

**April 2005**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	5	66	200	368	597	669	350	275	363	309	252	116	23	0	0	0	0	0	0	3595
2	0	0	0	0	0	1	38	114	73	?	?	?	69?	200	592	561	356	94	6	0	0	0	0	0	2103 ?
3	0	0	0	0	0	10	74	310	522	695	850	941	944	876	751	577	362	148	20	0	0	0	0	0	7080
4	0	0	0	0	0	7	94	309	525	716	860	937	948	887	753	573	358	138	18	0	0	0	0	0	7123
5	0	0	0	0	0	8	97	307	523	713	855	934	942	882	758	580	366	143	22	0	0	0	0	0	7133
6	0	0	0	0	0	20	102	285	494	678	792	816	790	746	700	538	315	126	12	0	0	0	0	0	6416
7	0	0	0	0	0	7	80	266	484	677	764	776	840	705	423	405	278	101	15	0	0	0	0	0	5820
8	0	0	0	0	0	3	21	58 ?	47 ?	70	140	224	188	359	346	231	124	42	13	0	0	0	0	0	1868
9	0	0	0	0	0	2	12	83	277	741	819	748	899	906	769	611	390	161	28	0	0	0	0	0	6446
10	0	0	0	0	0	9	128	356	586	780	923	999	1004	934	800	612	393	161	24	0	0	0	0	0	7708
11	0	0	0	0	0	11	123	335	547	733	864	937	942	873	748	573	362	139	23	0	0	0	0	0	7210
12	0	0	0	0	0	12	91	292	396	525	496	228	140	110	166	69	44 ?	17 ?	4	0	0	0	0	0	2590
13	0	0	0	0	0	1	15	29	52	125	84	145	214	167	216	108	79	44	3	0	0	0	0	0	1282
14	0	0	0	0	0	15	140	354	413	630	888	906	961	921	812	616	340	120	30	0	0	0	0	0	7147
15	0	0	0	0	0	8	42	121	234	258	388	519	674	561	730	435	254	127	25	0	0	0	0	0	4374
16	0	0	0	0	0	7	65	230	458	734	910	943	976	931	803	609	298	190	33	0	0	0	0	0	7187
17	0	0	0	0	0	24	141	361	592	786	928	1003	1005	933	798	611	394	167	26	0	0	0	0	0	7769
18	0	0	0	0	0	24	169	351	563	756	877	963	956	887	760	542	332	144	18	0	0	0	0	0	7342
19	0	0	0	0	0	12	87	288	534	709	845	917	929	861	700	531	310	141	22	0	0	0	0	0	6888
20	0	0	0	0	0	14	103	210	504	689	818	880	899	831	488	454	306	137	20	0	0	0	0	0	6353
21	0	0	0	0	0	18	130	321	533	712	800	916	837	860	729	553	352	109	28	0	0	0	0	0	6898
22	0	0	0	0	0	11	65	132	372	662	816	892	913	858	730	432	334	143	17	0	0	0	0	0	6376
23	0	0	0	0	0	9	48	198	194	259	520	500	523	710	421	242	281	50 ?	10	0	0	0	0	0	3964
24	0	0	0	0	0	30	178	400	475	545	510	377	627	405	754	374	309	126	39	0	0	0	0	0	5150
25	0	0	0	0	0	29	176	402	615	797	940	1001	1026	949	811	628	417	181	27	0	0	0	0	0	7999
26	0	0	0	0	0	11	36	188	189	249	332	370	306	324	241	217	160	72	23	0	0	0	0	0	2719
27	0	0	0	0	0	15	72	271	151	522	712	317	580	581	500	503	354	174	36	0	0	0	0	0	4788
28	0	0	0	0	0	34	185	404	615	795	928	998	1002	930	807	582	291	149	15	0	0	0	0	0	7735
29	0	0	0	0	0	37	136	129	161	227	113	155	299	376	201	226	269	91	17	0	0	0	0	0	2437
30	0	0	0	0	0	10	97	201	344	324	548	628	732	451	328	303	126	60	20	0	0	0	0	0	4171
Avg	0	0	0	0	0	14	94	250	395	576	689	701	715	679	598	452	289	117	20	0	0	0	0	0	5522
S D	0	0	0	0	0	10	49	107	180	222	261	302	311	273	222	168	101	48	9	0	0	0	0	0	2084
S/A	0	0	0	0	0	0.71	0.53	0.43	0.45	0.39	0.38	0.43	0.44	0.4	0.37	0.37	0.35	0.41	0.47	0	0	0	0	0	0.38
Min	0	0	0	0	0	1	12	29	47	70	84	145	69	110	166	69	44	17	0	0	0	0	0	0	1282
Max	0	0	0	0	0	37	185	404	615	797	940	1003	1026	949	812	628	417	190	39	0	0	0	0	0	7999
n	0	0	0	0	0	180	358	355	354	348	347	348	350	360	360	359	351	348	214	0	0	0	0	0	4632

Daylight Data Recovery: 0.0% missing; 1.7% exceed the 15% QC threshold -- 4714 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**

**April 2005**

**Direct Normal Solar Radiation**  
**Hourly Integrated and Daily Totals**  
**Instrument: Eppley NIP**  
**Watt-Hours per Square Meter**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	26	99	200	400	279	16	1	1	2	6	0	0	0	0	0	0	0	0	1030
2	0	0	0	0	0	0	0	1	0	0	0	0	0	7	382	755	741	243	0	0	0	0	0	0	2130
3	0	0	0	0	0	0	203	757	789	760	878	939	915	879	852	825	738	562	205	0	0	0	0	0	9302
4	0	0	0	0	0	52	413	699	787	847	886	896	906	900	867	795	710	501	156	0	0	0	0	0	9415
5	0	0	0	0	0	65	429	702	817	878	911	923	924	913	890	842	750	532	204	0	0	0	0	0	9781
6	0	0	0	0	0	24	275	558	701	758	652	523	439	482	648	699	526	312	47	0	0	0	0	0	6644
7	0	0	0	0	0	10	75	412	554	688	491	341	506	358	44	130	234	30	0	0	0	0	0	0	3874
8	0	0	0	0	0	0	0	1	0	0	1	2	2	17	20	0	0	0	0	0	0	0	0	0	44
9	0	0	0	0	0	0	0	10	140	712	620	231	719	847	838	851	772	575	234	0	0	0	0	0	6550
10	0	0	0	0	0	128	568	804	908	959	979	981	976	960	928	879	791	591	232	0	0	0	0	0	10684
11	0	0	0	0	0	112	489	720	813	862	881	883	866	831	764	730	616	329	42	0	0	0	0	0	8937
12	0	0	0	0	0	4	103	223	147	140	30	1	0	0	1	0	1	1	0	0	0	0	0	0	652
13	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	2	1	1	0	0	0	0	0	7
14	0	0	0	0	0	80	452	529	220	440	870	687	768	871	908	845	454	278	175	0	0	0	0	0	7579
15	0	0	0	0	0	0	0	0	0	0	1	62	174	76	424	70	19	17	2	0	0	0	0	0	846
16	0	0	0	0	0	0	4	88	248	524	752	743	784	834	814	737	388	486	132	0	0	0	0	0	6535
17	0	0	0	0	0	75	396	655	786	854	891	906	890	865	825	775	663	435	96	0	0	0	0	0	9111
18	0	0	0	0	0	93	438	584	716	804	822	816	796	753	594	467	306	37	0	0	0	0	0	0	8027
19	0	0	0	0	0	5	32	296	599	660	704	706	724	643	549	502	368	251	41	0	0	0	0	0	6081
20	0	0	0	0	0	3	126	71	462	557	587	591	609	604	262	302	335	232	34	0	0	0	0	0	4775
21	0	0	0	0	0	40	279	458	603	665	586	700	484	674	631	566	467	141	32	0	0	0	0	0	6326
22	0	0	0	0	0	0	0	0	75	455	547	588	659	673	630	333	388	243	11	0	0	0	0	0	4602
23	0	0	0	0	0	0	1	19	0	2	53	31	28	196	204	34	158	3	4	0	0	0	0	0	734
24	0	0	0	0	0	251	604	730	217	190	50	16	228	121	666	239	249	152	147	0	0	0	0	0	3861
25	0	0	0	0	0	191	555	751	840	872	899	887	911	893	858	797	708	471	97	0	0	0	0	0	9729
26	0	0	0	0	0	0	0	34	0	2	9	7	1	4	0	7	2	0	0	0	0	0	0	0	66
27	0	0	0	0	0	0	1	134	2	300	490	26	90	259	292	475	520	441	172	0	0	0	0	0	3202
28	0	0	0	0	0	226	576	743	827	867	882	898	900	870	847	645	140	104	0	0	0	0	0	0	8527
29	0	0	0	0	0	32	64	7	0	0	0	1	4	11	1	2	138	10	0	0	0	0	0	0	271
30	0	0	0	0	0	0	7	13	47	14	84	174	243	31	3	9	1	0	0	0	0	0	0	0	626
Avg	0	0	0	0	0	46	204	337	383	474	494	453	486	487	497	448	378	242	70	0	0	0	0	0	4998
S D	0	0	0	0	0	71	224	316	347	353	372	390	377	380	356	344	283	211	82	0	0	0	0	0	3650
S/A	0	0	0	0	0	1.53	1.1	0.94	0.9	0.74	0.75	0.86	0.78	0.78	0.72	0.77	0.75	0.87	1.18	0	0	0	0	0	0.73
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	7
Max	0	0	0	0	0	251	604	804	908	959	979	981	976	960	928	879	791	591	234	0	0	0	0	0	10684
n	0	0	0	0	0	180	360	360	360	360	360	359	360	360	360	358	360	357	214	0	0	0	0	0	4708

Daylight Data Recovery: 0.0% missing; 0.1% exceed the 15% QC threshold -- 4714 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**

**April 2005**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	7 ?	61	170	252	294	428	335	275	363	309	248	116	21	0	0	0	0	0	0	2879
2	0	0	0	0	0	0	38	114	69	?	?	?	54 ?	192	309	112	59	40	6	0	0	0	0	0	993 ?
3	0	0	0	0	0	14 ?	37	49	92	146	109	86	96	103	96	77	59	41	10	0	0	0	0	0	1015
4	0	0	0	0	0	8 ?	33	64	92	108	112	115	109	100	96	91	68	38	9	0	0	0	0	0	1043
5	0	0	0	0	0	9 ?	33	59	71	79	80	85	86	85	77	70	59	38	13	0	0	0	0	0	844
6	0	0	0	0	0	?	59	85	106	130	221	308	350	300	192	112	87	61	9	0	0	0	0	0	2019
7	0	0	0	0	0	8 ?	66	103	158	161	315	406	336	356	389	320	160	93	15	0	0	0	0	0	2886
8	0	0	0	0	0	3	21	50	42	70	140	224	188	352	335	231	124	42	13	0	0	0	0	0	1835
9	0	0	0	0	0	2	12	77	183	200	245	465	200	144	112	84	62	40	13	0	0	0	0	0	1839
10	0	0	0	0	0	10	32	52	62	66	71	77	79	77	75	68	57	38	11	0	0	0	0	0	773
11	0	0	0	0	0	11	39	64	77	90	93	97	105	121	136	110	91	61	19	0	0	0	0	0	1114
12	0	0	0	0	0	14	68	201	312	410	466	228	140	110	166	69	29	15	3	0	0	0	0	0	2231
13	0	0	0	0	0	1	15	29	52	125	81	145	214	167	216	108	79	44	4	0	0	0	0	0	1279
14	0	0	0	0	0	13	52	123	273	253	110	202	215	130	91	81	123	56	17	0	0	0	0	0	1740
15	0	0	0	0	0	10	42	121	234	258	388	456	495	483	358	377	245	123	25	0	0	0	0	0	3614
16	0	0	0	0	0	7	65	182	273	283	208	194	184	144	130	117	96	67	19	0	0	0	0	0	1971
17	0	0	0	0	0	17	56	87	98	106	108	108	120	124	120	102	86	59	17	0	0	0	0	0	1209
18	0	0	0	0	0	20	77	109	112	117	141	151	140	139	140	142	116	66	16	0	0	0	0	0	1484
19	0	0	0	0	0	12	80	151	162	187	197	216	206	257	249	204	144	80	19	0	0	0	0	0	2164
20	0	0	0	0	0	14	79	184	211	251	287	299	297	265	279	259	154	79	17	0	0	0	0	0	2675
21	0	0	0	0	0	16	68	127	150	178	235	212	327	218	200	175	132	67	24	0	0	0	0	0	2130
22	0	0	0	0	0	13	65	132	311	275	285	287	240	215	200	199	145	75	15	0	0	0	0	0	2458
23	0	0	0	0	0	9	48	193	194	259	475	477	503	484	228	208	221	46 ?	6 ?	0	0	0	0	0	3350
24	0	0	0	0	0	14	43	81	317	371	466	358	394	290	207	219	190	93	27	0	0	0	0	0	3071
25	0	0	0	0	0	17	49	70	83	98	109	120	120	109	104	98	85	55	16	0	0	0	0	0	1135
26	0	0	0	0	0	11	36	171	189	249	327	364	306	323	241	214	160	72	23	0	0	0	0	0	2685
27	0	0	0	0	0	17	72	209	151	264	260	288	483	335	255	186	101	65	17	0	0	0	0	0	2703
28	0	0	0	0	0	19	48	70	80	89	100	105	102	108	105	138	214	113	15	0	0	0	0	0	1306
29	0	0	0	0	0	36	124	127	161	227	113	155	299	374	201	225	195	89	17	0	0	0	0	0	2343
30	0	0	0	0	0	11	95	195	321	319	474	452	478	427	328	300	126	60	20	0	0	0	0	0	3606
Avg	0	0	0	0	0	12	54	115	163	195	229	242	238	230	198	165	119	61	15	0	0	0	0	0	2013
S D	0	0	0	0	0	7	24	53	89	95	137	129	136	125	92	83	55	25	7	0	0	0	0	0	848
S/A	0	0	0	0	0	0.59	0.45	0.47	0.55	0.49	0.6	0.53	0.57	0.54	0.46	0.5	0.46	0.41	0.46	0	0	0	0	0	0.42
Min	0	0	0	0	0	0	12	29	42	66	71	77	54	77	75	68	29	15	0	0	0	0	0	0	773
Max	0	0	0	0	0	36	124	209	321	410	475	477	503	484	389	377	245	123	27	0	0	0	0	0	3614
n	0	0	0	0	0	158	359	360	359	348	348	348	356	360	360	360	360	360	356	212	0	0	0	0	4645

Daylight Data Recovery: 0.0% missing; 1.5% exceed the 15% QC threshold -- 4714 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**

**April 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	15.6	14.8	14.8	14.5	14.2	13.9	13.6	15	17.5	19.9	20.7	19.5	16.7	13.7	12.8	12.5	12.1	11.1	10.2	9.9	10.6	11.9	14.8	15.9	14.4
2	15.6	16.2	17.7	18.4	18.7	18.5	18.5	18.8	19.4	19.5	18.6	18	17.9	15.5	16.5	18.8	19.1	16	11.9	11.2	9.2	9.9	10	10.1	16
3	9.6	9.2	8.5	8.2	8.1	8	7.8	8.7	10.2	11.4	12.6	13.9	15.1	16.1	16.6	17.1	17.3	17.3	16.3	15	14.3	13.7	13.2	12.6	12.5
4	11.6	11	10.7	10.7	10.4	10.3	10.4	12.1	14.3	16.6	18.6	19.4	20.4	20.8	21.4	21.6	21.9	21.7	20.4	19.2	17.3	15.3	15.4	14.2	16.1
5	13.2	12.5	12.1	11.7	10.8	10	11.4	13.9	15	16.4	17.5	18	18.3	18.4	18.6	17.4	16.4	15.7	14	12.8	12.6	12.6	12.1	12.2	14.3
6	12.4	12.7	13.2	13.2	13.5	13.8	15	16.8	19	21.1	22.8	24.3	25.1	25.8	26.5	27.2	26.7	25.1	22.5	20.6	19.5	19	18.2	17.8	19.7
7	17.3	16.5	15.9	15.3	15.8	16.4	16.7	18	20	21.4	22.6	23.3	23.7	23.9	23.6	23.2	22.7	21.8	20.9	20.2	19.9	19.5	18.6	17	19.8
8	17.1	17.5	17.5	17.4	17.2	17	17	17.2	17.1	17.2	17.3	18	18.5	18.6	19.1	18.7	18	17.1	16.4	15.1	12.2	11.1	10.5	10.3	16.4
9	10.2	10.2	10.5	10.8	11	10.6	10	9.7	10.3	11.9	12.6	12.7	13.1	13.8	14.1	13.7	13.2	12.6	11.2	10.2	9.9	9.5	9	8.4	11.2
10	8	7.8	7.9	7.9	7.7	7.6	8.1	9.6	11.8	14.4	16.4	17.4	17.8	18.3	18.2	17.9	17.1	16.3	14.5	12.8	11.8	10.4	9.7	8.8	12.4
11	8.5	8.6	8.1	8	8	7.8	8.8	12.5	14.8	17.8	20.4	22.1	18.4	15.9	14.1	12.1	11.3	10.7	9.5	8.7	8.7	8.9	8.9	9.2	11.8
12	9.3	8.7	8	8	8.1	7.7	8.3	9.6	10.8	11.1	11.4	10.7	10	8.9	8.5	8.2	7.8	7.6	7.4	7.3	7.4	7.3	7.4	6.9	8.6
13	6.9	7	7.1	7.6	7.8	7.6	7.7	8.1	7.9	8.4	8.1	7.6	8	7.8	7.8	7.9	7.4	7.9	8	8.3	8.1	7.9	7.6	7.2	7.7
14	7.2	7.4	7.6	7.4	7.4	7.3	8	9.4	10.5	11.5	12.3	12.3	12.4	12.3	12.2	12.4	12.4	11.1	9.4	8.5	8.1	7.8	7.7	7.7	9.6
15	8	8.1	8.1	8	7.9	7.4	7.1	7.2	7.6	7.8	8.1	8.3	8.5	8.2	8.5	8	7.4	7.1	6.6	6.1	6	5.8	5.7	5.9	7.4
16	6.2	6.2	6.1	6	6.2	6.3	6.5	7.3	8.3	9.3	10.1	10.4	10.6	10.4	10.2	9.7	8.9	8.3	7	6.2	5.9	5.6	5.2	4.9	7.6
17	4.6	4.8	4.2	3.8	3.4	3.3	4.4	7.2	9.7	13	14.9	16.2	17.3	18.3	18.3	17.7	17	15.7	14.4	12.6	11.8	11.7	11	10.3	11.1
18	9.8	9.7	9.7	9.3	9	8.8	9.9	12.2	14.8	17.5	20.1	22.4	23.3	24.1	24.5	24.4	22.7	21.9	19.4	17.8	17.2	17.2	15.9	14.8	16.5
19	13.8	13.3	12.8	12.6	12.6	11.9	13.1	14.9	17.6	20.5	23.5	25.2	26.4	27	27.7	26.8	24.4	23.3	21.3	20.6	20	18.8	17.7	17.3	19.3
20	16.9	16.9	16.6	15.5	14.9	15	15.4	16.7	19	21.7	24.6	26.7	28.1	29	29.1	29.2	29.1	28.2	26.4	23.9	22.4	21.2	20.1	19.6	21.9
21	19.2	19.4	18.9	18.7	18.6	17.6	17.4	18.9	20.7	22.6	25	26.3	26.1	24.1	20.2	18.3	17.3	15.5	14	13.1	12.5	12.2	12.3	12.2	18.4
22	12.3	12.6	13.1	13.8	14.2	14	14	14.1	14.9	17.3	19.1	20.6	22.4	24.8	26.3	26.5	25.9	24.3	22.4	20.7	19.8	19.3	19	18.7	18.8
23	18.7	19.1	19.6	19.6	19.2	18.4	18	18.7	19.3	19.7	20.7	21.4	21.7	22.2	22.4	19.4	20.4	16.8	16	16	15	13.7	12.5	10.7	18.3
24	9.6	8.9	8.7	8.3	7.8	7.5	8	9.1	9.7	10.3	10.2	9	9.9	10.4	12	11.8	11.6	10.6	9.9	8.7	8	7.8	7.6	7.1	9.3
25	6.7	6.7	6.9	7.1	6.9	6.9	7.7	9.8	11.8	12.9	13.9	14.9	15.9	16.7	17.4	17.8	18.1	18	16.8	15.2	14.2	13.6	13	12.4	12.5
26	12.2	11.9	11.6	11.6	11.9	12	12.1	13.5	14.6	15	16.1	16.9	17.8	18.8	18.3	17.9	18	17.9	18	17.5	17.2	17.1	16.7	16.7	15.5
27	17.1	17.4	17.5	17.5	16.7	16.3	16.7	17.7	17.9	18.6	19.9	19.9	20.5	21.4	21.5	22.3	22.2	21.4	19.8	18.2	17	15.6	14.9	14.4	18.4
28	13.1	12.1	11.3	10.5	9.6	9	9.8	11.6	14.2	15.7	16.4	17.2	17.8	18.7	19.2	19.9	19.4	19.3	18.2	17.3	16.6	16	15.2	14.8	15.1
29	14.9	14.7	14.6	14.6	14.6	14.3	14.5	14.7	14.9	15.4	13.8	13.6	14.7	15.8	16.2	16.4	18.1	18.3	18.2	18.3	18	17.3	17.7	17.6	15.9
30	17.9	18.1	17.7	17.7	17.8	17.6	18.1	19.1	20.3	21.6	23.1	24.1	25.2	25	24.6	24	23	22.5	22.2	21.9	21.3	21.1	20.9	20.6	21.1
Avg	12.1	12	11.9	11.8	11.7	11.4	11.8	13.1	14.5	15.9	17	17.7	18.1	18.2	18.2	18	17.6	16.7	15.4	14.5	13.7	13.3	12.9	12.5	14.6
S D	4.2	4.3	4.3	4.4	4.4	4.3	4.2	4	4.1	4.3	4.9	5.5	5.6	5.8	5.9	6	5.9	5.7	5.4	5.1	4.9	4.6	4.5	4.4	4.3
S/A	0.35	0.35	0.36	0.37	0.37	0.38	0.35	0.31	0.28	0.27	0.29	0.31	0.31	0.32	0.32	0.33	0.33	0.34	0.35	0.35	0.36	0.35	0.35	0.35	0.29
Min	4.6	4.8	4.2	3.8	3.4	3.3	4.4	7.2	7.6	7.8	8.1	7.6	8	7.8	7.8	7.9	7.4	7.1	6.6	6.1	5.9	5.6	5.2	4.9	7.4
Max	19.2	19.4	19.6	19.6	19.2	18.5	18.5	19.1	20.7	22.6	25	26.7	28.1	29	29.1	29.2	29.1	28.2	26.4	23.9	22.4	21.2	20.9	20.6	21.9
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**April 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	101.3	103.4	104.3	104.8 ?	?	?	?	104.5 ?	98.3	87.5	84.7	89	93.4	97	97.2	97	97.4	101.1	104.6 ?	?	?	?	?	?	97.8 ?
2	?	?	?	103.1	100.9	99.5	98.6	98.1	99	100	104.3 ?	104.6 ?	104.7 ?	102.8	95	84.5	57.6	64.9	81.3	81.2	93.5	82.8	74.1	72.2	90.6 ?
3	63.3	63.7	63.8	65.7	64.3	65.1	68.6	67.3	58.7	52.4	45.7	40.6	34.9	30.4	29.9	28.2	29.7	29.9	30.1	33.4	34.7	35.7	37.5	41.6	46.5
4	47.5	50.5	52.4	53	55	55.8	58.5	57.3	52.9	46	34.1	33.2	30.5	31.2	31.1	31	30.4	32.1	34.9	37	44	51.8	50.7	59.6	44.2
5	68.9	72.6	72	76.9	80.8	80.3	83.9	60.2	52.7	37.8	33.3	33.3	32.4	32.4	36.9	42.5	41.7	48.7	56.9	64.3	75.1	74.3	73.1	72.8	58.5
6	74.7	83	89.8	95.6	98.6	101.4	101.6	100.6	96.3	77.5	56.9	49.9	46.6	41.6	37.6	36.7	38.1	48.4	57.3	64.5	69.6	79.6	84.4	88.5	71.6
7	91.4	95.5	98.6	101.5	100.4	97.6	97	94	86.1	79.3	71.8	70.1	68.9	66.3	65.9	66.5	69.1	73.2	80.3	85.9	89.6	92.7	99.4	?	84.4
8	?	?	?	?	?	?	?	?	?	?	?	?	103.7	101.2	97.5	97.8	99.4	101.1	102.4	101.9	?	?	?	?	100.6 ?
9	?	?	?	?	?	103.7	104	101.2	97.3	88.2	81.4	76.5	70.1	61.2	56.1	56.1	57.4	58.5	60.1	63.5	61.5	62.8	65.9	71.4	73.5 ?
10	75.5	75.8	71	69.8	70	69.1	64.5	57.5	43.1	29.5	23	20.1	23.1	26.4	28.2	30.5	34.6	38.6	46.6	52.9	58.6	67.3	70.4	75.5	50.9
11	71.6	71.8	83	86	87.6	91	83	63.1	58.5	52.8	43.8	39.8	62.5	69.9	69.9	79.6	85.2	88.1	91.9	95.7	95.8	94.5	92.3	90.1	77
12	89.8	94.9	98	98	98.8	101	96	83.8	75	71.4	69.7	72.6	78.1	91.7	94.2	95.2	97	97.6	100.4	101	100.7	100.4	100.9	103.6	92.1
13	?	?	?	?	?	?	?	105 ?	?	103.7	102.4	104.1	102.7	102	103.2	96.6	91.8	90.7	92.6	85.4	84.5	83.7	81.9	84.5	94.7 ?
14	87.6	89.9	85	86	88.4	90.5	88.1	80.1	72.5	68.4	60.6	60.3	60.8	58.2	57	56.8	54.1	62	75.7	78.8	80.7	84.5	87.7	92.7	75.3
15	93.8	95	96.1	95.6	93.3	89.6	85.7	83.5	81.7	78.2	75.2	74.1	71.4	72.5	69.7	73.2	76.2	76.6	76.7	78.3	79.3	80.2	82.9	84.4	81.8
16	85.6	86.7	87.5	88.7	88.7	90.1	91.5	89.2	82.7	77	74.8	72.6	71	70.9	69	70.7	73.5	75	82.5	87.7	90.7	92.4	93.5	95.1	82.8
17	96.7	96.1	96.6	98.5	99.4	99.3	96.7	84.3	65.6	45.1	30.8	29.9	27.7	26.9	26.5	35.4	38.5	43.7	45.8	55	55.1	62	68.1	70.4	62.3
18	72.3	72.6	71.3	73.7	75.9	76.6	75.5	70.7	64.1	57.9	47.6	40.8	43.8	39.4	37	36.8	47.4	48.8	58.7	58.7	66.1	66.6	73.2	78.5	60.6
19	83.4	85.9	88	89.5	90.3	95	91.3	81.8	74.1	64.3	54.4	50	48.3	42.6	37.1	44.5	55.2	55.8	67.6	71	71.1	74.6	79.2	80.6	69.8
20	82.5	81.3	82.5	88.3	93.2	92.9	91.6	87.5	79.4	69.3	59.9	51.4	48.8	45.2	39.4	37	36.7	37.7	41.3	57.7	68.5	73.6	79.1	79.1	66.8
21	78.4	73.3	71.8	68.4	66.5	70.7	72.8	68.9	62.9	58.1	51	48.2	50.5	58.1	71.9	75.2	79.6	87.3	93.1	97.2	100.7	101.7	100.7	101.6	75.3
22	103	102.5	100.7	97.1	95.7	97.6	100.2	101.5	99.6	91.4	84.2	75.9	68.9	60.6	52.4	50.3	50.4	53	59.5	79	89	91.6	92	90.5	82.8
23	89.7	91.4	88.1	90.5	95.6	98.1	97.3	92.8	92.2	87.8	81.9	79.9	78	75.4	73.7	95	93.8	96.1 ?	101.9	93.6	82.1	81.4	68.1	67.4	87.2
24	67.3	71.9	73.7	76.4	79.7	81.8	80.4	73.6	66.5	61.9	59.2	71	70.9	67.6	46.4	41.4	43.8	48.3	53.5	61.6	66.5	65.3	63.9	67.5	65
25	71.5	73.2	72.6	71.4	71.5	72.5	70.9	61.1	51.7	48.3	45.7	40	38.1	36.1	35.3	34.8	34.5	34.9	38.4	46.5	53.1	66.9	79.4	88.4	55.7
26	91.3	92.5	95.6	96.7	96.4	96.8	97.3	92.5	84.8	81.8	74.3	67.4	64.6	57.2	60.2	65.2	71.3	74.7	77.1	81.8	90.5	95.9	102.1	105 ?	83.9
27	?	?	103	100.1	102.1	104.1	104.3	100	95	90	79.2	79.3	79	69	61.2	48	41.1	36.4	40.9	47.4	52.9	60.1	63.6	66.2	73.8
28	69.8	73.6	75.5	76.9	81.3	85.7	82.4	75.2	59	51.5	46	42.7	40.6	38.7	36.9	35.1	36	38.3	42.2	47.1	53.8	65.2	82.6	86.9	59.3
29	87.2	89.2	91.1	88.3	83.9	85.3	89.3	86.3	85.8	82.5	97.1	102.9	103.1	98.9	94.3	92.9	88	86.4	88.1	91.7	94.8	97.9	97.5	98.9	91.7
30	99.6	99.9	101.5	102	102.3	102.5	102.3	100.2	97.1	93.9	87.5	83.3	79	78.7	80.9	81.7	83.6	86.3	89.9	92.2	94.9	96.1	97.4	98.9	93
Avg	81.7	83.4	85.1	86.8	87	88.6	87.9	83.5	76.2	70.1	64.2	62.2	63.2	61.7	59.7	60.5	61.1	63.8	69.1	72.1	74.9	77.9	80	81.9	75
S D	13.5	13.2	13.6	13.6	13.2	13.1	12.7	15.3	17.3	19.5	22	23.4	24	24.4	24.3	24.3	23.4	23.2	22.9	19.9	18.3	16.2	15.9	14.9	15.5
S/A	0.16	0.16	0.16	0.16	0.15	0.15	0.14	0.18	0.23	0.28	0.34	0.38	0.38	0.4	0.41	0.4	0.38	0.36	0.33	0.28	0.24	0.21	0.2	0.18	0.21
Min	47.5	50.5	52.4	53	55	55.8	58.5	57.3	43.1	29.5	23	20.1	23.1	26.4	26.5	28.2	29.7	29.9	30.1	33.4	34.7	35.7	37.5	41.6	44.2
Max	103	103.4	104.3	104.8	102.3	104.1	104.3	105	99.6	103.7	104.3	104.6	104.7	102.8	103.2	97.8	99.4	101.1	104.6	101.9	100.7	101.7	102.1	105	100.6
n	300	300	312	320	312	323	324	330	336	347	342	338	354	360	360	360	360	356	350	347	336	336	336	314	8057

Data Recovery: 0.0% missing; 6.7% failed QC -- 8640 total measurements.

Instrument: CSI HMP-35C    Serial Number: P0520031    Calibration Factor: 0.10 %/mV    Calibration Date: 01/1999

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

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

Prepared by: Afshin M. Andreas, NREL

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

**April 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	15.7	15.2	14.7	14.4	14	13.8	13.5	14.2	16.3	20	23.7	24.9	22.8	20	17.6	16.3	15.2	13.7	12.3	11.2	10.8	11.2	12.4	14.4	15.8
2	15.2	15.7	16.5	17.3	18	18.4	18.4	18.8	19.4	19.8	19.3	18.8	18.3	17.8	16.5	18.5	20.8	20.6	16.6	13.5	11.5	9.5	9.3	9.7	16.6
3	9.9	9.7	9.4	8.9	8.6	8.3	8.1	8.7	10.6	12.4	13.9	15.2	16.2	17	17.9	18.6	19.2	19.2	18.2	15.9	14	12.9	11.9	11.4	13.2
4	10.8	9.9	9.2	8.9	8.9	8.8	9.2	11.1	14	16.7	19.4	21.5	22.5	23	23.2	23.8	24.1	24	22.5	19.4	17	14.8	13.4	13	16.2
5	12.3	11.4	10.7	10.2	9.5	8.1	8.1	11.3	14.9	17.7	20	21.8	22.5	22.3	22.3	22.1	21.2	20	17.7	14.5	12.5	11.4	11	10.6	15.2
6	10.7	10.9	11.1	11.6	11.9	12.3	13.2	15.5	18.7	21.7	24.3	26.1	27.4	28	28.5	29.4	29.9	28.9	26.2	22.6	20.3	18.9	18.1	17.3	20.1
7	16.8	16.2	15.4	14.8	14.8	15.2	15.7	16.8	19.7	22.3	24.4	25.9	26.7	26.9	26.6	26	25.8	24.5	22.8	21.3	20.6	20.1	19.6	18.5	20.7
8	17.8	17.6	17.7	17.7	17.7	17.5	17.4	17.5	17.6	17.6	17.8	18.2	18.7	19.6	21	21.5	21	19.8	18.4	16.9	15.4	13.6	12.3	11.5	17.6
9	11.1	10.9	10.8	11	11.2	11.2	10.8	10.6	10.9	12.5	14.8	15.9	16.1	16.1	16.5	16.7	16.6	16	14.2	11.6	10	9.2	8.5	7.9	12.5
10	7.4	6.9	6.9	6.9	6.9	6.7	7	9	11.6	14.4	16.9	19	19.9	20.4	20.9	21.4	21.5	20.5	18.3	14.5	11.6	9.6	7.9	6.7	13
11	6	5.8	5.9	5.9	6.1	6.1	6.6	9.9	14.3	18	21.7	24.6	25.4	22.3	20.2	18.2	16.4	14.9	12.8	10.3	9	8.5	8.3	8.5	12.7
12	8.6	8.2	7.2	6.7	7.1	7.3	7.3	8.7	11.2	12.7	13.9	14.2	13	11.5	9.6	8.8	8.4	7.7	7.4	7.2	7.2	7.3	7.3	7.3	9
13	7.2	7.2	7.4	7.5	7.8	7.9	7.9	8.1	8.2	8.4	8.7	8.4	8.4	8.5	8.4	8.3	7.6	7.1	7.6	8.1	8.2	8.1	8	7.6	7.9
14	7.4	7.3	7.3	7.2	7.1	6.9	7.1	9	11.2	12.6	14.2	15.1	15.3	15.2	15.2	15.5	15.6	14.5	12.5	10	8.5	7.7	7.2	6.9	10.7
15	6.9	7.2	7.5	7.9	8.2	8.2	7.9	7.9	8.3	9	9.5	10.1	10.7	11.1	11.2	11.3	10.5	9.6	8.5	7.1	6.1	5.6	5.3	5.3	8.4
16	5.9	6.2	6.3	6	6	6.2	6.3	7.1	8.6	10.5	12.2	13.3	13.5	13.3	13.4	13.4	12.9	11.5	10	7.6	6.1	5.2	4.7	4.2	8.8
17	3.8	3.5	3.3	2.7	2.3	1.9	2.4	5.3	9.2	12.8	16	18.3	19.8	20.6	21.7	22.2	21.7	20.4	17.9	13.9	10.9	9.9	9.7	9.2	11.7
18	8.8	8.5	8.4	8.3	8.1	7.9	8.5	11.3	14.5	18	21.2	24.2	26.4	26.8	27.4	28.1	27.5	26.1	23.4	19.8	17.6	16.5	15.7	14.4	17.4
19	13.2	12	11.2	11	11.1	11.1	11.5	13.4	17.3	21.6	25.7	28.6	30	30.5	31.1	31.7	30.5	28	25.2	22	20.3	19.2	18.1	17.1	20.5
20	16.4	16	15.8	15.4	14.4	14.4	14.7	16	18.2	21.7	25.3	28.7	30.5	31.6	32.1	31.8	31.6	30.9	29	26.1	23.8	22.1	20.6	19.4	22.8
21	18.9	18.5	18.5	18.2	18	17.7	17.5	18.8	21.2	24.2	27.5	30.2	31.4	30.2	27.8	25	23	20.9	17.7	15.2	13.6	12.8	12.6	12.3	20.5
22	12.3	12.6	12.8	13.2	13.9	14.2	13.9	14.5	15.8	18.7	22.3	24.5	25.6	26.6	28.2	29.5	29.3	28.2	25.6	22.8	20.8	19.7	19	18.7	20.1
23	18.4	18.5	19.1	19.5	19.6	19.2	18.4	18.5	19.6	20.4	21.4	23	23.9	24.7	25.5	23.6	21	20.4	17.5	16.2	15.4	14.5	13.4	11.9	19.3
24	10.3	9	8.2	7.8	7.4	6.9	7.4	9.4	11.5	12.7	13.4	12.6	11.7	12.7	13.3	14	13.9	13.3	12	10.1	8.3	7.3	6.9	6.7	10.3
25	6.3	6	5.9	6	6.1	6	6.7	9	11.8	14.1	15.6	16.8	17.4	18	18.8	19.7	20.3	20.2	18.9	16.1	13.7	12.4	11.9	11.3	12.9
26	11	10.7	10.4	10.2	10.5	10.9	11.3	12.1	14.1	15.3	16.7	17.9	19.1	20.1	20.3	19.6	19.6	19.3	18.8	18.2	17.8	17.5	17.3	16.9	15.6
27	16.8	17.1	17.2	17.2	17	16.5	16.6	17.5	19.1	19.6	22.3	23.3	23.2	23.9	24.2	24.2	24.8	24.1	22.7	19.7	17.5	16.2	14.9	14.1	19.6
28	13.2	12.1	11	10	9.1	8.2	8.8	11.3	14.4	17.4	19.5	20.5	21.3	21.4	21.8	22.6	22.6	21.4	19.9	18.3	17.1	16.3	15.7	15.2	16.2
29	15	14.9	14.7	14.6	14.6	14.5	14.2	14.9	15.4	16.1	15.6	14.4	14.6	15.8	17.4	17.8	18.7	19.5	19.1	18.7	18.4	17.7	17.3	17.1	16.3
30	17.1	17.5	17.7	17.6	17.6	17.5	17.7	18.7	20.4	22.2	23.9	25.8	27.1	28	27.5	26.8	25.7	24.3	23.4	22.8	22.2	21.6	21.3	21	21.9
Avg	11.7	11.4	11.3	11.2	11.1	11	11.1	12.5	14.6	16.7	18.7	20.1	20.6	20.8	20.9	20.9	20.6	19.7	17.9	15.7	14.2	13.2	12.7	12.2	15.4
S D	4.3	4.4	4.5	4.5	4.6	4.6	4.5	4	3.9	4.3	4.9	5.7	6.1	6.2	6.3	6.3	6.3	6.1	5.7	5.3	5.1	5	4.8	4.7	4.4
S/A	0.37	0.38	0.4	0.41	0.41	0.42	0.4	0.32	0.27	0.26	0.26	0.29	0.3	0.3	0.3	0.31	0.31	0.31	0.32	0.34	0.36	0.37	0.38	0.38	0.28
Min	3.8	3.5	3.3	2.7	2.3	1.9	2.4	5.3	8.2	8.4	8.7	8.4	8.4	8.5	8.4	8.3	7.6	7.1	7.4	7.1	6.1	5.2	4.7	4.2	7.9
Max	18.9	18.5	19.1	19.5	19.6	19.2	18.4	18.8	21.2	24.2	27.5	30.2	31.4	31.6	32.1	31.8	31.6	30.9	29	26.1	23.8	22.1	21.3	21	22.8
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**April 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	1.3	1.6	1.5	0.6	0.7	0.4	1.3	0.6	0.8	1.1	1.6	3.8	4.6	4.6	4.8	4.8	4.7	3.9	4.1	3.5	3.7	4.6	3.2	3	2.7
2	1.1	1.9	3.3	4.6	6	4.4	5.2	6.1	7.2	6.8	6.4	6.5	6.6	5	4.7	5.3	7.5	8.3	8.1	8.2	6	6.7	6.6	6.9	5.8
3	6.6	7.9	7.2	6.3	6.3	6.7	5.8	6.7	8.1	8.6	8.8	8.2	9.2	9.7	8.3	7.8	7.2	5.1	4.6	3.1	2.6	2.1	2.2	2.6	6.3
4	2.2	1.8	2.1	2.3	2.5	2.8	3.1	3.8	5.3	4.6	4.5	4.4	4.1	5.2	5.1	5.5	4.5	3.2	1.7	1	0.9	0.8	1.7	1.9	3.1
5	1.8	1.7	1.8	1.8	0.5	0.7	1.6	2.4	3	3.1	2.5	2.5	2.7	2.9	3.7	4.1	4	3.5	2.6	2.4	1.7	2	1.7	1.7	2.3
6	1.8	1.4	2.1	1.7	1.9	1.7	2.2	2.9	3.3	3.4	4.1	3.7	4.1	4.5	4.4	3.8	3.6	3.2	2.9	2.8	2.7	3.2	3.1	3.2	3
7	2.6	2.3	2	1.5	2.1	2.8	2.3	2.8	4.2	5.6	5.9	5.9	6.4	6.8	6.4	6.4	6.4	5.7	4.5	4	3.4	3.8	4.2	2.2	4.2
8	0.9	1.2	0.7	1	0.6	0.5	1	0.3	0.1	0.1	1.3	1.4	1.1	2.6	2.8	3.2	3.3	3.5	2.7	3.1	3.8	3.9	4.5	3.1	2
9	3.5	4.4	4.2	4.3	4.7	4.4	4.5	4.4	5	5.6	6.6	6.8	7.1	7.4	7.4	7.2	6.7	5.4	4.8	4.8	4.6	4.4	4.2	3.9	5.3
10	3.5	3.9	4.3	4	3.8	3.1	3.6	4.5	5	4.6	5.1	5.6	5.1	4.7	4.4	3.8	3.9	2.9	2.1	1.9	0.9	0.3	0.4	0.5	3.4
11	0.7	0.8	1.4	1.5	1.6	1.1	1.1	1.6	2.1	2.1	1.7	2	4.8	5	5.6	6.3	5.7	5	4	3.8	3.6	3.2	3	2.2	2.9
12	1.5	0.9	0.9	2.2	2.3	2.7	2.9	4.5	5.2	5.3	4.7	4.7	3.9	3.8	4	4.1	4.3	1.9	1.8	3	2.5	2.8	2.9	3.4	3.2
13	3.8	4	4.2	4.5	4.4	3.8	4.2	4.1	3.6	5	4.9	4.2	4.8	5.2	4.8	5.1	5	4.6	5.3	4.4	4.3	4.7	4.5	4.9	4.5
14	5.3	4.2	4.5	4.4	4.8	3.8	3.8	5.4	5.2	5.4	6.7	6.7	6.4	6.5	6.7	5.8	5.7	5.1	4.6	3.9	4.4	4.1	4	4	5.1
15	4.7	5.3	6.7	6.8	7.5	7.2	8.1	7.2	7.2	7	8	8.3	8.7	9	8.8	8.6	8.4	8.1	7.1	6.1	5.5	5.1	5.3	5.5	7.1
16	6.1	5.6	5.4	5.3	5.7	4.9	5.4	6.5	6.8	7.4	7	7.8	7.5	7.8	7.4	7	6.4	5.7	4.9	4.2	3.7	3.1	2.8	3	5.7
17	2.8	2.8	1.6	1.8	1.4	1.4	1.3	2.2	2.4	3.4	3.7	2.8	2.9	2.4	2.8	3.1	3.1	2.2	1.1	0.2	0.9	1.7	1.6	2	2.1
18	2.3	2.3	2.8	2.6	2.8	2.8	2.8	3	2.8	2.4	2	1.8	2.5	2.8	3.3	3.5	2.9	2.4	2.2	1.9	1.6	1.5	0.9	0.6	2.4
19	0.1	0	0	0.2	0.3	0.3	0.4	1.1	0.7	0.7	1.1	1.7	2.2	3	2.5	2.8	2.9	2.1	1.6	1.5	1.9	1.9	1.8	1.9	1.4
20	1.4	1.6	1.4	0.6	0.9	1	1.6	2.2	2.6	2.4	2.1	2.6	2.9	3.7	3.9	4.7	4	3.5	2.1	3.2	2.8	2.2	1.6	2.6	2.4
21	1.9	3.4	3.3	3.2	3.1	2.8	3	3.1	2.4	1.5	1.2	1.3	3.5	5.6	5.7	5.5	5.5	4.6	4.4	3.7	4.1	4.1	3.5	3.1	3.5
22	3.9	2.6	1.9	1.5	1.4	1.7	1.4	2	1.4	1	1.7	2.5	2.8	3.7	3.9	4	5.5	5.3	4.9	4.4	4.4	4.5	4.8	4.5	3.2
23	5	5.2	5	4.9	5.3	4.7	3.9	4.5	3.8	4.8	5.1	5	4.6	5.5	4.9	3.4	4.4	4.7	2.8	2.3	2.6	2.4	4.5	4.2	4.3
24	4.1	3.3	3.6	3.7	3	2.8	3.3	3.8	4	4.1	5.1	4.7	3.5	3.8	5.6	6.2	6	5.5	5.4	3.6	2.7	3.3	3.9	3.8	4.1
25	3.9	3.9	4.4	4.2	4	3.9	4.6	4.9	6	6.3	6	6.5	6.4	6.5	6	6	5.5	4.4	1.8	1.1	1.2	2	1.5	1.9	4.3
26	1.7	1.3	1.1	1.3	1.4	1.1	1.2	2.1	2.5	2.1	2.7	3.1	2.6	3.7	3.6	3.3	3	2.4	2.8	2.7	3.5	3.2	3.7	3.6	2.5
27	2.9	3.3	3.7	2.8	1.2	0.2	0.4	2.3	2.6	1.2	2.9	2.8	2.8	4.1	4.8	4.8	4.3	3.7	2.7	2.2	2.9	2.5	2.8	2.8	2.8
28	2.4	2.3	1.8	1.5	1.4	1.8	2	2.2	2.7	2.7	3.1	2.2	2.6	3.3	3.3	3.4	4.2	3.1	1.9	1.1	1.1	1.6	1.6	1.6	2.3
29	1.7	2	1.7	1.9	1.6	0.8	1.7	1.9	2.1	4.5	3.4	1.6	1.4	1.5	2.2	2.3	2.6	1.8	1.2	2.6	2.5	2.4	3.2	3.1	2.1
30	3.3	3	2.7	2.9	2.6	2.6	3.4	3.6	4	3.5	4.7	4.9	5.3	4.9	5.4	7.5	7.5	6.4	5.3	3.6	3.2	3.6	4	4.5	4.3
Avg	2.8	2.9	2.9	2.9	2.9	2.6	2.9	3.4	3.7	3.9	4.1	4.2	4.4	4.8	4.9	5	5	4.2	3.5	3.1	3	3.1	3.1	3.1	3.6
SD	1.6	1.7	1.8	1.7	2	1.8	1.8	1.8	2	2.2	2.2	2.1	2.1	1.9	1.7	1.6	1.6	1.7	1.8	1.6	1.4	1.4	1.4	1.4	1.4
S/A	0.58	0.59	0.61	0.61	0.68	0.7	0.62	0.52	0.54	0.57	0.52	0.51	0.47	0.4	0.34	0.33	0.32	0.4	0.5	0.51	0.45	0.45	0.46	0.45	0.4
Min	0.1	0	0	0.2	0.3	0.2	0.4	0.3	0.1	0.1	1.1	1.3	1.1	1.5	2.2	2.3	2.6	1.8	1.1	0.2	0.9	0.3	0.4	0.5	1.4
Max	6.6	7.9	7.2	6.8	7.5	7.2	8.1	7.2	8.1	8.6	8.8	8.3	9.2	9.7	8.8	8.6	8.4	8.3	8.1	8.2	6	6.7	6.6	6.9	7.1
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**April 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	179	170	184	194	163	350	1	23	13	56	87	56	53	49	61	62	57	61	78	89	96	117	134	132	79
2	125	128	144	154	161	178	165	169	165	168	172	157	177	223	215	197	207	229	238	235	231	229	231	229	196
3	238	240	250	253	253	255	243	249	261	266	268	259	262	265	265	271	267	271	266	262	248	234	238	257	258
4	261	234	228	230	239	239	230	256	266	267	289	287	280	252	257	259	276	270	265	279	231	202	302	51	262
5	57	35	47	47	205	20	39	47	55	53	39	66	94	106	91	119	112	127	126	121	141	136	168	154	91
6	164	174	165	181	182	183	185	196	196	206	226	212	209	218	221	186	175	170	168	165	175	185	194	197	193
7	195	201	182	168	183	182	182	183	186	179	186	180	175	178	174	170	172	174	178	178	177	166	175	193	178
8	166	181	179	165	173	179	188	207	202	67	46	32	57	63	60	61	73	69	63	25	19	21	11	7	48
9	13	15	14	12	29	17	17	15	24	32	38	32	35	35	25	30	32	18	10	5	1	2	348	342	20
10	335	341	342	345	356	357	343	349	357	2	10	37	33	43	49	51	65	69	70	70	84	235	169	206	17
11	222	256	259	253	273	274	280	289	278	290	346	7	51	53	42	37	38	43	50	54	75	84	83	92	38
12	78	72	39	50	53	51	56	65	64	66	66	64	68	73	74	73	76	101	61	66	71	58	48	52	65
13	54	56	55	61	63	48	49	55	50	47	41	43	41	42	37	41	42	45	47	38	41	41	48	43	47
14	45	43	46	38	42	43	42	44	42	46	51	42	34	31	26	30	13	30	23	12	21	24	29	28	35
15	31	27	28	24	27	19	23	20	19	17	17	9	24	17	25	20	19	23	18	10	11	13	12	14	20
16	21	18	20	22	19	21	22	21	27	33	34	37	39	28	36	28	33	31	32	31	31	15	7	5	27
17	16	11	344	355	338	319	325	352	18	37	36	48	61	70	104	162	164	159	131	155	177	205	215	220	49
18	227	234	248	243	232	245	243	245	265	253	241	196	173	178	167	120	95	100	97	95	136	139	140	153	198
19	153	194	181	185	204	121	181	208	216	220	209	134	128	165	152	129	101	101	110	131	149	159	175	193	148
20	200	211	215	201	206	209	219	230	240	237	216	219	201	200	207	219	214	220	210	178	203	198	188	207	211
21	211	224	228	236	237	230	234	250	273	274	30	73	92	65	64	72	68	74	70	61	59	72	70	58	77
22	65	72	79	91	82	74	60	71	79	55	128	188	209	201	188	181	183	179	176	172	172	174	167	166	158
23	167	169	179	178	179	181	176	181	185	184	183	189	183	175	172	166	163	187	238	289	279	275	270	264	190
24	266	251	243	247	239	238	245	257	256	250	246	216	191	245	262	254	267	261	263	261	249	247	248	237	249
25	230	230	232	232	232	232	232	252	248	253	251	253	246	251	245	238	237	241	237	206	177	176	184	180	238
26	179	176	178	176	169	141	162	171	182	180	174	189	184	182	177	177	170	150	150	131	145	134	145	151	165
27	192	205	223	231	225	201	193	245	267	251	218	198	199	228	259	263	267	275	267	274	276	266	270	278	245
28	284	288	289	291	285	278	287	298	328	296	310	283	249	247	256	258	255	259	247	226	206	183	171	170	268
29	176	187	185	189	220	187	183	192	205	232	232	218	193	168	168	163	167	133	105	140	151	165	183	185	184
30	192	188	184	182	174	171	167	177	187	194	184	192	187	187	182	182	181	191	191	184	179	184	182	189	184
Avg	202	228	239	245	220	263	253	275	289	289	310	100	115	140	118	128	127	137	104	90	116	140	177	189	136
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

Instrument: NRG Vane    Serial Number: 0    Calibration Factor: 0.1408 deg/mV    Calibration Date: 06/1995

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

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



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

**April 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	2.3	2.6	2.5	1.4	1.3	0.8	2.4	1.6	1.8	2.4	3.3	6.2	7.5	7.2	7.9	7.4	7.3	6.2	6.2	5.9	6.1	7.4	5.7	5.2	4.5
2	2.4	3.5	5.7	7.3	10.3	7.6	8.6	10.3	11.9	11.7	10.9	10.8	11.2	8.6	7.8	8.6	12.4	14.5	12.8	12.8	9.3	10.6	10.5	11.3	9.6
3	10.4	12.5	12.2	10.5	10.3	11	9	10.9	14.2	15.2	14.7	14.2	15.7	16.9	14.8	14.8	13.5	9.9	8.1	4.9	3.9	3.1	3.2	4.1	10.8
4	3.3	2.4	2.9	3.4	3.8	4.3	4.5	6.1	8.7	8.4	8.8	8.8	7.7	8.8	8.9	9.5	8.5	5.6	3	1.8	1.5	1.2	3	2.8	5.3
5	2.5	2.1	2.5	2.3	1	1.1	2.1	3.7	4.7	5	4.3	4.3	4.6	4.6	5.5	6.2	5.8	5	3.8	3.7	2.8	3	2.8	2.8	3.6
6	2.9	2.3	3.1	2.7	3.1	2.7	3.5	4.6	5.2	5.4	6.6	5.9	6.4	7.1	7.8	6.6	5.7	5.5	4.4	4.4	4.5	5	5	5.2	4.8
7	4.3	4.1	3.2	2.4	3.6	4.8	4	4.7	7.1	9.7	9.7	10.1	10.3	10.6	10.4	10.1	10.3	10	7.8	6.9	6	6.3	6.9	3.9	7
8	2.1	2.9	2.2	2.3	2	1.6	2.3	1.2	0.7	0.5	2.4	2.6	2.5	4.3	4.5	5.5	5.4	6	5	5.7	6.6	7.1	7.8	6.3	3.7
9	7	7.8	7.6	7.9	8.3	8.2	8.1	8	9.4	9.7	11.2	12.1	11.7	13	13.4	12.3	11.1	9.1	8.5	8.2	8	7.7	7.1	6.6	9.3
10	6	6.9	7.2	6.4	6.3	5.3	5.9	7.3	8.1	8.1	8.5	9.3	8.7	8	7.4	6.1	6.2	4.6	3.2	3	1.6	0.7	0.7	0.8	5.7
11	1	1.2	1.9	2.3	2.4	1.8	2	3.3	3.9	3.8	3.5	3.8	7.4	8.2	8.6	10.1	9	8	6.5	6	6	5.4	4.8	3.6	4.8
12	2.5	1.6	1.4	3.5	3.6	4.1	4.9	7.4	8.7	8.5	7.5	7.8	6.2	5.8	6.5	6.5	7.3	3.4	3.2	4.8	4.4	5	5.3	6	5.3
13	6.3	6.6	6.7	7.7	7.5	6.4	7	7	6.6	8.9	8.3	7.6	8.7	8.9	9	9.4	8.8	8.3	9.2	7.9	7.5	8.2	7.9	8.7	7.9
14	8.9	7.8	7.6	7.5	8.1	6.5	6.7	9.5	9.2	9.1	11	11.7	10.9	11.4	11.4	9.9	10.1	8.9	8.2	7.3	7.6	7.3	7.6	7.3	8.8
15	8.7	9	11.7	12.1	12.9	13.2	14.9	12.2	12.3	13.4	14.7	14.1	15.4	15.1	16.3	14.3	14.7	14.4	13.5	10.8	9.8	8.8	9.2	9.8	12.5
16	10.6	10.4	9.4	9.8	10.3	8.9	10.1	11.6	11.8	12.8	12.3	13	12.7	12.8	12.7	12.1	11	11	8.7	7.4	6.2	5.7	5.1	5	10
17	4.8	5.1	3	3.2	2.5	2.9	2.9	4	4.4	5.9	6.3	5.1	5.1	4.2	4.5	5.4	4.8	3.4	2	0.6	2	2.8	2.5	3	3.8
18	3.3	3.2	4.3	3.9	3.9	4.1	4.3	4.8	4.8	4.1	3.6	3.4	4.3	4.9	5.7	5.5	4.6	3.7	3.6	2.9	2.4	2.4	1.6	1.3	3.8
19	0.7	0.3	0.3	0.5	0.8	0.7	1	2.2	1.9	1.7	2.4	3	3.7	5	4.5	4.8	4.6	3.7	2.7	2.4	3.2	3.2	3	3.2	2.5
20	2.5	2.6	2.2	1.4	1.7	1.8	2.6	3.5	4.2	3.9	3.3	4.5	4.8	5.9	6.5	7.8	6.7	5.9	3.6	5.4	4.4	3.6	2.7	4.1	4
21	3	5.3	5	4.8	4.7	4.1	4.4	5.2	4.7	3.2	2.6	3	5.4	8.8	9.1	8.6	8.9	7.4	6.9	6.1	6.9	6.6	5.6	5.1	5.6
22	6.8	4.7	3.6	2.7	2.4	2.7	2.7	3.4	2.6	2.1	3.2	4.4	4.9	6.5	6.6	6.7	9	8.8	8.4	7.2	7.3	7.8	8.3	7.3	5.4
23	8.3	9	8.5	8.4	9.5	8	6.7	8.2	7	8.1	8.7	8.7	8	9.2	8.3	6	7.6	8.6	5	4.8	5.5	5	8.6	7.3	7.6
24	6.8	5.2	5.5	6	4.7	4.5	5.7	6.8	7	6.7	8.6	7.4	5.7	6.5	10.2	10.7	11.2	9.4	9.7	6.1	4.3	5.5	6.3	6.1	6.9
25	6	6.1	6.9	6.5	6.3	6	7.2	8.3	9.8	10.1	9.8	11.2	10.7	11.3	10.7	10	9.5	7	3	2.1	2.1	3.4	2.8	3.2	7.1
26	3	2.3	2	2.4	2.4	1.9	2.1	3.8	4.3	4	4.7	5.8	4.9	6.3	6.5	6.1	5.6	3.8	4.7	4.5	5.7	5.3	5.7	5.7	4.3
27	5.4	5.7	6.3	5	2.3	1	1.4	3.8	4.9	2.7	4.9	4.4	4.7	6.8	8	8.9	8.6	7.2	4.8	4.2	5.5	4	4.6	5.7	5
28	4.9	4.3	3.5	3.3	3	3.3	4.4	4.7	5.5	5.4	6.1	4.8	5.2	6.2	6.5	6.2	6.9	5.5	3.1	1.8	2	2.8	2.8	2.6	4.4
29	3	3.4	3.2	3.4	2.7	1.7	3.2	3.5	3.7	7.4	5.1	3	2.8	3.2	3.8	4.1	4.7	2.8	1.9	4.1	4.2	4.1	5.6	5.1	3.7
30	5.6	5.2	4.7	5	4.3	4.5	5.7	6.5	6.7	6.2	7.8	8.6	8.8	8.7	10	12.8	12.6	11.2	8.9	6.3	5.5	6.5	6.8	8	7.4
Avg	4.8	4.9	4.9	4.9	4.9	4.5	5	5.9	6.5	6.8	7.2	7.3	7.5	8.2	8.5	8.4	8.4	7.3	6	5.3	5.1	5.2	5.3	5.2	6.2
S D	2.7	2.9	3	3	3.3	3.1	3.1	3	3.3	3.7	3.6	3.6	3.5	3.3	3.1	2.9	2.8	3.1	3.1	2.6	2.3	2.3	2.4	2.4	2.5
S/A	0.56	0.59	0.61	0.61	0.68	0.69	0.61	0.5	0.51	0.54	0.5	0.49	0.46	0.4	0.36	0.34	0.33	0.42	0.51	0.49	0.44	0.45	0.46	0.46	0.4
Min	0.7	0.3	0.3	0.5	0.8	0.7	1	1.2	0.7	0.5	2.4	2.6	2.5	3.2	3.8	4.1	4.6	2.8	1.9	0.6	1.5	0.7	0.7	0.8	2.5
Max	10.6	12.5	12.2	12.1	12.9	13.2	14.9	12.2	14.2	15.2	14.7	14.2	15.7	16.9	16.3	14.8	14.7	14.5	13.5	12.8	9.8	10.6	10.5	11.3	12.5
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

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

**April 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	1014	1014	1013	1013	1013	1014	1015	1015	1015	1015	1015	1015	1015	1015	1014	1013	1013	1012	1011	1011	1010	1008	1007	1006	1013
2	1006	1005	1004	1002	1001	1000	999	998	997	996	995	993	991	991	990	989	989	990	991	992	994	994	994	994	996
3	995	995	995	996	996	997	998	999	999	1000	1001	1001	1000	1000	1001	1001	1001	1003	1004	1005	1006	1006	1007	1008	1001
4	1008	1009	1009	1009	1010	1011	1011	1012	1012	1013	1013	1012	1012	1012	1011	1011	1012	1012	1012	1013	1013	1013	1014	1015	1012
5	1015	1016	1016	1016	1017	1018	1019	1020	1021	1022	1023	1023	1022	1022	1021	1021	1020	1021	1021	1022	1022	1022	1022	1021	1020
6	1021	1020	1020	1020	1020	1020	1021	1021	1022	1022	1022	1021	1021	1020	1019	1019	1018	1018	1018	1018	1019	1019	1019	1019	1020
7	1018	1018	1017	1017	1017	1017	1017	1018	1017	1017	1017	1016	1015	1014	1012	1011	1011	1010	1010	1011	1010	1010	1010	1010	1014
8	1009	1008	1008	1007	1007	1007	1007	1008	1008	1008	1007	1007	1007	1007	1007	1007	1007	1007	1007	1007	1008	1009	1010	1010	1008
9	1010	1010	1010	1010	1010	1010	1011	1012	1012	1013	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1015	1015	1014	1014	1013
10	1014	1014	1013	1013	1013	1014	1015	1015	1016	1016	1016	1016	1016	1016	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015
11	1015	1015	1015	1014	1014	1014	1015	1015	1015	1015	1015	1015	1015	1015	1015	1016	1016	1016	1016	1016	1017	1017	1016	1016	1015
12	1015	1015	1014	1014	1015	1015	1015	1016	1015	1015	1016	1015	1016	1015	1014	1013	1012	1012	1012	1011	1012	1011	1010	1010	1014
13	1009	1008	1007	1007	1006	1007	1007	1007	1007	1007	1008	1008	1008	1007	1007	1007	1007	1007	1008	1009	1010	1010	1010	1010	1008
14	1010	1010	1010	1010	1010	1011	1011	1012	1012	1012	1013	1012	1012	1012	1012	1012	1012	1013	1013	1014	1014	1014	1014	1014	1012
15	1013	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1022	1023	1023	1023	1023	1024	1024	1025	1025	1025	1025	1025	1025	1021
16	1024	1024	1024	1024	1024	1024	1025	1026	1026	1027	1027	1027	1027	1027	1026	1026	1026	1026	1026	1027	1027	1027	1027	1026	1026
17	1025	1024	1024	1024	1023	1024	1025	1025	1025	1025	1024	1024	1023	1023	1022	1021	1021	1020	1020	1020	1020	1020	1020	1020	1023
18	1019	1019	1019	1019	1019	1019	1019	1019	1020	1020	1020	1019	1019	1018	1017	1017	1017	1017	1017	1017	1017	1018	1017	1017	1018
19	1017	1017	1017	1017	1017	1017	1017	1018	1018	1018	1018	1017	1017	1016	1015	1015	1015	1015	1014	1015	1015	1015	1015	1015	1016
20	1015	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1013	1012	1012	1011	1010	1010	1009	1009	1009	1010	1010	1010	1010	1012
21	1010	1009	1009	1009	1009	1009	1009	1010	1010	1011	1011	1011	1010	1011	1011	1010	1010	1011	1011	1012	1012	1012	1012	1012	1010
22	1011	1011	1010	1010	1010	1010	1010	1010	1010	1010	1010	1009	1008	1007	1006	1005	1005	1005	1005	1005	1005	1005	1004	1003	1008
23	1002	1001	1001	1000	1000	1000	1000	999	999	999	998	997	996	995	994	993	992	992	993	995	996	996	996	997	997
24	997	997	997	997	997	997	998	998	998	998	998	998	998	997	996	996	997	998	999	1000	1001	1001	1002	1002	998
25	1003	1003	1003	1003	1003	1004	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1006	1006	1007	1008	1009	1009	1010	1005
26	1010	1010	1010	1010	1010	1010	1011	1011	1012	1013	1012	1012	1012	1012	1011	1010	1010	1009	1009	1009	1009	1008	1007	1006	1010
27	1006	1005	1005	1005	1005	1005	1006	1006	1006	1005	1005	1005	1004	1004	1003	1003	1003	1004	1005	1006	1007	1008	1008	1009	1005
28	1009	1010	1011	1012	1013	1014	1015	1015	1015	1015	1015	1014	1014	1014	1013	1013	1013	1013	1013	1013	1014	1014	1014	1015	1013
29	1014	1014	1014	1014	1014	1014	1014	1015	1015	1015	1016	1015	1015	1014	1014	1013	1013	1013	1013	1013	1013	1013	1013	1012	1014
30	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1011	1011	1010	1009	1008	1007	1006	1007	1008	1008	1009	1009	1008	1008	1010
Avg	1012	1011	1011	1011	1011	1012	1012	1012	1012	1013	1013	1012	1012	1012	1011	1011	1010	1011	1011	1011	1012	1012	1012	1012	1012
SD	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Min	995	995	995	996	996	997	998	998	997	996	995	993	991	991	990	989	989	990	991	992	994	994	994	996	
Max	1025	1024	1024	1024	1024	1024	1025	1026	1026	1027	1027	1027	1027	1027	1026	1026	1026	1026	1026	1026	1027	1027	1026	1026	
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640	

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

Instrument: Viasala PTA-427    Serial Number: 493926    Calibration Factor: 0.104 mBar/mV + 800 mBar    Calibration Date: 06/1995

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

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

Prepared by: Afshin M. Andreas, NREL

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

**April 2005**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily	
1	12.7	12.7	12.7	12.6	12.6	12.6	12.8	13.4	13.5	13.4	13.3	13.3	13.4	13.5	13.5	13.6	13.5	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.7	13
2	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.9	12.9	12.7	12.6	12.6	12.6	13.1	13.5	13.4	13.4	13	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.8
3	12.7	12.6	12.6	12.6	12.6	12.5	12.9	13.7	13.7	13.7	13.6	13.6	13.6	13.5	13.5	13.5	13.5	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13.1
4	12.7	12.7	12.7	12.6	12.6	12.6	13.1	13.7	13.6	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.3	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13
5	12.7	12.7	12.7	12.6	12.6	12.6	13.1	13.6	13.6	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.4	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13
6	12.7	12.7	12.7	12.6	12.6	12.6	13	13.5	13.4	13.4	13.3	13.3	13.3	13.3	13.2	13.2	13.2	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	13
7	12.7	12.7	12.7	12.7	12.7	12.6	12.9	13.5	13.4	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.2	12.8	12.8	12.8	12.8	12.8	12.8	12.7	13
8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.7	13	13.3	13.4	13.4	13.4	13.4	13.2	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
9	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.7	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.5	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13
10	12.7	12.7	12.6	12.6	12.6	12.6	13.3	13.7	13.7	13.6	13.5	13.5	13.5	13.5	13.4	13.4	13.4	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13.1
11	12.7	12.7	12.6	12.6	12.6	12.6	13.2	13.7	13.6	13.5	13.4	13.3	13.3	13.4	13.5	13.5	13.6	13	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13
12	12.7	12.7	12.7	12.6	12.6	12.6	12.9	13.7	13.7	13.7	13.6	13.6	13.7	13.7	13.8	13.3	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.7	13.1
13	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13	13	13.2	13.5	13.6	13.8	13.6	13.3	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
14	12.7	12.7	12.6	12.6	12.5	12.5	13.3	13.7	13.7	13.7	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13.1
15	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13	13.6	13.8	13.8	13.7	13.7	13.7	13.7	13.7	13.8	13.6	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13.1
16	12.7	12.7	12.7	12.6	12.6	12.6	12.7	13.6	13.7	13.7	13.7	13.6	13.7	13.7	13.7	13.7	13.7	13.7	13.4	12.8	12.8	12.8	12.7	12.7	12.7	13.1
17	12.7	12.7	12.6	12.6	12.6	12.6	13.3	13.8	13.7	13.6	13.5	13.5	13.5	13.5	13.4	13.4	13.5	13	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1
18	12.7	12.7	12.7	12.6	12.6	12.6	13.3	13.7	13.6	13.5	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	13
19	12.7	12.7	12.7	12.7	12.6	12.6	12.8	13.4	13.5	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.1	12.8	12.8	12.8	12.8	12.8	12.7	13
20	12.7	12.7	12.7	12.7	12.7	12.6	12.9	13.4	13.5	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.7	13
21	12.7	12.7	12.7	12.7	12.7	12.7	13	13.4	13.4	13.3	13.2	13.2	13.2	13.2	13.3	13.4	13.4	13.1	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13
22	12.7	12.7	12.7	12.7	12.6	12.6	12.7	13	13.5	13.4	13.3	13.3	13.3	13.3	13.2	13.2	13.3	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13
23	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.4	13.4	13.4	13.4	13.4	13.3	13.3	13.3	13.3	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13
24	12.7	12.7	12.6	12.6	12.6	12.6	13.3	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.3	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.2
25	12.7	12.7	12.6	12.6	12.6	12.6	13.3	13.7	13.7	13.6	13.6	13.6	13.6	13.5	13.5	13.5	13.4	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	13.1
26	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.2	13.3	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.1	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13
27	12.8	12.7	12.7	12.7	12.7	12.6	12.7	13.3	13.2	13.4	13.3	13.4	13.4	13.4	13.4	13.4	13.3	13	12.8	12.8	12.8	12.8	12.7	12.7	12.7	13
28	12.7	12.7	12.7	12.6	12.6	12.6	13.3	13.7	13.6	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13.1
29	12.7	12.7	12.7	12.7	12.6	12.6	13.1	13.2	13.4	13.6	13.4	13.5	13.6	13.6	13.6	13.6	13.5	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13.1
30	12.7	12.7	12.7	12.7	12.6	12.6	12.8	13.3	13.4	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13

Avg	12.7	12.7	12.7	12.6	12.6	12.6	12.9	13.4	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13
SD	0	0	0	0	0	0	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0	0.1
S/A	0	0	0	0	0	0	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0	0	0	0	0	0	0.01	
Min	12.7	12.6	12.6	12.6	12.5	12.5	12.6	12.6	12.6	12.7	12.6	12.6	12.6	13.1	13.2	13.2	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.8	
Max	12.8	12.7	12.7	12.7	12.7	12.7	13.3	13.8	13.7	13.8	13.8	13.7	13.7	13.7	13.8	13.7	13.8	13.6	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13.2
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640	

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

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

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

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