7	26	24.4	24.1	24.4	24.6	24.7	28.8
18	24.9	25.1	25.3	25.2	25	24.8	25.3	27.2	29	31.9	33.7	34.7	35.5	35.9	36.8	37.3	37.3	35.9	33.3	30.8	28.6	27.3	26.6	26	30.1
19	25.7	25.3	24.8	24.5	24.4	24.4	24.7	26.6	28.8	30.6	32.2	33.5	35.2	35.6	36.2	36.8	36.5	35.8	34.9	32.6	30.9	30	29.3	28.5	30.3
20	27.5	26.6	25.7	25.1	24.6	24.3	24.6	25.4	27.1	30.5	33	33.7	34.2	35	36	35.6	35.3	32.5	30.7	29.7	28	26.9	26.1	25.4	29.3
21	24.9	24.6	24.5	24.4	24.2	24	24.6	26.8	30	32.9	35.2	35.9	36.1	36.9	36.7	33.7	33.2	33.8	32.8	30.8	29.3	28.4	27.6	27.1	29.9
22	26.5	26.1	25.7	25.6	25.3	24.8	24.9	26.7	29.3	31.6	33.7	35.5	35.8	36.6	37.3	36.8	30.3	26	24.7	24.2	24	24	24	23.9	28.5
23	23.9	23.9	23.9	23.8	23.8	23.6	23.7	25.3	28.6	32.4	35.4	37.1	35.1	32.9	32.2	32.6	33.2	33	31.7	29.3	26.9	25.4	24.5	23.8	28.6
24	23.4	23.1	22.8	22.3	22	21.8	22.2	24.7	28	31.2	32.9	33.4	33.7	33.8	34.4	34.1	33.5	32.7	30.6	27.9	25.5	24.2	23.3	22.4	27.7
25	22.2	22.5	22.2	21.2	20.6	20.3	21.4	23.2	23.8	24.1	27.5	30.2	31.7	33.3	34.3	35.1	35.5	34.8	33.4	31.2	29.2	27.8	26.9	26.6	27.5
26	26.5	26.5	26.3	26.1	25.9	25.9	26.3	28.2	31.1	34.2	36.9	38.5	39.4	39.7	39.7	39.1	38.9	37.2	34.8	32.1	30	29	28.3	27.8	32
27	27.3	27.1	27	27.2	27.3	27.4	27.5	28.3	31.2	34.6	37.1	38.9	39.7	39.8	40.3	41.2	41.1	39.8	37.5	34.8	32.7	31.3	30	28.2	33.2
28	24.5	23.5	23.1	22.8	22.5	22.6	23.3	24.9	26.8	28.6	29.6	31.2	32.8	33.7	33.8	34.1	34	33.1	31	28.2	26.4	25.6	25.2	25	27.8
29	24.8	24.6	24.6	24.6	24.5	24.2	23.9	23.8	23.5	23.6	23.9	24.5	27	31.1	33	32.3	31.1	30	27.9	26	24.3	23.8	23.6	23.4	26
30	23.2	23.3	23.1	22.9	22.9	22.9	23.2	23.6	24.2	26.4	29.4	31.8	33.4	30.3	25.4	23.7	23.5	23.9	23.9	23.9	23.7	23.6	23.6	23.7	25
31	23.6	23.5	23.4	23.3	23.2	23.1	23.3	24	24.7	26.7	28.4	27	25.3	24.5	24	23.7	23.5	23.5	23.3	23.2	23.1	23.1	23	22.9	24.1
Avg	24.6	24.4	24.2	24	23.8	23.6	24	25.5	27.5	29.7	31.8	33.2	33.8	34.1	34.1	33.8	33	31.6	30	28.2	26.7	25.9	25.3	24.9	28.2
S D	1.9	1.7	1.7	1.7	1.7	1.7	1.5	1.6	2.2	2.7	2.9	3	3	3	3.5	3.7	3.9	3.9	3.6	3	2.6	2.4	2.2	2.1	1.9
S/A	0.08	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.08	0.09	0.09	0.09	0.09	0.09	0.1	0.11	0.12	0.12	0.12	0.11	0.1	0.09	0.09	0.08	0.07
Min	20.7	20.8	20.7	20.3	20.2	20.2	21	23	23.5	23.6	23.9	24.5	25.3	24.5	24	23.7	23.5	23.5	22.8	22.5	22	21.6	21.1	20.8	24.1
Max	27.5	27.1	27	27.2	27.3	27.4	27.5	28.5	31.2	34.6	37.1	38.9	39.7	39.8	40.3	41.2	41.1	39.8	37.5	34.8	32.7	31.3	30	28.5	33.2
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: 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 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	0.3	0.7	0.9	0.4	0.3	1.2	0.5	1.3	0.7	1.6	2.4	3.1	2.5	2.5	2.8	2.1	2	2.3	2.4	1.9	2	2	1.9	1.9	1.7
2	1.7	2.4	1.9	1.3	2.1	1.8	1.7	2.1	1.6	2.5	1.4	1.7	1.6	2.3	2.4	1.5	1.3	2.2	2.2	3.3	2.4	0.9	0.3	0.3	1.8
3	1.8	1.4	1.4	1.5	0.4	1.2	1.6	2.2	2.4	3.2	3.3	3.4	3.6	2.9	3.4	3.7	3.3	2.8	2.6	1.9	1.8	2	1.8	1.2	2.3
4	1.4	1	1.2	0.3	0.8	1.3	0.8	1.6	1.9	2.4	2.3	2.1	2.2	2	2.3	2.7	2.5	2.5	2.4	2.1	1.5	1.7	1.3	0.7	1.7
5	0.7	0.6	0.3	0.9	1	1.2	1.5	1.9	2.2	1.9	2.8	2.6	3.1	2.9	3.3	2.9	2.4	2.5	2.4	1.8	0.9	1.1	0.9	1.2	1.8
6	1.2	1.9	1.9	2.1	1.9	1.8	2.3	2.9	1.8	2.2	2.4	3	2.6	2.8	2.5	3.5	3.7	2.6	2.2	1.8	1.7	0.9	0.4	0.5	2.1
7	0.5	0.3	0.1	0.5	0.4	0.8	1.4	1.5	1.6	1.5	2.7	2.9	3.2	4.2	3.8	4.2	4.4	4.7	4.7	4.5	4.8	4.4	3.3	2.8	2.6
8	3.7	3.5	3.5	3.4	3.6	3.6	3.6	4.7	4.6	5	5.3	5.9	5.4	4.9	4	3.4	3.2	2.4	1.3	0.1	0.1	0.1	0.1	0.3	3.2
9	1.2	0.8	0.8	0.7	0.9	1.5	1.7	2	2.4	2.1	2.4	2.8	2.3	2	2.1	2.3	2.8	2.6	2	1.1	0.5	1	0.2	1.7	1.7
10	1.2	0.9	0.9	1	1.1	1.6	1.7	1.6	1.6	0.9	0.9	1.5	0.6	0.8	2.7	2.7	2.8	2.5	2.6	2.2	1.6	1.1	0.8	0	1.5
11	0	1.4	2	1.3	1.4	1.4	1.2	1.5	2	2.1	1.7	1.6	2.1	2.1	3.1	2.4	2.1	1.5	1.6	1.1	1	1.6	1.5	2.2	1.7
12	2.1	2.6	1.9	1.6	1.4	1.3	2	2.2	2.2	3	3.5	3.1	3.1	3.2	3.8	3.4	2.2	1.2	1.6	1.3	0.5	0.2	0.6	1.6	2.1
13	1.7	2.1	1.4	1.8	2.2	2.6	1.8	0.9	3.4	2.4	1.1	1.8	2.4	2.6	3.1	2.3	2.3	2.2	2	1.8	0.6	0.7	0.7	1.1	1.9
14	0.8	0.7	0.4	0.8	1.4	1.8	1.5	1.8	1.7	1.8	2.2	2.9	3.2	2.3	2.3	3.3	2.4	1.4	1.2	1.1	0.8	1	1.4	1.4	1.6
15	1.8	1.8	1.5	1.5	1.3	0.7	0.8	1.2	1.8	1.7	1.9	2.1	2.1	2	4	3.6	2.1	2.6	1.9	1.7	1.5	1	1	1.7	1.8
16	1.7	2.1	2	1.6	1.2	0.6	1.2	2	2	1.6	1.9	2.4	2.2	2.6	2.4	2.8	1.8	2.8	2.2	1.4	1.6	1.6	1.8	1.9	1.9
17	1.3	1.1	1.2	1	0.8	1	1.7	2	2.3	2.2	3.4	3.4	3.4	3.1	4.2	3.7	3.2	2.7	1.7	1.8	1.6	1.7	1.4	1.5	2.1
18	1.5	1.6	1.6	1.3	0.7	1.4	1.9	2.5	2.1	2.5	2.2	2.4	2.8	3	2.8	2.9	2.6	2.9	3.9	3.4	2.7	2.5	2.5	2.7	2.4
19	2.1	1.8	1.9	2	2.4	2.3	3.4	3.5	2.5	2.6	2.9	2.8	3.3	4	3.7	3.4	3.4	2.8	1.7	1.8	1.5	2.6	1.1	1.1	2.5
20	1.9	2	1.9	1.8	2.1	1.8	2	2.6	2.3	2.4	3.1	2.9	2.8	3.1	3	2.6	2.7	2.3	2.2	0.9	0.1	0.3	0.1	0.5	2
21	0.1	0.5	0.4	0.3	0.2	0.3	0.6	1	1.4	1.4	2.4	2.9	2.4	2.5	2.4	1.8	2.2	3.2	2.3	1.7	2.8	2.6	2.2	2.1	1.6
22	2	1.9	1.8	1.8	0.6	0.5	1.4	2.3	2.3	2.3	2.3	2.2	2.2	2.4	2.4	3.4	2.8	1.7	0.3	1.1	1.7	0.6	0.8	0.7	1.7
23	0.5	0.5	0.6	1.3	0.8	0.7	0.7	0.9	1.1	1.2	1.5	2.2	2.8	2	4	3.8	3.8	3.3	2.2	1.5	1.1	0.7	0.3	0.6	1.6
24	0.5	0.5	0.5	0.5	0.5	0.8	0.8	1.3	2	2.6	3	2.3	2.4	2.2	2.8	3.1	3.2	3	2.2	1.8	1.5	1.1	0.3	1.1	1.7
25	1	0.4	0.3	0.1	0.2	0.5	1.2	1.8	1.1	2.6	2.9	3.4	1.9	2.5	2.7	2.5	2.9	2.6	2	1.8	1.4	1.5	1.5	1.6	1.7
26	1.9	1.2	1.1	0.8	1.6	1.4	1.2	1.1	0.8	0.9	1.3	1.4	1.3	0.9	1.8	2.2	3.1	3	2.3	1.8	1.3	1.3	1.3	0.8	1.5
27	0.5	0.2	0.5	0.3	0.2	0.4	0.4	1.3	1.5	1.9	1.7	1.9	2.2	2.6	2.3	2.3	2.5	2.4	1.9	1.5	2	1.9	2.5	5.9	1.7
28	1.6	0.6	0.8	0.9	0.5	0.9	1.6	2.5	3.3	2.7	2.8	3	2.8	3.1	3.1	3.2	3.2	2.8	2.4	2.3	2.2	2.6	2.4	2.8	2.3
29	1.9	1.2	0.8	2.1	1.1	1.3	2	3	3.3	1.6	0.6	0.3	0.3	1.1	1.1	0.8	0.6	1.5	1.1	0.7	0.8	0.8	0.3	0	1.2
30	0.3	1.6	0.4	0.1	0.1	0.7	0.6	0.4	1.1	1.2	1.4	1.1	1.7	3.5	2.4	0.2	0.1	1	0.1	0	0	0.4	0.1	0	0.8
31	0	0	0.3	0.4	0.2	0.8	0.9	0.5	0.6	1	2.2	0.9	0.8	1.8	1.2	1.1	0.6	1	0.8	0.6	0.7	0.7	0.9	2.1	0.9
Avg	1.3	1.3	1.2	1.2	1.1	1.3	1.5	1.9	2	2.1	2.3	2.4	2.4	2.6	2.8	2.7	2.5	2.4	2	1.7	1.4	1.4	1.2	1.4	1.8
S/D	0.8	0.8	0.8	0.7	0.8	0.7	0.7	0.9	0.9	0.8	0.9	1	1	0.9	0.8	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.8	1.2	0.5
S/A	0.65	0.63	0.65	0.64	0.75	0.56	0.5	0.48	0.43	0.39	0.39	0.41	0.4	0.34	0.28	0.34	0.37	0.31	0.43	0.54	0.66	0.66	0.72	0.82	0.26
Min	0	0	0.1	0.1	0.1	0.3	0.4	0.4	0.6	0.9	0.6	0.3	0.3	0.8	1.1	0.2	0.1	1	0.1	0	0	0.1	0.1	0	0.8
Max	3.7	3.5	3.5	3.4	3.6	3.6	3.6	4.7	4.6	5	5.3	5.9	5.4	4.9	4.2	4.2	4.4	4.7	4.7	4.5	4.8	4.4	3.3	5.9	3.2
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: 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**

**July 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	156	224	227	232	220	226	230	250	240	166	177	195	185	187	183	187	205	194	173	169	179	186	191	200	192
2	201	194	195	199	223	224	249	266	270	253	264	239	198	184	205	293	164	356	57	71	86	96	118	337	215
3	351	23	45	49	59	63	48	52	44	53	49	61	65	54	65	59	53	51	48	50	53	71	71	76	54
4	67	12	4	52	2	357	28	26	23	51	70	58	77	69	62	67	67	64	71	76	95	90	125	119	61
5	130	155	139	124	136	128	135	129	141	154	145	170	146	155	138	118	176	187	182	208	182	171	187	184	155
6	204	226	225	231	239	239	251	265	273	241	247	244	261	260	268	63	76	90	70	69	76	102	113	121	237
7	145	147	112	34	51	65	71	70	60	82	74	87	73	86	85	80	82	88	91	95	101	109	125	145	91
8	151	161	175	184	185	195	200	200	237	235	236	242	258	276	289	298	302	313	317	328	194	174	175	223	231
9	233	208	223	229	240	233	226	236	246	261	263	247	243	230	214	210	215	220	221	210	205	223	209	222	231
10	221	218	213	219	223	227	235	256	240	282	332	259	288	250	147	184	69	57	147	112	129	140	317	0	188
11	197	214	232	236	225	236	235	233	261	249	238	241	228	227	233	223	228	235	231	221	217	225	226	228	232
12	234	234	243	243	239	231	240	257	265	260	252	241	249	243	236	243	236	206	197	216	170	160	182	199	238
13	200	223	253	32	38	22	42	89	78	122	200	194	203	175	165	181	183	176	204	210	214	199	155	166	166
14	206	216	209	218	215	213	225	225	207	183	192	178	203	182	155	149	193	186	190	198	174	166	166	182	190
15	183	203	221	243	220	215	222	213	221	222	229	231	242	222	91	162	184	168	189	196	193	201	199	200	198
16	210	217	213	218	214	214	200	216	233	213	225	213	181	195	176	194	181	129	138	136	158	177	195	208	193
17	207	206	213	205	210	212	224	226	230	222	230	239	228	196	135	147	157	213	127	137	144	153	175	193	193
18	208	203	210	213	211	224	227	239	239	244	243	227	209	210	216	191	194	210	221	228	227	231	227	243	221
19	238	224	224	214	225	229	230	237	239	236	235	215	226	226	222	225	219	216	206	211	212	232	234	282	226
20	275	244	242	250	235	232	246	259	264	259	253	243	233	237	234	51	151	220	345	5	48	43	262	206	246
21	217	258	256	317	323	162	214	222	171	169	150	156	184	183	165	243	107	142	176	182	199	207	220	232	183
22	236	234	231	233	234	220	220	223	223	217	183	217	231	233	218	79	110	109	160	199	215	255	244	267	211
23	240	246	246	258	273	291	291	301	308	359	32	28	101	61	51	31	37	38	50	57	60	40	14	350	33
24	40	351	326	334	355	355	358	24	56	50	68	53	69	58	70	68	69	87	97	99	108	117	157	150	67
25	145	166	235	206	195	237	230	226	242	203	230	239	230	183	170	180	162	159	162	169	181	167	184	183	193
26	209	230	131	202	203	227	304	302	288	26	68	82	126	89	102	105	119	128	120	119	132	158	159	161	135
27	155	138	156	158	188	191	160	152	177	211	212	191	178	199	188	173	165	144	164	29	111	134	246	179	
28	28	313	235	285	304	323	23	43	33	28	37	24	39	60	57	56	52	58	55	64	86	91	98	83	50
29	74	74	64	350	356	21	71	84	101	133	175	234	346	211	269	317	14	356	68	292	46	356	349	304	54
30	262	229	48	31	43	50	36	62	72	82	52	67	62	79	128	89	77	16	97	248	0	321	3	14	72
31	275	305	352	336	340	350	354	357	16	42	93	5	31	24	32	30	52	63	46	38	345	339	62	74	35
Avg	202	215	218	230	223	232	232	233	236	218	211	216	202	193	161	134	134	132	135	138	137	154	168	199	188
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 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	0.9	1.5	1.6	1	0.9	2	1.3	2.3	1.6	3	4.3	5.2	4.6	4.6	5	4	3.6	4.5	4.3	3.6	3.9	4	3.6	3.5	3.1
2	3.1	4.3	3.5	2.6	3.3	3.2	3.1	4.3	3.2	4	3.1	2.7	2.7	3.9	4.5	3.1	2.4	3.7	3.6	6	4.3	1.8	0.9	0.8	3.2
3	3.2	3.1	2.9	2.9	1.3	2.3	3.1	4.1	4.3	5.3	5.4	5.4	5.9	4.8	5.8	6.3	5.6	4.6	4.3	3.2	3	3.3	3	2	4
4	2.3	1.8	2.2	0.9	1.5	2.3	1.9	3	3.6	4	4	3.9	3.8	4	4	4.2	4.1	3.9	3.7	3.3	2.6	3	2.2	1.5	3
5	1.4	1.3	0.8	1.6	1.7	2	2.4	2.9	3.6	3.4	4.6	4.6	5.4	5	5.6	4.8	4.3	4.5	4.7	3	1.9	2.1	2.1	2.3	3.2
6	2.2	3	2.9	3.4	3.1	2.8	4	5.1	3.4	3.9	4.5	5.1	4.9	4.9	4.7	5.3	6.3	4.3	3.5	3	2.8	1.6	1.1	1.1	3.6
7	1.1	0.9	0.3	1.1	1	1.4	2.5	2.4	2.5	2.9	4.1	4.7	5.3	6.8	6.3	6.9	7.2	7.9	7.8	7.9	7.8	6.9	5.4	4.5	4.4
8	6.5	5.9	6.7	6.3	6.6	6.4	6.8	8.3	8	8.3	8.8	9.5	9.2	9.3	7.4	6.9	6.3	4.7	2.8	0.3	0.3	0.4	0.6	0.8	5.7
9	1.8	1.6	1.4	1.3	1.4	2.4	2.7	3.5	4.3	3.9	4.7	4.7	4.3	3.8	3.8	3.9	4.9	4.7	3.2	2.1	1.5	1.6	0.6	2.6	2.9
10	2.2	1.7	1.8	1.8	1.9	2.4	2.9	3	2.7	2.3	2.3	3	1.8	2.1	4.6	4.8	4.9	4.2	4.5	3.5	2.5	2.2	1.9	0	2.7
11	0.1	2.5	3	2.3	2.4	2.3	2.1	2.7	3.5	3.6	3	3	3.8	3.8	4.7	3.9	3.6	2.4	2.4	1.9	1.8	2.5	2.4	3.2	2.8
12	3.4	3.9	3.5	2.7	2.5	2.2	3.5	4	4.3	5.4	6	5	5.2	5.1	5.9	5.3	3.5	2.2	3	2.3	1.3	0.8	1.4	3	3.6
13	3.2	3.3	2.8	3.7	4	4.7	3.6	1.8	5.6	3.9	2.4	3.4	3.9	4.5	5.3	4.4	4.3	4	3.5	2.9	1.3	1.6	1.4	2.2	3.4
14	2	1.5	1.3	1.4	2.3	2.9	2.6	3.1	3.1	3.3	4.2	5	5.2	4.2	4	5.5	4.4	2.6	2.6	2.2	1.7	2.1	2.6	2.9	3
15	3.4	3.4	2.7	2.7	2.5	1.7	1.7	2.3	3.1	3.3	3.5	3.8	3.7	3.8	6.8	5.9	3.9	4.7	3.8	3.4	2.9	2	2.2	3.1	3.3
16	3.1	3.4	3.3	2.8	2.1	1.5	2.5	3.3	3.4	3	3.6	4.2	4.2	4.6	4.7	4.8	3.6	4.4	3.4	2.4	2.9	3.1	3.4	3.4	3.4
17	2.4	2.1	2.2	2.1	1.6	2	3	3.6	3.7	3.8	5.4	5.9	5.4	5.2	6.8	6.4	5.7	5	2.9	3	3	3.1	3	3.1	3.8
18	3	3.2	3.3	3	1.9	2.4	3.3	4.1	3.6	4.2	3.8	3.9	4.8	5.1	5	5.2	4.8	5.1	6.4	5.5	4.3	4	4.1	4.5	4.1
19	3.6	3	3.2	3.2	3.8	3.6	5.2	5.5	4.2	4.2	4.6	4.4	5.3	6.2	6.2	5.7	5.3	4.6	3.2	3	2.6	4.2	1.8	2.4	4.1
20	3.5	3.5	3.1	3	3.3	2.9	3.5	4.6	4.5	4.3	5.1	4.7	4.6	5.1	4.7	4.9	4.7	3.9	4	1.9	0.4	0.7	0.3	1.3	3.4
21	0.3	1	1	0.6	0.5	0.7	1.5	1.9	2.6	2.8	4.2	4.7	4.6	4.5	4.1	3.1	3.4	5.3	4.3	3.4	5	4.6	3.7	3.3	3
22	3.3	3.1	2.8	2.9	1.3	1.2	2.6	3.8	3.9	4	4.3	3.9	4.1	4.2	4.2	6.3	4.7	2.9	1	2.3	3.1	1.6	1.7	1.9	3.1
23	1.1	1.3	1.5	2.5	2.2	1.7	1.7	2.3	2.6	2.6	3.1	4.1	4.2	3.9	7.1	6.9	6.8	5.8	3.6	2.4	1.9	1.6	1	1.3	3.1
24	1.2	1.1	1	1.2	1.2	1.6	1.6	2.6	3.8	4.6	5	4.5	4.5	3.9	4.9	5.1	5.1	4.8	3.7	2.7	2.5	1.9	0.9	1.9	3
25	1.9	1.1	0.8	0.7	0.7	1	2	3	2.2	4.5	5.1	5.3	3.8	4.5	4.9	4.4	5	4.7	3.7	3.2	2.7	2.8	3	2.8	3.1
26	3.6	2.2	1.9	1.5	2.9	2.7	2.5	2.5	2.1	2.2	2.7	2.9	2.7	2.1	3.2	3.9	4.9	4.6	3.6	2.8	2.2	2.5	2.5	1.9	2.8
27	1.5	0.9	1.4	1.5	1.1	1.5	1.6	2.5	3.1	3.4	3.2	3.6	4.1	4.5	4.1	4.1	4.7	4	3.6	2.7	4.4	3	4.4	10.6	3.3
28	2.9	1.4	1.6	1.8	1.3	2.4	3.6	4.7	5.8	5	5	5.2	4.9	5.2	5.5	5.1	5.3	4.7	4.2	4	3.7	4.6	4.3	4.5	4
29	3.2	2.2	1.8	3.8	2.2	2.5	3.4	5.2	5.5	3.1	1.7	1.1	1.2	2.6	2.9	1.8	1.5	2.7	2.4	2	2	1.7	0.8	0.3	2.4
30	0.6	3	1.1	0.9	0.7	1.6	1.4	1.3	2.1	2.4	2.7	2.5	3.4	6.3	3.7	0.7	0.6	2.1	0.3	0	0	1.2	0.6	0.2	1.6
31	0.1	0.3	1.1	1.2	0.4	1.6	1.9	1.4	1.7	2.2	3.9	2.1	1.9	3.7	2.6	2.3	1.5	2.1	2.2	1.7	1.5	1.5	2	3.7	1.9
Avg	2.3	2.3	2.2	2.2	2.1	2.3	2.8	3.4	3.6	3.8	4.1	4.3	4.3	4.6	4.9	4.7	4.4	4.2	3.5	3	2.6	2.5	2.2	2.6	3.3
SD	1.4	1.2	1.2	1.2	1.3	1.1	1.2	1.4	1.3	1.2	1.4	1.5	1.4	1.4	1.2	1.5	1.5	1.2	1.4	1.5	1.5	1.4	1.3	1.9	0.8
S/A	0.58	0.53	0.56	0.54	0.62	0.47	0.42	0.42	0.37	0.32	0.33	0.34	0.34	0.3	0.24	0.32	0.34	0.29	0.38	0.5	0.58	0.54	0.6	0.74	0.23
Min	0.1	0.3	0.3	0.6	0.4	0.7	1.3	1.3	1.6	2.2	1.7	1.1	1.2	2.1	2.6	0.7	0.6	2.1	0.3	0	0	0.4	0.3	0	1.6
Max	6.5	5.9	6.7	6.3	6.6	6.4	6.8	8.3	8	8.3	8.8	9.5	9.2	9.3	7.4	6.9	7.2	7.9	7.8	7.9	7.8	6.9	5.4	10.6	5.7
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

Data Recovery: 0.0% missing; 0.0% 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 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	1008	1007	1007	1007	1008	1008	1008	1008	1008	1008	1008	1008	1007	1007	1006	1006	1005	1005	1005	1006	1006	1006	1006	1006	1006	1007
2	1006	1006	1005	1005	1005	1006	1007	1007	1007	1007	1008	1008	1008	1008	1008	1008	1008	1009	1010	1010	1011	1011	1011	1011	1011	1008
3	1012	1012	1012	1012	1012	1013	1014	1015	1015	1015	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1017	1017	1017	1017	1017	1015
4	1017	1017	1017	1017	1017	1018	1018	1019	1019	1019	1019	1019	1019	1018	1018	1018	1017	1017	1017	1017	1017	1017	1018	1018	1018	1018
5	1017	1017	1016	1016	1015	1015	1016	1016	1016	1016	1016	1015	1015	1014	1013	1012	1012	1012	1012	1012	1012	1012	1011	1011	1011	1014
6	1010	1010	1010	1010	1010	1010	1010	1011	1011	1011	1012	1012	1012	1011	1011	1011	1011	1011	1012	1012	1012	1013	1013	1013	1013	1011
7	1013	1013	1013	1013	1013	1013	1014	1014	1015	1015	1015	1015	1015	1015	1014	1014	1013	1013	1013	1013	1013	1013	1012	1012	1013	1014
8	1012	1011	1010	1010	1010	1011	1011	1011	1011	1011	1011	1012	1012	1012	1013	1013	1013	1013	1014	1014	1014	1015	1015	1015	1015	1012
9	1015	1015	1015	1015	1016	1016	1016	1017	1017	1017	1018	1017	1017	1017	1017	1016	1016	1016	1016	1016	1016	1017	1017	1017	1017	1016
10	1017	1017	1017	1017	1017	1017	1018	1018	1018	1018	1018	1018	1018	1018	1017	1017	1017	1017	1017	1017	1017	1017	1018	1018	1018	1018
11	1017	1017	1017	1017	1017	1018	1018	1018	1018	1018	1018	1018	1018	1018	1017	1017	1016	1016	1016	1016	1016	1016	1016	1017	1017	1017
12	1016	1016	1016	1016	1016	1017	1017	1017	1017	1017	1017	1016	1016	1016	1015	1015	1015	1015	1015	1014	1015	1015	1015	1014	1014	1016
13	1014	1013	1013	1013	1013	1013	1014	1014	1015	1014	1014	1014	1013	1012	1013	1012	1012	1012	1012	1012	1013	1013	1013	1013	1013	1013
14	1013	1013	1012	1012	1013	1013	1013	1014	1014	1014	1014	1014	1013	1013	1013	1013	1012	1012	1012	1012	1013	1013	1013	1014	1014	1013
15	1014	1013	1013	1014	1014	1014	1015	1015	1015	1016	1016	1016	1015	1015	1015	1015	1015	1015	1014	1015	1015	1015	1016	1016	1016	1015
16	1016	1016	1016	1016	1016	1017	1017	1018	1018	1018	1018	1018	1018	1017	1017	1016	1016	1016	1015	1016	1016	1016	1016	1016	1017	1017
17	1017	1017	1016	1016	1017	1017	1017	1017	1018	1018	1018	1017	1017	1016	1016	1015	1015	1016	1016	1016	1016	1016	1016	1016	1016	1016
18	1016	1016	1015	1015	1015	1015	1016	1016	1016	1016	1016	1016	1016	1015	1015	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015	1015
19	1015	1015	1014	1014	1014	1015	1015	1016	1016	1016	1016	1016	1015	1015	1014	1014	1013	1013	1013	1013	1014	1014	1014	1015	1015	1014
20	1015	1015	1015	1014	1015	1015	1015	1016	1016	1016	1016	1016	1015	1015	1014	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015
21	1015	1014	1014	1014	1014	1015	1016	1016	1016	1015	1015	1015	1014	1014	1013	1013	1013	1012	1013	1013	1013	1013	1013	1013	1013	1014
22	1012	1012	1012	1012	1013	1012	1013	1013	1013	1013	1013	1013	1012	1012	1011	1011	1012	1011	1011	1012	1012	1012	1012	1012	1012	1012
23	1012	1012	1011	1012	1012	1012	1013	1013	1013	1014	1014	1013	1013	1013	1013	1014	1014	1014	1014	1014	1015	1015	1015	1016	1016	1013
24	1015	1016	1016	1016	1016	1016	1016	1017	1017	1018	1018	1018	1018	1018	1017	1017	1016	1016	1015	1015	1015	1016	1016	1016	1016	1016
25	1015	1015	1015	1015	1015	1015	1015	1015	1015	1014	1013	1013	1013	1013	1012	1011	1011	1011	1011	1011	1011	1012	1012	1011	1011	1013
26	1010	1010	1010	1010	1010	1011	1011	1011	1011	1011	1011	1012	1011	1011	1011	1010	1010	1010	1010	1010	1010	1010	1011	1010	1011	1011
27	1010	1010	1010	1009	1010	1010	1010	1010	1010	1010	1010	1010	1009	1009	1008	1008	1008	1007	1008	1008	1010	1010	1010	1010	1012	1009
28	1010	1009	1009	1010	1011	1011	1012	1013	1013	1014	1015	1015	1015	1015	1015	1014	1014	1015	1015	1016	1016	1016	1016	1016	1016	1014
29	1016	1017	1017	1018	1017	1017	1018	1018	1018	1018	1018	1019	1019	1018	1018	1018	1018	1018	1018	1019	1019	1019	1019	1019	1019	1018
30	1019	1019	1018	1018	1018	1019	1019	1020	1020	1020	1020	1020	1020	1020	1020	1019	1019	1019	1019	1019	1019	1020	1020	1019	1019	1019
31	1019	1019	1019	1018	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1018	1019	1019	1018	1018	1018	1018	1018	1018	1018	1018	1019
Avg	1014	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015	1015	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1015	1014	1014
SD	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
StA	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	1006	1006	1005	1005	1005	1006	1007	1007	1007	1007	1008	1008	1007	1007	1006	1006	1005	1005	1005	1006	1006	1006	1006	1006	1006	1007
Max	1019	1019	1019	1018	1019	1019	1019	1020	1020	1020	1020	1020	1020	1020	1020	1019	1019	1019	1019	1019	1019	1020	1020	1019	1019	1019
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 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	12.8	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13	13.1	13.1	13	12.9	12.8	12.8	12.8	12.8	12.8	12.9
2	12.8	12.7	12.7	12.7	12.7	12.7	13	13.1	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9
3	12.7	12.7	12.7	12.7	12.6	12.7	13.1	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.8	13
4	12.8	12.7	12.7	12.7	12.7	12.7	13	13.3	13.2	13.2	13.1	13.1	13.2	13.2	13.1	13.1	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	13
5	12.7	12.7	12.7	12.7	12.7	12.7	13	13.1	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	12.9
6	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	13.2	13	12.8	12.8	12.8	12.8	12.8	12.8	12.9
7	12.7	12.7	12.7	12.7	12.7	12.7	13	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.2	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.9
8	12.8	12.7	12.7	12.7	12.7	12.7	12.8	13.2	13.2	13.2	13.2	13.2	13.1	13.2	13.2	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.9
9	12.7	12.7	12.7	12.7	12.6	12.6	12.9	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.9
10	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.9
11	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	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	13.1	13.1	13.1	13.1	13.1	13.1	13.2	13.2	13.1	13	12.8	12.8	12.8	12.8	12.8	13
13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9	13	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13	12.8	12.8	12.8	12.8	12.8	12.9
14	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	13.2	13.2	13.1	13	12.8	12.8	12.8	12.8	12.8	12.8	12.7	12.9
15	12.7	12.7	12.7	12.7	12.7	12.7	12.8	13.2	13.3	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	12.8	12.9
16	12.7	12.7	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	13	12.8	12.8	12.8	12.8	12.8	12.8	12.9
17	12.8	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13	13	12.8	12.8	12.8	12.8	12.8	12.7	12.9
18	12.7	12.7	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	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.9
19	12.7	12.7	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	12.9
20	12.8	12.7	12.7	12.7	12.7	12.7	12.8	13.1	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	13	12.8	12.8	12.8	12.8	12.9
21	12.7	12.7	12.7	12.7	12.7	12.7	13	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13	13	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.9
22	12.7	12.7	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	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
23	12.7	12.7	12.7	12.6	12.6	12.6	12.8	13.3	13.2	13.1	13	13	13.1	13.1	13.2	13.1	13.1	13	12.8	12.8	12.8	12.8	12.8	12.7	12.9
24	12.7	12.7	12.7	12.7	12.7	12.7	12.9	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.8	12.8	12.8	12.8	12.8	12.7	12.9
25	12.7	12.7	12.7	12.7	12.7	12.7	12.9	13.2	13.1	13.3	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.9
26	12.8	12.7	12.7	12.7	12.7	12.7	12.9	13.2	13.1	13.1	13	13	13	13	13	13	13	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.9
27	12.7	12.7	12.7	12.7	12.7	12.7	12.8	13.2	13.1	13.1	13	13	13	13	13	13	13	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.9
28	12.7	12.7	12.6	12.6	12.6	12.6	13	13.3	13.2	13.2	13.2	13.2	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
29	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.7	13.1	13.3	13.2	13.1	13.1	13.2	13.2	13	12.8	12.8	12.8	12.8	12.8	12.8	12.9
30	12.7	12.7	12.7	12.7	12.7	12.6	12.7	12.8	13.2	13.2	13.2	13.2	13.1	13.1	12.9	12.8	12.8	13	12.8	12.8	12.8	12.7	12.7	12.7	12.8
31	12.6	12.6	12.6	12.6	12.6	12.6	12.8	13.1	13.2	13.2	13.2	13.1	13.2	13.4	13.3	13	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.9
Avg	12.7	12.7	12.7	12.7	12.7	12.7	12.9	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.8	12.8	12.8	12.8	12.8	12.8	12.9
S D	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	
S/A	0	0	0	0	0	0	0.01	0.01	0.01	0.01	0	0	0	0.01	0.01	0.01	0.01	0.01	0	0	0	0	0	0	
Min	12.6	12.6	12.6	12.6	12.6	12.6	12.7	12.6	12.6	12.7	13	13	13	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.8	
Max	12.8	12.8	12.7	12.7	12.7	12.7	13.1	13.3	13.3	13.3	13.2	13.3	13.2	13.4	13.3	13.2	13.2	13.2	13	12.8	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.