

**September 2006**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	12	35 ?	?	?	?	71 ?	85 ?	74	84	76	59	25	5	0	0	0	0	0	527 ?
2	0	0	0	0	0	3	29	83	160	365	740	835	874	817	692	502	322	123	16	0	0	0	0	0	5561
3	0	0	0	0	0	12	79	259	480	702	801	905	869	670	691	516	316	114	14	0	0	0	0	0	6428
4	0	0	0	0	0	10	68	187	384	631	783	883	900	789	681	496	299	108	15	0	0	0	0	0	6233
5	0	0	0	0	0	18	86	215	256	159	367	815	513	142 ?	?	82 ?	137	56	4	0	0	0	0	0	2849 ?
6	0	0	0	0	0	2	19	73	144	138	209	284	335	270	241	178	123	69	22	0	0	0	0	0	2108
7	0	0	0	0	0	5	94	283	443	551	761	585	648	558	606	451	238	86	6	0	0	0	0	0	5315
8	0	0	0	0	0	2	15	46	100	154	406	606	693	577	607	467	289	84	8	0	0	0	0	0	4054
9	0	0	0	0	0	9	91	263 ?	480	632	763	833	852	738	625	440	268	95	9	0	0	0	0	0	6098
10	0	0	0	0	0	5	74	248	446	627	715	750	724	632	624	436	229	50	8	0	0	0	0	0	5567
11	0	0	0	0	0	7	64	181	296	271	474	738	440	641	388	200	79	26	2	0	0	0	0	0	3808
12	0	0	0	0	0	8	106	283	472	628	834	874	873	803	676	461	240	104	5	0	0	0	0	0	6365
13	0	0	0	0	0	8	56	96	243	627	599	460	452	298	305	87	86	10	0	0	0	0	0	0	3328
14	0	0	0	0	0	1	13	32	96	122	268	467	689	503	222	144	86	66	5	0	0	0	0	0	2714
15	0	0	0	0	0	0	14	51	95	224	315	310	543	595	522	359	204	55	3	0	0	0	0	0	3291
16	0	0	0	0	0	4	42	92	100	349	373	421	532	230	253	274	108	34	6	0	0	0	0	0	2818
17	0	0	0	0	0	5	96 ?	301 ?	453	554	566	508	635	674	654	459	221	64	0	0	0	0	0	0	5188
18	0	0	0	0	0	7	51 ?	215 ?	445	622	628	634	484	569	484	417	218	52	0	0	0	0	0	0	4828
19	0	0	0	0	0	5	52	142	387	541	412	431	332	456	392	359	217	35	0	0	0	0	0	0	3760
20	0	0	0	0	0	2	42	189	440	619	705	605	660	399	278	201	93	19	0	0	0	0	0	0	4252
21	0	0	0	0	0	3	70	259	464	641	621	650	648	474 ?	486	353	245	52	0	0	0	0	0	0	4966
22	0	0	0	0	0	4	65	222	434	635	758	804 ?	?	726 ?	614	425	182	37	0	0	0	0	0	0	4907 ?
23	0	0	0	0	0	3	32	139	329	511	576	598	596	588	596	400	206	49	0	0	0	0	0	0	4624
24	0	0	0	0	0	5	54	231	398	565	618 ?	?	?	552 ?	536	160	57	36	0	0	0	0	0	0	3213 ?
25	0	0	0	0	0	1	26	103	117	298	444	305	212	296	231	295	219	37	0	0	0	0	0	0	2585
26	0	0	0	0	0	3	74	245	438	554 ?	?	?	?	?	?	?	209	46	0	0	0	0	0	0	1570 ?
27	0	0	0	0	0	2	58	223	427	551 ?	?	?	378 ?	382 ?	260 ?	285 ?	192	41	0	0	0	0	0	0	2798 ?
28	0	0	0	0	0	3	49	217	407	534	507 ?	?	528 ?	469 ?	431 ?	362 ?	178	50	0	0	0	0	0	0	3734 ?
29	0	0	0	0	0	1	26	170	339	439 ?	475 ?	?	?	306 ?	257 ?	261 ?	183	27	0	0	0	0	0	0	2484 ?
30	0	0	0	0	0	0	71	241	409 ?	?	?	?	?	?	?	?	173	19	0	0	0	0	0	0	913 ?
Avg	0	0	0	0	0	5	54	177	334	473	566	599	580	508	461	327	189	56	4	0	0	0	0	0	3896 ?
S D	0	0	0	0	0	4	27	83	139	184	180	223	214	201	184	139	76	30	6	0	0	0	0	0	1602
S/A	0	0	0	0	0	0.87	0.5	0.47	0.42	0.39	0.32	0.37	0.37	0.4	0.4	0.43	0.4	0.54	1.37	0	0	0	0	0	0.41
Min	0	0	0	0	0	0	12	32	95	122	209	71	85	74	84	76	57	10	0	0	0	0	0	0	527
Max	0	0	0	0	0	18	106	301	480	702	834	905	900	817	692	516	322	123	22	0	0	0	0	0	6428
n	0	0	0	0	0	81	351	337	340	313	294	273	276	289	306	305	358	346	59	0	0	0	0	0	3935

Daylight Data Recovery: 0.0% missing; 0.0% untested; 11.5% exceed the 15% QC threshold -- 4446 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.

September 2006

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	1	0	1	39	531	685	828	823	746	637	662	480	189	0	0	0	0	0	5622
3	0	0	0	0	0	25	269 ?	586	683	787	805	820	758	454	757	704	601	351	66	0	0	0	0	0	7666
4	0	0	0	0	0	0	3	19	238	486	613	659	657	635	623	588	491	271	44	0	0	0	0	0	5328
5	0	0	0	0	0	0	7	136	88	0	135	626	172	0 ?	0	0	2	0	0	0	0	0	0	0	1167
6	0	0	0	0	0	0	0	1	1	2	4	4	4	1	2	0	0	3	78	0	0	0	0	0	98
7	0	0	0	0	0	1	240	538	559	431	560	251	302	271	473	444	242	151	0	0	0	0	0	0	4465
8	0	0	0	0	0	0	0	0	0	1	18	122	206	147	281	448	521	255	48	0	0	0	0	0	2047
9	0	0	0	0	0	11	192	472 ?	587	656	697	721	706	588	586	394	390	188	12	0	0	0	0	0	6198
10	0	0	0	0	0	0	149	394	555	632	518	450	443	388	541	406	267	55	10	0	0	0	0	0	4808
11	0	0	0	0	0	0	107	171	167	17	141	378	53	309	76	2	0	0	0	0	0	0	0	0	1422
12	0	0	0	0	0	0	294	589	645	637	818	849	851	829	778	607	398	279	5	0	0	0	0	0	7581
13	0	0	0	0	0	8	37	5	26	594	188	32	32	6	7	0	0	0	0	0	0	0	0	0	934
14	0	0	0	0	0	0	0	0	1	1	20	54	303	160	15	1	1	158	0	0	0	0	0	0	714
15	0	0	0	0	0	0	0	0	1	4	5	3	69	346	373	231	145	68	1	0	0	0	0	0	1246
16	0	0	0	0	0	0	2	4	1	40	30	95	183	3	38	95	30	4	0	0	0	0	0	0	524
17	0	0	0	0	0	12	326	677 ?	679	503	332	254	426	547	646	577	269	229	4	0	0	0	0	0	5481
18	0	0	0	0	0	2	170 ?	538 ?	682	763	552	407	253	350	377	387	363	146	0	0	0	0	0	0	4990
19	0	0	0	0	0	0	24	47	270	331	33	33	15	136	48	205	265	49	0	0	0	0	0	0	1456
20	0	0	0	0	0	0	7	268	696	703	510	301	318	89	50	66	26	0	0	0	0	0	0	0	3034
21	0	0	0	0	0	0	305	610	723	744	419	426	327	186 ?	321	426	553	225	0	0	0	0	0	0	5266
22	0	0	0	0	0	37	276	566	729	804	758	668	?	608 ?	598	492	184	0	0	0	0	0	0	0	5720 ?
23	0	0	0	0	0	0	2	45	144	270	221	190	171	217	400	463	397	162	0	0	0	0	0	0	2683
24	0	0	0	0	0	0	109	434	491	446	416 ?	330 ?	?	284 ?	322	90	0	14	0	0	0	0	0	0	2935 ?
25	0	0	0	0	0	0	0	4	2	6	30	1	1	9	5	135	333	93	0	0	0	0	0	0	621
26	0	0	0	0	0	0	269	564	635	628 ?	?	?	?	?	?	?	439	206	0	0	0	0	0	0	2741 ?
27	0	0	0	0	0	0	259	569	625	624 ?	?	?	136 ?	87 ?	60 ?	304 ?	348	158	0	0	0	0	0	0	3170 ?
28	0	0	0	0	0	0	157	425	501	421	238 ?	?	129 ?	97 ?	178 ?	311 ?	201	139	0	0	0	0	0	0	2797 ?
29	0	0	0	0	0	0	7	200	372	246 ?	180 ?	?	?	71 ?	96 ?	222 ?	233	103	0	0	0	0	0	0	1731 ?
30	0	0	0	0	0	0	311	584	626 ?	?	?	?	?	?	?	?	390	47	0	0	0	0	0	0	1958 ?
Avg	0	0	0	0	0	3	118	282	358	373	325	334	294	273	300	294	258	128	15	0	0	0	0	0	3147
S D	0	0	0	0	0	8	125	258	292	301	278	285	272	253	274	228	205	122	39	0	0	0	0	0	2248
S/A	0	0	0	0	0	2.58	1.06	0.92	0.82	0.81	0.85	0.85	0.92	0.93	0.91	0.78	0.79	0.96	2.55	0	0	0	0	0	0.71
Min	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Max	0	0	0	0	0	37	326	677	729	804	818	849	851	829	778	704	662	480	189	0	0	0	0	0	7666
n	0	0	0	0	0	81	353	339	354	328	309	290	282	297	322	318	359	346	59	0	0	0	0	0	4045

Daylight Data Recovery: 0.0% missing; 0.0% untested; 9.0% exceed the 15% QC threshold -- 4446 total daylight measurements.

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

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

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

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

**September 2006**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	12	32 ?	?	?	38 ?	57 ?	74	71	84	76	59	25	5	0	0	0	0	0	534 ?
2	0	0	0	0	0	3	29	83	160	339	262	184	91	88	116	109	54	31	7	0	0	0	0	0	1555
3	0	0	0	0	0	10	37 ?	71	98	124	106	148	158	268	114	93	76	47	12	0	0	0	0	0	1362
4	0	0	0	0	0	10	67	181	241	285	262	286	302	236	211	149	105	57	13	0	0	0	0	0	2404
5	0	0	0	0	0	14 ?	74	152 ?	208	159	258	247	353	142 ?	?	48	137	56	4	0	0	0	0	0	1852 ?
6	0	0	0	0	0	2	19	73	144	138	209	284	335	270	241	178	123	69	19	0	0	0	0	0	2105
7	0	0	0	0	0	5	40	87	131	239	281	356	375	323	265	198	151	61	6	0	0	0	0	0	2518
8	0	0	0	0	0	2	15	46	100	154	397	498	493	440	384	200	97	43	6	0	0	0	0	0	2876
9	0	0	0	0	0	11 ?	54	113 ?	137	165	180	184	212	229	191	217	125	66	9	0	0	0	0	0	1893
10	0	0	0	0	0	6 ?	56	123	151	177	283	344	325	304	233	212	132	43	7	0	0	0	0	0	2396
11	0	0	0	0	0	7	50	124	207	261	349	390	392	373	335	200	79	26	2	0	0	0	0	0	2795
12	0	0	0	0	0	10 ?	62	72	111	162	142	99	86	86	100	108	90	58	4	0	0	0	0	0	1190
13	0	0	0	0	0	10 ?	53	96	229	189	431	444	437	298	305	87	86	10	0	0	0	0	0	0	2676
14	0	0	0	0	0	1	13	31	96	122	252	414	401	357	214	144	86	58	5	0	0	0	0	0	2193
15	0	0	0	0	0	0	14	51	95	224	315	310	468	288	236	230	156	48	2	0	0	0	0	0	2436
16	0	0	0	0	0	5 ?	42	92	100	321	349	327	358	227	232	223	101	33	6	0	0	0	0	0	2415
17	0	0	0	0	0	4	27	53	88	202	291	270	238	192	180	134	133	36	0	0	0	0	0	0	1846
18	0	0	0	0	0	9 ?	32 ?	87 ?	96	101	172	261	249	269	213	223	107	36	0	0	0	0	0	0	1855
19	0	0	0	0	0	6 ?	50	126	247	304	388	411	324	335	361	245	136	27	0	0	0	0	0	0	2962
20	0	0	0	0	0	4 ?	42	107	92	119	245	288	335	309	231	169	86	19	0	0	0	0	0	0	2045
21	0	0	0	0	0	2	32	67	84	103	236	252	327	312 ?	227	115	60	23	0	0	0	0	0	0	1839
22	0	0	0	0	0	4 ?	29	67	63	63	79	137	?	144 ?	139	136	117	37	0	0	0	0	0	0	1016 ?
23	0	0	0	0	0	3 ?	32	128	252	315	375	404	406	367	265	120	75	29	0	0	0	0	0	0	2770
24	0	0	0	0	0	?	39	89	121	201	211 ?	233 ?	?	253 ?	244	116	57	36	0	0	0	0	0	0	1599 ?
25	0	0	0	0	0	1	26	103	117	298	425	305	212	289	228	196	100	25	0	0	0	0	0	0	2324
26	0	0	0	0	0	?	29	61	75	86 ?	?	?	?	?	?	?	48	20	0	0	0	0	0	0	318 ?
27	0	0	0	0	0	?	27	61	74	81 ?	?	?	185 ?	262 ?	198 ?	106 ?	66	22	0	0	0	0	0	0	1083 ?
28	0	0	0	0	0	?	32	84	119	183	307 ?	?	349 ?	329 ?	247 ?	149 ?	105	33	0	0	0	0	0	0	1937 ?
29	0	0	0	0	0	?	25	116	145	229 ?	273 ?	?	?	215 ?	154 ?	115 ?	92	17	0	0	0	0	0	0	1381 ?
30	0	0	0	0	0	0	25	51	56 ?	?	?	?	?	?	?	?	46	12	0	0	0	0	0	0	190 ?
Avg	0	0	0	0	0	5	36	88	132	191	263	285	299	260	220	153	96	37	4	0	0	0	0	0	1879 ?
S D	0	0	0	0	0	4	16	35	58	80	101	111	117	91	74	54	31	16	5	0	0	0	0	0	743
S/A	0	0	0	0	0	0.75	0.45	0.4	0.44	0.42	0.38	0.39	0.39	0.35	0.34	0.35	0.32	0.45	1.33	0	0	0	0	0	0.4
Min	0	0	0	0	0	0	12	31	56	63	38	57	74	71	84	48	46	10	0	0	0	0	0	0	190
Max	0	0	0	0	0	14	74	181	252	339	431	498	493	440	384	245	156	69	19	0	0	0	0	0	2962
n	0	0	0	0	0	63	351	338	342	318	304	285	282	299	310	317	359	346	59	0	0	0	0	0	3981

Daylight Data Recovery: 0.0% missing; 0.0% untested; 10.5% exceed the 15% QC threshold -- 4446 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**

**September 2006**

**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	23.5	23.2	23.6	23.5	23.8	24.5	24.9	25.4	24.9	24.7	24.6	24	23	22.8	22.1	21.6	21.3	20.7	20.4	19.4	19	18.9	18.9	18.4	22.4
2	18.2	18	17.6	17.2	16.9	16.7	16.5	16.7	17.2	17.9	19.5	21.3	22.8	24.4	25.4	25.7	26.2	25.5	24.2	23.1	22.3	22.1	21.8	21.6	20.8
3	21.3	20.9	20.6	20.5	20.2	20.2	21.1	23.3	25	26.5	26.6	27.7	27.9	27.5	27.3	27	26.6	26	24.6	23.8	23.1	22.9	22.8	22.8	24
4	22.4	21.9	21.7	21.6	21.7	21.9	22	22.5	23.8	26.5	26.9	27.9	28.7	28.6	27.8	27.5	27.1	25.8	24.3	23.7	23.6	23.6	23.6	23.3	24.5
5	23.4	23.3	23.3	23.4	23.5	23.7	24.4	25.5	26.5	25.4	24.1	27.3	28.3	26.1	23	22.7	23.1	23.3	23.2	23	21.2	20.7	20.1	19.7	23.7
6	19.6	19.6	19.2	18.8	18.8	18.8	18.9	19.1	19.4	20.1	20.9	21.7	22.7	22.9	23	23.2	22.6	22.2	21.7	21.3	21.2	20.9	20.7	20.5	20.7
7	20.2	19.8	19.3	18.9	18.6	18.4	18.9	20.8	22.8	23.9	25.1	25.5	25.8	26	26.4	25.8	25	23.8	22.6	21.9	21.4	20.7	20.3	19.4	22.1
8	19.6	19.6	19.6	19.6	19.9	19.8	20	20.6	21.3	21.7	22.8	24	25.3	25.4	25.8	25.3	24.8	23.8	22.1	21.4	20.9	19.4	18.6	18	21.6
9	17.8	17.5	17.6	17.7	17.3	17.1	17.6	20.1	22.6	24.3	25.9	27.1	27.7	27.4	27	26.7	25.8	24.9	23.4	22.3	21.6	21.3	20.9	20.6	22.2
10	20	20	19.7	19.3	19.1	18.8	19.4	21.2	23.7	25.1	26.2	26.5	26.6	26.7	26.6	26.2	25.6	24.2	23	22.1	21.8	21.8	22	22	22.8
11	21.8	21.6	21.4	21.1	20.9	20.6	20.9	21.6	21.9	21.5	21.7	22.2	21.6	21.9	21.4	20.6	20.2	19.7	19.1	18.9	18.7	18.9	18.7	17.9	20.6
12	17.4	16.3	15.4	15.1	15	15.2	16.3	18.1	19.5	19.9	20.6	21	21.2	21.6	21.5	21.2	20.4	19.7	18.4	17.6	17.1	16.7	15.7	15	18.2
13	14.4	14.3	14.5	14.7	14.6	15	16.1	17.8	19.4	21.7	22.8	23	23.5	23.9	23	22.8	22.5	21.5	19.6	19.5	19.7	19.8	19.9	20	19.3
14	20.3	20.5	20.7	20.9	20.7	21	20.8	21	21.7	21.9	22.2	23.4	24.4	24.7	24.2	23	22.4	22.7	22.5	22.1	22.2	22.1	22	21.8	22
15	21.6	21.6	21.2	21.1	20.9	20.5	19.9	19.6	19.8	20.5	21.9	22.7	24.5	25.9	26.4	25.9	25.3	24.1	22.3	21.2	20.5	19.7	18.9	18.4	21.9
16	18.1	17.7	17.3	17.1	17.1	17.1	17.7	18.9	20.3	21.5	22.2	22.4	23.1	23.2	22.8	23.1	22.5	21.9	21.2	21	20.8	20.6	20.4	19.9	20.3
17	19.2	18.6	18.2	17.8	17.4	17.1	17.5	19.5	21.8	22.9	23.9	24.2	25.5	26.1	26.9	27	26.4	24.8	23	21.4	20.7	20.3	20.3	19.9	21.7
18	19.7	19.2	18.8	18.8	18.5	18.3	18.4	20.4	22.9	25.9	27	27.3	27.4	27.7	28.3	28.3	28.1	27	25	23.4	22.7	22.2	22.2	22.1	23.3
19	21.9	21.6	21.3	21.1	20.7	20.6	21.2	22.5	24.4	25.8	26.5	27.1	27.2	28.3	28.4	29	28.8	27.7	26.8	25.5	23	22.8	21.6	21.4	24.4
20	21.7	21.7	20.8	20	19.1	18.4	17.9	19.1	21.1	22.2	23.4	23.6	24.6	24.3	23.1	22.2	21.4	20.8	20.3	19.6	19.2	18.6	17.9	16.6	20.7
21	15.9	15.5	15.3	14.8	13.7	12.9	12.7	14.7	16.9	18.6	19.5	20	19.9	19.8	20	19.2	19.5	18.3	17	16.6	16.2	15.6	15.2	15.5	16.8
22	14.8	12.6	12.5	11.9	11.3	11	11.7	15.6	19.2	19.5	20.6	22	22.9	23.7	24.5	23.5	22.5	21.2	20.2	19.4	19.2	19.2	19	19.1	18.2
23	19.1	19.4	19.6	20.3	20.9	21.2	21.8	22.7	24	25.3	26.5	27.2	27.9	28.4	29	29.4	28.4	27.1	25.9	25.2	24.6	24.2	23.9	23.6	24.4
24	23.4	23.2	23.1	23	22.8	22.8	22.9	24	25.4	26.4	27.3	28.2	29.2	29.9	30.3	29.7	28.7	27.9	26.9	26.1	25.6	25.3	25.2	24.8	25.9
25	24.2	21.2	19.1	18.3	18.1	18	18.1	18.7	19.3	20.4	22.1	23	22.6	23.1	23.1	23.7	23.4	22.3	20.6	19.9	19.3	18.7	17.8	17.3	20.5
26	16.7	16.3	15.7	14.9	14.7	14	14.2	17.2	20.2	22.3	23.1	24.1	24	24.3	24	23.8	23	21.6	20.1	19.5	18.5	17.9	17.3	17.2	19.4
27	17.4	17.5	15.7	14.7	14.3	14	14.2	16.8	19.8	22.1	23.6	24.1	24.5	24.1	23.7	23.5	22.8	21.5	20.2	19.7	17.6	16.8	16.2	16	19.2
28	15.7	16.2	16	16	16	16.2	16.7	18.8	20.8	22.6	23.7	24.5	25.2	25.5	26.1	25.7	23.8	22.5	21.4	20.7	20.3	20.2	19.4	18.3	20.5
29	16.3	15.7	15.4	15.3	15.1	14.7	14.3	14.7	15.6	17.2	18.4	19.7	20.6	21.1	20.5	21.2	21.2	19.7	18.3	16.9	16.6	16.1	15	13.8	17.2
30	13.2	12.4	12	11.5	11.5	12	12.4	15.4	19.4	20.7	21.2	21.8	22.7	23	22.8	22.5	22.1	21	19.3	18	17.4	17.2	17.1	17.1	17.7
Avg	19.3	18.9	18.5	18.3	18.1	18	18.3	19.7	21.3	22.5	23.4	24.2	24.7	24.9	24.8	24.6	24	23.1	21.9	21.1	20.5	20.2	19.8	19.4	21.2
S D	2.9	3	3.1	3.2	3.3	3.4	3.4	2.9	2.7	2.7	2.5	2.5	2.5	2.5	2.7	2.7	2.7	2.6	2.5	2.4	2.3	2.4	2.6	2.7	2.3
S/A	0.15	0.16	0.16	0.18	0.18	0.19	0.19	0.15	0.12	0.12	0.11	0.1	0.1	0.1	0.11	0.11	0.11	0.11	0.12	0.11	0.12	0.13	0.14	0.11	0.11
Min	13.2	12.4	12	11.5	11.3	11	11.7	14.7	15.6	17.2	18.4	19.7	19.9	19.8	20	19.2	19.5	18.3	17	16.6	16.2	15.6	15	13.8	16.8
Max	24.2	23.3	23.6	23.5	23.8	24.5	24.9	25.5	26.5	26.5	27.3	28.2	29.2	29.9	30.3	29.7	28.8	27.9	26.9	26.1	25.6	25.3	25.2	24.8	25.9
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% untested; 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.

**September 2006**

**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	?	?	?	105 ?	105 ?	105 ?	103.6	102	101.6	100.1	96.6	96.2	96.1	95.5	96.7	97.8	98.3	99	99.3	102.8 ?	?	103.3	101.9	103.5	100.5 ?
2	101.8	100.5	100.9	101.8	101.8	102.9	104	102.4	100	97.9	92.5	87.2	82.7	79.1	76.8	75.9	76.2	80.6	85.7	91.6	95	96.6	99.2	101.7	93.1
3	103.8	105 ?	?	?	?	?	?	102 ?	95.3	86.4	83.8	81.8	77.6	77.5	78.8	80.8	82.7	88.9	97.5	101.4	103.6	104.8 ?	?	?	91.3 ?
4	?	?	?	?	?	?	?	?	101.3 ?	92.4	89	83.8	80.6	81.9	85.5	86.4	88.5	94.7	99.7	103.1	104.2	104.5	104.7 ?	?	93.4 ?
5	?	?	?	?	?	?	?	104.5 ?	101.1	102.4 ?	104 ?	95	89.8	96.7	105 ?	?	?	?	?	?	?	105 ?	?	?	100.4 ?
6	?	?	?	?	?	?	?	?	?	104.7 ?	103	99.7	95.9	95.2	94.6	94.4	97.9	99	99.8	100.2	101.4	103.2	103.9	103.9	99.8 ?
7	104.7	105 ?	?	?	?	?	104.5 ?	101.3	94.8	86.2	78.2	77.9	77.2	76.7	75.6	79.6	82.8	88.3	93.3	96.4	99	101.2	102.1	104.5	91.5 ?
8	104.6 ?	?	?	?	104.6	104.7 ?	104.8 ?	102.9	97.3	96.7	90.7	78.8	69.5	67.2	64.8	65.9	67.2	74.1	84.9	90.6	95.3	101.9	104.5 ?	?	88.6 ?
9	?	?	?	?	?	?	?	100.8 ?	94.6	82.1	72.6	66.5	59.9	63.2	64.8	65	67.9	72.2	83.1	91.6	98.1	101.1	103.1	104.2	81.8 ?
10	?	?	?	?	?	?	?	101.5 ?	91.3	83.2	80.8	79.3	79.3	78.6	79.4	81.5	83.2	92.5	98.8	100.7	101.9	102.5	103.4	102.5	90.6 ?
11	101.4	100	98.5	98.3	98.5	97.2	97.2	93.2	85.6	84.8	80.9	76.7	78.4	77.3	77.7	81.3	82.8	84.1	84.4	83.2	84.2	81.8	79.3	80.6	87
12	83.9	90.1	94.8	95.2	95.9	96.3	92.7	84.6	75	71.6	67.9	64.2	60.8	61.1	64.3	67.9	70.6	78.9	87.7	93	97	99	102	104	83.3
13	?	?	?	?	?	?	?	102.3	97.4	88.7	82.8	83.1	82.7	82.5	88	88.6	94.4	99.2	?	?	?	?	?	?	90 ?
14	?	?	?	?	104.7 ?	?	?	?	?	104.3	102.7	99.2	95.3	93.9	98	104.3	104.7 ?	104.8 ?	?	?	105 ?	104.9 ?	?	?	101.8 ?
15	?	?	?	?	?	?	?	?	?	102.8 ?	98.6	95.4	87.5	76.2	71.4	77.6	78.1	85.3	95.3	98.1	100	102	104.5 ?	?	90.9 ?
16	?	?	?	?	?	?	?	?	?	104.8 ?	102	97.5	96.5	92.9	89.4	93.6	91.8	94.6	99.3	103.6	?	?	?	?	96.9 ?
17	?	?	105 ?	104.6	104.4 ?	?	?	101.9	95.7	90.8	85.1	82.4	75.6	73.1	69.8	68.6	72.6	81.8	91.9	99.1	101.8	102.8	104.7 ?	?	90.1 ?
18	?	?	?	?	?	?	?	100.6	92.9	79.8	71.2	68.3	69.9	72.7	67.2	66.7	68.7	77.8	85.6	92.2	98.3	103.6	103.6	103.3	83.7 ?
19	102.3	101.7	99.8	98.6	99.5	102.1	102.9	100.1	96.2	93.7	92.8	91.5	92.5	87.7	85.9	83.8	84.7	88.6	91.5	97.3	?	?	?	?	94.7 ?
20	?	?	103.5 ?	101	99.1	98.3	98.6	93.2	84.4	80.8	72.2	67.6	62.8	64.1	71.8	76.2	76.1	79	81.9	88.1	86.6	88.1	87.8	81.3	83.8 ?
21	80.4	79.9	79.2	82.5	90.6	94.7	97.2	90.1	82.4	75.7	70.4	67.9	69.6	68.5	68.2	69.9	69.4	73.5	78.7	77.5	80.2	84.8	89.4	88	79.5
22	93.8	102.7 ?	104.5 ?	?	?	?	104 ?	94.4	74.4	69.9	66.7	61.5	60.3	58.2	58.2	61.6	62.4	68.4	74.6	85.3	90.7	89.7	92.7	92.9	79.4 ?
23	93	96.5	100.8	100.6	100.6	102.5	102.8	102.3	99.1	95.4	90.1	86.1	80.9	79.5	78.5	78.9	85.3	90.4	94.7	97	98.8	100	101.3	102.6	94.1
24	103.4	104.2	104.1	104.5	?	?	?	102.3	97.1	93.5	89.2	85	80.8	79.1	78.1	79.2	84.3	87.8	89.9	94	98.2	98.9	97.7	98.4	92.8 ?
25	99.9	102.4 ?	?	?	?	?	?	?	104.4	101.1	93.8	79.3	81.9	80	78.9	75.9	77.5	85.2	96.7	98.5	98.7	98.3	100.9	100.9	91.9 ?
26	99.9	99.5	100.5	103.1	103.3	104.5 ?	?	97	85.7	74.4	67.2	63.3	62.3	62	63.4	64	68.8	79.2	86.6	91.4	95.3	98.4	100.4	101	85.7
27	100.7	100.2	103.5 ?	?	?	?	?	99.7	87.2	74.8	60.8	54.9	52.8	58.3	65.2	65.5	68.8	74.9	80.4	82.7	94.4	98.4	100.9	101.8	81.3 ?
28	103.8	103.2	104	104.1 ?	?	?	104.3 ?	98.7	90.6	81.3	73.2	69.9	66.9	67.2	62.6	64	76.4	81.4	79.8	86.6	94.1	97.2	97.1	97.1	86.5 ?
29	102.3 ?	?	?	?	?	?	?	103	97.8	91.3	82.8	74	64	60.7	61.5	59.5	59.7	69.7	78.2	88.8	88.6	86.7	91.8	97.2	81 ?
30	98.4	101.9	102.6	104.8	103.8	101.9	101.9	96.7	72	53.9	52.4	53.7	48	45.7	46.3	54.7	66.7	79.1	88.3	96	97.5	95.3	95.9	98.4	81.5
Avg	98.7	99.5	100.1	100.3	100.9	100.9	101.4	99.1	92.6	88.1	83	78.9	75.8	75	75.7	76.1	79	84.7	89.3	93.4	96.3	98.1	99.1	98.4	89.6 ?
SD	7.1	6.6	6.6	6.1	4.2	3.6	3.8	4.8	9	12.2	13.4	13.1	13.2	12.7	13.4	12.1	11.5	9.8	7.9	6.7	6.2	6.5	6.4	7.3	6.6
S/A	0.07	0.07	0.07	0.06	0.04	0.04	0.04	0.05	0.1	0.14	0.16	0.17	0.17	0.17	0.18	0.16	0.15	0.12	0.09	0.07	0.06	0.07	0.07	0.07	0.07
Min	80.4	79.9	79.2	82.5	90.6	94.7	92.7	84.6	72	53.9	52.4	53.7	48	45.7	46.3	54.7	59.7	68.4	74.6	77.5	80.2	81.8	79.3	80.6	79.4
Max	104.7	105	105	105	105	105	104.8	104.5	104.8	104.7	104	99.7	96.1	96.7	105	104.3	104.7	104.8	103.6	103.1	105	104.9	105	104.5	101.8
n	195	151	138	137	133	112	126	266	303	347	354	360	360	359	350	346	338	341	324	308	291	298	270	237	6449

Data Recovery: 0.0% missing; 0.0% untested; 25.4% 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.

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

September 2006

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	23.3	23.4	23.5	23.6	23.7	24	24.4	24.7	24.7	24.4	24	23.6	23.5	23.6	23.4	23.1	22.7	22.2	21.5	20.9	19.9	19.3	18.9	18.9	22.7
2	18.5	18.4	18.3	18	17.8	17.5	17.1	17.1	17.6	18.5	20.6	22.9	24.8	26.2	28	29.4	30.2	30.1	28.4	25	22.7	21.7	21.2	20.9	22.1
3	20.8	20.4	20	19.7	19.7	19.6	19.9	22.2	25.2	29	31.7	32.9	33.7	32.9	32.4	32.1	31.7	30.8	28.4	25.6	23.9	22.9	22.5	22.4	25.9
4	22.2	21.9	21.7	21.7	21.8	22	22.2	22.6	23.8	27.2	30.6	32.6	34.1	34.5	33.9	33	32.3	31	28.2	25.5	24.4	23.8	23.6	23.3	26.6
5	23.1	23.1	23.1	23	23.2	23.4	23.8	25.1	27	28.1	26.2	26.9	30.4	30.3	26.5	24.1	23.7	23.7	23.5	23.4	22.7	21.7	21	20.3	24.5
6	19.9	19.7	19.6	19.3	19.1	18.9	18.9	19.1	19.4	19.8	20.5	21.9	23.8	25.1	25.1	25.5	25.4	24.5	23.5	22.4	21.7	21.4	20.9	20.5	21.5
7	20.3	20	19.4	18.9	18.6	18.2	18.1	19.6	22.7	25.4	27.7	29.7	30.1	30.4	30.7	31.2	30.2	28.3	25.5	22.9	21.5	20.5	19.5	18.8	23.7
8	18.4	18.6	18.8	19	19.1	19.2	19.3	19.6	20.1	20.9	22.4	25	27.7	29.3	30.1	30.4	29.9	28.5	25.5	22.4	20.7	19.5	18.2	17.5	22.5
9	17.1	16.9	16.7	16.8	16.8	16.6	16.6	18.3	21.2	25.1	28.6	31	32.3	32.6	32.3	31.6	30.9	29.2	26.6	23.7	21.8	20.7	20.1	19.9	23.5
10	19.6	19.4	19.4	19.2	19	18.6	18.6	19.8	22.5	26.4	29	30.6	31	31.1	30.9	30.8	30.1	28.1	25.4	23.4	22.2	21.6	21.5	21.4	24.2
11	21.2	21	20.7	20.5	20.3	20.1	20	21	22.4	23.3	23.6	24.6	25.3	25.1	25.1	24.3	22.9	21.7	20.6	19.9	19.4	19.2	19.2	18.5	21.7
12	17.4	16.6	15.5	14.6	14.2	13.9	14.5	17.3	20.1	22	23.5	24.8	25.3	25.4	25.7	26	25.3	23.8	21.3	18.4	16.8	15.9	15.4	14.7	19.5
13	13.9	13.5	13.4	13.6	13.6	13.9	14.6	16	17.3	20.5	24.5	26.2	26.6	27.3	26.9	25.9	24.7	23.6	21.7	20.4	19.9	19.8	19.8	19.8	19.9
14	19.9	20.1	20.3	20.5	20.6	20.6	20.7	20.8	21.1	21.6	22	23.9	26.1	28.2	28.1	26.1	24.2	23.4	23.2	22.4	22.1	22	22	22	22.6
15	22	21.9	21.8	21.6	21.5	21.2	20.8	20.5	20.3	20.4	21.9	23.9	25.8	28.3	29.8	30.1	29.4	27.7	25.1	22.4	20.7	19.7	18.7	18.2	23.1
16	17.9	17.6	17.3	17	16.9	17	17.4	18.2	19.3	20.5	22.9	24.3	25.5	26	25.3	24.8	24.8	24	22.9	21.8	21.3	21	20.7	20.3	21
17	19.6	18.9	18.2	17.6	17.1	16.7	16.7	18.3	21.3	24.3	26.5	27.3	28.1	29.4	30.4	31.7	31.3	29.8	26.6	23	20.8	19.7	19.3	19.1	23
18	19	18.8	18.5	18.3	18.4	18.2	18.2	19.4	22.4	26.8	30.9	33.1	32.7	32.2	32.4	32.5	32.1	30.7	27.8	24.8	22.8	21.8	21.5	21.3	24.8
19	21.2	21	20.8	20.7	20.3	19.9	20.2	21.4	23.6	26.9	28.9	29.6	30.1	30.7	31.3	31.6	32	31.2	28.8	27.2	25.2	23.9	23.1	22.3	25.5
20	22	22.1	21.6	20.2	19	18.1	17.4	18	20.7	23.7	26.2	27.9	28.8	29.5	28.5	26.5	24.9	23.1	21.6	20.5	19.6	18.9	18.3	17.2	22.3
21	16	15.3	14.8	14.5	13.6	12.3	11.6	13.4	16.8	19.8	22.3	24	24.6	24.6	24.5	23.8	23.5	22.5	19.4	16.8	15.4	14.3	13.1	12.8	17.9
22	12.8	12.3	11.3	10.9	10.5	10.1	9.9	12.2	16.5	21.1	24.3	26.7	27.7	28.4	29.3	29.9	28.1	25.1	22.2	20.4	19.4	18.9	18.6	18.5	19.4
23	18.4	18.4	18.6	19.1	19.8	20.3	20.8	21.7	23.7	26.3	28.4	29.7	30.3	30.9	31.8	32.6	32.6	31.2	28.5	26.6	25.4	24.7	24.3	23.9	25.3
24	23.5	23.3	23	22.9	22.7	22.6	22.7	23.8	26	28	29.5	30.8	31.7	32.5	33.1	33.3	31.4	29.9	28.5	27.1	26.3	25.8	25.6	25.3	27.1
25	24.8	23.7	21.6	19.8	19	18.5	18.3	18.5	19	19.8	22.2	24.7	25.3	25.4	26.1	26.5	27.2	26.3	23.5	21	19.4	18.4	17.4	16.6	21.8
26	16	15.4	14.8	14.2	13.7	13.4	13.1	14.9	18.7	22.7	25.7	27.9	29.3	29.6	29.6	29.1	28.3	26.3	22.7	20.1	18.5	17.4	16.7	16.2	20.6
27	15.8	15.7	15.3	14.3	13.7	13.4	13.3	15	18	22.1	25.7	28.2	29.2	29.5	28.5	27.5	27.1	25.5	22.3	20	18.3	16.5	15.1	14.5	20.2
28	14.1	14	14.2	14.5	14.9	15.1	15.3	16.7	19.6	23.5	26.1	28	29.1	29.2	29.4	29.6	28.6	26.4	23.4	21.3	20.3	19.9	19.6	19.3	21.3
29	18.4	16.9	16.1	15.7	15.6	15.2	14.7	14.7	15.7	18.2	21.1	23	24.6	25.4	24.7	24.1	24.7	23.1	20.3	17.6	16.2	15.5	14.6	13.1	18.7
30	11.7	11	10.4	9.7	9.4	9.1	9.5	12	16.6	21.5	24.9	26.3	27	27.4	27.2	26.9	26.4	24.8	21.2	18.3	16.6	15.8	15.4	15.4	18.1

Avg	19	18.6	18.3	18	17.8	17.6	17.6	18.7	20.8	23.3	25.4	27.1	28.2	28.7	28.7	28.5	27.9	26.5	24.3	22.2	20.9	20.1	19.5	19.1	22.4
S D	3.3	3.4	3.4	3.5	3.6	3.7	3.8	3.4	3	3.1	3.2	3.2	3	2.8	2.9	3.2	3.2	3.1	2.9	2.8	2.7	2.8	3	3.1	2.5
S/A	0.17	0.18	0.19	0.19	0.2	0.21	0.22	0.18	0.14	0.13	0.13	0.12	0.11	0.1	0.1	0.11	0.12	0.12	0.12	0.12	0.13	0.14	0.15	0.16	0.11
Min	11.7	11	10.4	9.7	9.4	9.1	9.5	12	15.7	18.2	20.5	21.9	23.5	23.6	23.4	23.1	22.7	21.7	19.4	16.8	15.4	14.3	13.1	12.8	17.9
Max	24.8	23.7	23.5	23.6	23.7	24	24.4	25.1	27	29	31.7	33.1	34.1	34.5	33.9	33.3	32.6	31.2	28.8	27.2	26.3	25.8	25.6	25.3	27.1
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% untested; 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**

**September 2006**

**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	6.6	5.2	7.2	7.3	6.4	6	7.6	6.7	7.6	9.3	8.6	8.6	6.7	5.9	5.3	4.8	4.4	4.3	4.6	3.7	3.4	4.2	3.9	3.9	5.9
2	4.8	4.8	5.1	4.5	4.6	4.8	4.1	4.3	3.9	3.9	4.5	4	3.6	2.9	2.6	2.4	2	1.5	0.7	0.2	0.4	0.7	0.9	1	3
3	0.5	0	0	0	0	0	0	0.5	0.9	1.4	2	2	3	3.5	3.7	3.6	2.8	2.6	2.1	1.3	0.8	0.9	1	0.2	1.4
4	0.2	0.1	0.2	0	0.1	0.2	0.5	0.7	1.5	1.8	2.5	2.2	2.5	3	3.8	3.8	3.2	2.9	2.6	2.3	1.9	1.9	1.3	1	1.7
5	1.1	1.1	0.9	0.9	1	0.7	1.5	2.5	2.3	2.6	1.9	2.9	3.6	3	3.2	1	1.3	0.7	0.6	0.7	1.5	1.3	1.5	1.3	1.6
6	1	0.6	0.7	0.4	0.1	0.1	0.3	0.8	1.3	0.7	0.9	1.2	1.2	1.2	0.9	0.9	1.4	1.7	1.7	1.5	1.8	1	0.5	0.6	0.9
7	1	0.8	0.9	1	1.4	1.1	1.3	1.8	2	2.7	2.8	2.5	2	2.1	2.3	2.9	2.7	2.3	1.1	0.7	0.9	0.1	0	0	1.5
8	0.3	0.2	0.5	0.1	0.4	0.1	0.6	1.3	1.6	1.7	2.2	2.9	2.3	2.3	2.4	2.6	2.5	1.9	1.2	1.3	0.9	0.1	0	0.4	1.2
9	0.3	0.4	0.6	0.6	0.4	0.1	0.2	0.7	1.4	1.6	1.7	2	2.3	2.5	3.2	2.7	2.7	1.8	1.3	0.6	0.3	0.1	0.1	0.1	1.1
10	0.1	0.3	0.1	0.2	0.4	0.3	0.7	1	1.2	2.4	3.2	3.8	3.6	3.7	3.8	3.8	3.3	2.8	2.8	2.9	2.2	2.1	2.5	2.3	2.1
11	2.2	2.3	2.2	1.8	2	2	2.9	4	4.9	5.2	5.3	5.5	5.2	5	4.8	4.6	4.4	3.2	3.8	3.3	2.5	3.8	3.7	3	3.6
12	2.1	1.5	1.2	1.4	1.2	1	1.2	2.5	3.7	4.3	4.3	3.9	3.7	3.3	3.2	3.1	2.6	2.4	1.4	0.8	0.6	0.6	0.3	0.2	2.1
13	0.1	0.3	0.4	0.2	0.2	0.1	0.2	0.2	0.9	2.8	3.3	3.1	2.3	1.6	2.8	2	1.8	1.8	1.4	0.1	0.3	0.1	0.2	0.2	1.1
14	0.1	0.6	0.3	0.7	1.3	1.7	1.2	1.2	2	1.8	2	2.6	2.5	3.3	3.3	2.7	2	0.9	0.1	0.2	1.1	0.4	0.1	0.5	1.4
15	0.3	0.5	1.2	1	1.3	2	2.2	2.2	1.8	1.7	1.5	1.7	1.8	2.5	2.6	2.3	2.6	2.2	1.1	0.7	0.6	0.2	0.3	1	1.5
16	0.6	1.2	1.2	1.1	1	1.3	1	1.5	2.9	3.5	3.9	3.8	4.4	3.7	2.4	3.3	3.4	2.9	2.4	2.9	2	1.8	1.7	1.7	2.3
17	0.9	0.8	1.2	1.1	0.8	0.4	0.7	1.9	3	3.4	3.2	2.9	2.6	2.4	2.4	2.2	1.6	1.4	0	0	0.1	0.2	0.1	0.4	1.4
18	0.2	0	0.1	0.6	0.2	0.6	0.6	1.3	0.9	0.5	0.5	1.3	0.9	1.7	1.9	2.6	1.9	0.8	0.7	0.6	0.7	1	1.1	1.1	0.9
19	1.2	1.5	1.8	1.2	0.8	1.2	1.5	2.1	2.6	3.9	4	3.1	3.2	3.5	3.5	3.3	2.7	1.4	0.6	1.7	1.8	1.2	1.9	1.5	2.1
20	0.7	1.3	1.7	1.7	1.3	1	0.4	1.2	2.5	3.1	2.3	1.9	1.2	1.4	2.1	2.5	2.3	1.4	1.2	0.9	1	1.1	2.3	2.2	1.6
21	2	2	2.3	1.5	1.1	0.9	0.5	1.4	2.3	2.8	2.4	2.4	2.9	2.4	2.8	3.2	2.6	2.3	1.6	1.5	1	0.5	0.7	1	1.8
22	0.8	0.1	0.2	0.3	0.3	0.1	0.6	0.2	0.6	1.2	1.2	1.8	1.6	1.4	1.1	2.7	2.3	1.9	1.7	2	1.8	1.5	1.6	1.8	1.2
23	1	1.5	1.4	1.9	2.2	1.8	1.9	2.1	3.3	4.4	5.1	5.6	5.6	4.9	5	3.9	3.8	4	3.7	3.6	3.6	3.8	3.8	3.4	3.4
24	3	2.9	2.8	3	3.3	3.2	3.2	3.8	4.9	5.5	5.7	5.9	5.9	5.6	4.8	4.5	2.5	2	2	2.1	3	3.6	3.7	3.4	3.8
25	3.6	3.5	2.2	0.6	0.3	0.4	0.4	0.4	0.8	1.2	1	1	0.6	0.4	0.4	0.7	1.6	0.9	0.6	0.7	1.1	0.8	0.6	1	1
26	1	0.9	0.7	0.7	0.7	0.2	0.4	1	1.4	2.7	3.1	2.7	2.7	2.7	2.9	2.5	2.6	2.1	1.7	1.6	0.9	1.3	1.5	0.8	1.6
27	1.2	0.8	0.3	0.4	0.4	0.5	0.4	0.6	1.6	2	1.8	2.2	1.9	2.5	2.5	2.1	2.7	1.6	1.7	1.2	0.5	0.1	0.3	0.1	1.2
28	0.1	0.5	0.5	0.6	0.6	0.7	0.3	1.1	1.5	2.1	2.6	3	3.4	3.5	3.4	4	5	3.3	1.8	2.3	2.6	2	1.1	2.8	2
29	1	0.5	0.5	1.6	2.2	2.3	2.5	2.8	2.9	2.3	2.1	2	2.2	1.6	1.8	1.6	1.2	0.4	0.2	0.2	0.7	0.9	0.4	0.2	1.4
30	0.1	0.4	0	0.1	0	0	0.2	0	0.4	1	1.6	1.9	1.7	2.2	3	2.8	2.1	1	0.4	0.1	0.6	0.5	1	0.9	0.9
Avg	1.3	1.2	1.3	1.2	1.2	1.2	1.3	1.7	2.3	2.8	2.9	3	2.9	2.9	2.9	2.8	2.6	2	1.6	1.4	1.4	1.3	1.3	1.3	1.9
S D	1.5	1.3	1.6	1.5	1.4	1.4	1.6	1.4	1.6	1.8	1.7	1.6	1.5	1.3	1.2	1	0.9	1	1.1	1.1	1	1.2	1.2	1.1	1.1
S/A	1.18	1.08	1.21	1.22	1.18	1.21	1.2	0.84	0.68	0.64	0.59	0.54	0.51	0.45	0.39	0.36	0.35	0.47	0.71	0.78	0.71	0.94	0.95	0.89	0.57
Min	0.1	0	0	0	0	0	0	0	0.4	0.5	0.5	1	0.6	0.4	0.4	0.7	1.2	0.4	0	0	0.1	0.1	0	0	0.9
Max	6.6	5.2	7.2	7.3	6.4	6	7.6	6.7	7.6	9.3	8.6	8.6	6.7	5.9	5.3	4.8	5	4.3	4.6	3.7	3.6	4.2	3.9	3.9	5.9
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% untested; 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**

**September 2006**

**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	66	59	70	64	84	99	100	97	118	124	132	153	160	169	181	181	186	188	194	194	191	198	200	216	134
2	217	221	224	225	230	229	239	243	236	238	248	245	240	238	220	229	212	177	176	164	152	156	149	132	228
3	144	129	202	122	0	0	112	97	94	76	103	106	101	94	99	103	98	92	92	70	61	64	86	69	95
4	352	339	8	72	54	3	14	41	57	69	91	91	89	81	105	89	83	75	72	80	92	97	82	77	82
5	79	67	84	83	70	89	108	145	190	189	194	188	190	194	228	197	197	228	221	281	308	303	328	318	190
6	330	305	309	287	298	293	310	321	336	23	346	19	13	3	12	74	68	64	72	70	69	63	46	359	26
7	346	345	338	348	342	325	339	0	21	22	35	56	54	37	57	61	60	66	75	93	108	138	146	145	35
8	349	3	348	35	16	20	64	69	62	49	54	67	59	69	69	64	61	54	55	73	75	311	142	305	59
9	300	312	358	349	324	322	302	334	9	12	29	57	70	94	88	83	93	89	94	81	86	83	95	19	64
10	326	6	18	320	314	321	339	2	20	13	39	45	47	58	56	58	56	52	38	41	31	35	47	44	42
11	42	42	47	33	28	28	29	39	42	35	40	39	38	31	30	20	23	13	4	8	10	39	41	37	31
12	15	339	321	323	334	335	341	8	41	38	45	49	28	43	57	58	50	47	43	44	17	13	315	334	31
13	295	308	357	360	339	11	15	337	57	83	110	128	150	145	100	89	75	128	235	69	84	99	103	108	108
14	89	67	66	117	103	122	106	95	122	156	141	133	136	147	139	129	136	123	120	125	140	337	352	129	
15	18	1	348	346	327	335	330	327	318	324	346	348	21	354	352	3	349	351	354	354	4	339	275	265	344
16	272	272	280	285	281	283	288	314	339	345	347	328	334	333	322	306	325	337	348	346	354	355	335	329	328
17	317	318	324	314	315	299	303	324	326	342	333	317	329	342	337	350	7	61	76	0	182	239	242	227	333
18	234	225	236	231	229	240	238	267	277	318	151	195	206	187	229	226	226	191	180	170	161	163	174	168	210
19	181	193	205	205	195	200	200	197	198	208	206	197	187	202	225	236	253	243	269	321	352	237	259	264	217
20	297	298	312	326	310	304	300	315	340	346	358	352	359	336	54	73	67	51	21	320	311	314	329	329	348
21	328	329	327	318	310	308	273	325	345	13	19	27	43	46	60	67	54	55	74	72	79	69	43	40	24
22	21	330	336	307	308	303	305	321	118	156	170	70	65	37	74	95	105	130	126	133	161	151	155	137	114
23	148	143	157	157	155	164	170	186	197	208	204	215	213	211	210	193	190	189	191	199	200	205	206	205	197
24	204	207	204	200	202	207	203	207	215	214	216	219	218	214	216	213	207	221	210	189	191	195	204	201	209
25	202	289	294	291	269	256	266	263	266	284	320	3	356	68	231	200	217	214	222	222	245	256	249	248	258
26	255	274	285	288	294	300	301	348	11	34	53	68	50	62	64	55	55	62	64	59	43	8	7	22	41
27	34	45	351	331	320	303	307	319	1	20	23	355	342	334	44	45	58	63	73	72	202	170	205	145	23
28	135	130	170	211	204	201	192	205	203	219	191	176	178	173	179	166	160	160	168	158	160	237	287	293	183
29	297	266	182	266	270	262	275	283	288	303	308	300	303	302	283	278	288	258	292	44	267	281	302	300	285
30	279	294	298	285	0	336	334	357	119	123	206	184	169	142	150	135	112	116	48	112	161	167	153	174	150
Avg	338	308	319	307	283	235	262	330	12	39	78	103	102	105	111	101	91	92	90	83	125	186	222	258	97
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% untested; 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**

**September 2006**

**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	11.2	9.5	12.2	13	10.9	10.6	12.8	11.7	12.7	14.7	14.8	14.1	12.3	11.6	9.9	9.7	8.9	7.9	8.3	6.6	6.3	7.6	7.3	7	10.5
2	8.6	8.6	8.9	7.7	7.7	7.7	6.7	7.6	6.5	6.6	7.7	6.6	5.8	5.1	4.5	4.1	3.4	2.8	1.6	0.8	0.9	1.2	1.5	1.7	5.2
3	1	0.1	0.1	0	0	0	0.1	1.1	1.9	2.7	3.7	3.5	4.9	5.8	6	5.4	4.6	4.3	3.4	2.2	1.5	1.6	1.6	0.5	2.3
4	0.5	0.3	0.8	0.2	0.8	0.7	1.8	2	2.9	3.6	4.2	4	4.6	5.1	5.8	6	5.2	4.8	4.2	4.2	3.2	3.1	2.2	1.9	3
5	2.1	1.9	1.8	1.6	1.9	1.4	2.4	4.3	4.5	4.7	3.8	5.3	6.5	5.2	5.4	2.4	2.8	1.6	1.4	2.2	3.5	3.3	3.1	3.2	3.2
6	2.4	1.8	2	1.3	0.8	0.6	1	2	2.6	1.6	2.3	2.4	2.4	2.4	2	2	2.5	3	3.1	2.8	3.1	2.1	1.3	1.4	2
7	2	1.7	1.9	1.9	2.5	2.3	2.5	3.3	3.7	4.7	4.9	4.3	3.7	3.9	4	4.5	4.6	3.9	2	1.3	1.6	0.3	0.2	0.1	2.7
8	0.6	0.4	0.9	0.5	0.9	0.5	1.1	2.2	2.8	2.9	4	4.7	4.2	3.8	4	4.2	4.1	3.1	2.1	2.3	1.5	0.3	0.1	0.8	2.2
9	0.7	0.9	1.1	1.1	1.1	0.5	0.6	1.8	2.6	2.9	3.2	3.5	4.2	4.4	4.9	4.4	4.2	2.8	2	1.1	0.8	0.4	0.3	0.3	2.1
10	0.4	0.9	0.4	0.6	1	0.9	1.6	2.2	2.6	4.4	5.7	6.3	6.2	6.4	6.7	6.7	5.8	4.8	4.9	5	4	3.8	4.4	4	3.7
11	4	4	4	3.4	3.6	3.7	5.2	7.3	8.8	8.6	9.3	9.6	9.1	8.5	8.4	8.1	7.6	5.8	6.3	5.9	4.5	6.5	6.6	5.1	6.4
12	3.9	2.5	2.4	2.5	2.2	1.9	2.6	4.3	6.6	7.4	7.5	7.1	6.5	5.6	5.7	5.4	4.5	4.3	2.5	1.6	1.2	1.3	1	0.7	3.8
13	0.6	0.8	1.1	0.6	0.6	0.6	0.7	0.7	1.9	4.7	5.3	5.2	4	3	4.4	3.1	3	3.1	2.7	0.4	0.9	0.5	0.6	0.7	2
14	0.7	1.3	1	1.6	2.6	3.2	2.3	2.7	3.7	3.9	3.5	4.5	4	5.5	5.5	4.5	4	2.1	0.7	0.6	2.1	0.8	0.7	1.6	2.6
15	1.2	1.6	2.4	2.3	2.9	3.8	4.2	4	4.2	4	3	3.5	3.2	4.7	4.6	4.1	4.5	3.9	2.1	1.4	1.3	0.7	0.6	1.6	2.9
16	1.4	2.1	2.5	2.4	2.3	3.2	2.8	3.5	5.1	6.1	6.6	7.1	7.7	6.7	5.2	6.5	6.4	5.6	4.3	4.6	3.7	3.4	3.7	3.6	4.4
17	2.7	2.2	2.5	2.5	2	1.3	2.1	3.8	5.6	6.2	5.8	5.7	5	4.9	5	4.2	3.2	2.4	0.2	0	0.5	0.5	0.3	0.8	2.9
18	0.6	0.1	0.5	1.2	0.6	1.3	1.3	2.9	2.4	1.6	1.6	2.5	2.1	3.3	3.4	4.3	3	1.9	1.7	1.3	1.5	2.2	2.2	2	1.9
19	2.3	2.8	3.3	2.6	1.8	2.2	2.7	3.9	5	6.7	7.1	5.9	5.9	6.3	5.5	5.1	4.7	2.6	1.2	3	3.7	2.1	3.5	3.2	3.9
20	2.1	3.1	3.8	3.4	2.9	2.5	1.6	3	4.8	5.3	4.3	3.6	2.7	2.7	3.6	4.2	4	2.5	2.2	1.9	2.1	2.4	4.4	4	3.2
21	3.6	3.6	3.9	2.9	2.1	1.8	1.3	2.9	4.3	5.1	4.4	4.5	5.2	4.3	4.8	5.2	4.4	4.1	2.7	2.4	1.7	1.1	1.3	1.4	3.3
22	1.3	0.4	0.5	0.5	0.6	0.3	1.2	0.8	1.4	2.4	2.6	3.2	3.3	2.9	2.4	4.3	3.7	2.9	2.7	3.2	3	2.5	2.8	2.9	2.2
23	1.9	2.7	2.5	3.3	3.7	3.5	3.6	4.2	5.9	7.8	8.8	9.5	9.4	8.2	8.3	6.9	6.8	6.8	6.6	6.3	6.5	6.8	6.4	6.1	5.9
24	5	5.1	4.9	5.2	5.8	5.6	6	7.3	8.1	9.2	9.8	9.6	9.9	9.2	8.1	8.1	4.4	3.4	3.4	4.1	5.5	6.4	6.5	5.9	6.5
25	6	7.3	4.7	1.8	1.2	1.4	1.3	1.4	2.1	2.8	2.5	2.4	1.7	1.3	1.3	1.9	2.7	1.6	1.1	1.1	1.6	1.4	1.2	1.6	2.2
26	1.6	1.8	1.6	1.6	1.6	1	1.2	2.5	2.8	5	5.2	4.7	4.8	4.5	4.7	4.2	4.4	3.5	2.8	2.5	1.6	2.1	2.3	1.6	2.9
27	1.8	1.3	0.8	0.8	0.9	1.1	1.2	1.7	3	3.6	3.5	4.1	3.7	4.5	4.6	4	4.5	2.7	2.5	1.8	0.8	0.3	0.5	0.2	2.3
28	0.2	0.9	1.1	1.2	1.1	1.3	1.1	2.1	3	3.8	4.7	5.3	6.1	6.3	6.2	7.7	9.8	6.4	3.6	4.1	4.6	4	2.4	5.5	3.8
29	2.5	1.3	1.1	3.4	4.7	4.3	5.1	5.7	5.8	4.9	4.4	4.5	4.4	3.6	3.6	3.2	2.6	0.9	0.7	0.5	1.3	1.7	1	0.7	3
30	0.2	0.9	0.1	0.1	0	0.2	0.4	0.2	1	2.2	3.3	3.4	3.4	3.9	5.3	4.9	3.7	1.7	1	0.4	1.2	1.2	1.6	1.7	1.7
Avg	2.4	2.4	2.5	2.4	2.4	2.3	2.6	3.4	4.3	5	5.3	5.3	5.2	5.1	5.1	5	4.6	3.6	2.8	2.5	2.5	2.4	2.4	2.4	3.5
S D	2.5	2.4	2.6	2.6	2.3	2.3	2.6	2.5	2.5	2.7	2.8	2.6	2.5	2.2	1.9	1.8	1.8	1.7	1.8	1.8	1.7	2.1	2.1	1.9	1.9
S/A	1.03	0.99	1.05	1.08	0.99	1.01	0.98	0.71	0.59	0.54	0.53	0.48	0.47	0.43	0.37	0.37	0.39	0.47	0.66	0.72	0.67	0.87	0.88	0.81	0.53
Min	0.2	0.1	0.1	0	0	0	0.1	0.2	1	1.6	1.6	2.4	1.7	1.3	1.3	1.9	2.5	0.9	0.2	0	0.5	0.3	0.1	0.1	1.7
Max	11.2	9.5	12.2	13	10.9	10.6	12.8	11.7	12.7	14.7	14.8	14.1	12.3	11.6	9.9	9.7	8.9	7.9	8.3	6.6	6.5	7.6	7.3	7	10.5
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% untested; 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**

**September 2006**

**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	1009	1008	1007	1005	1003	1003	1002	1001	1000	1000	999	999	1000	1000	1001	1001	1002	1003	1003	1004	1005	1005	1005	1006	1003
2	1006	1006	1006	1007	1007	1008	1009	1010	1011	1011	1012	1012	1012	1012	1012	1011	1012	1012	1013	1013	1014	1014	1014	1014	1011
3	1014	1014	1014	1014	1014	1015	1015	1016	1016	1017	1016	1016	1016	1016	1015	1015	1015	1015	1015	1015	1015	1016	1016	1016	1015
4	1015	1015	1015	1015	1015	1016	1016	1017	1017	1018	1017	1017	1017	1017	1016	1015	1015	1016	1016	1016	1017	1017	1017	1016	1016
5	1016	1015	1015	1015	1014	1014	1015	1015	1015	1014	1014	1013	1012	1011	1012	1011	1012	1012	1011	1012	1013	1013	1013	1013	1013
6	1013	1012	1013	1013	1013	1013	1014	1015	1014	1015	1015	1015	1015	1015	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1014
7	1015	1014	1014	1014	1014	1015	1015	1016	1016	1017	1017	1017	1017	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016
8	1016	1016	1016	1016	1016	1017	1017	1018	1018	1018	1018	1018	1017	1017	1017	1016	1016	1016	1016	1016	1016	1016	1016	1016	1017
9	1016	1016	1016	1016	1016	1016	1016	1017	1017	1017	1017	1017	1016	1016	1015	1015	1015	1015	1015	1015	1016	1016	1016	1016	1016
10	1016	1016	1016	1016	1016	1016	1016	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1018	1018	1018	1018	1017
11	1018	1018	1018	1018	1018	1019	1019	1020	1021	1022	1022	1022	1022	1022	1021	1021	1021	1021	1021	1021	1022	1022	1022	1022	1020
12	1021	1021	1021	1021	1021	1021	1021	1022	1022	1022	1022	1022	1021	1021	1020	1020	1020	1020	1019	1020	1020	1019	1019	1018	1020
13	1018	1018	1017	1016	1016	1016	1016	1016	1016	1016	1015	1015	1015	1014	1014	1013	1013	1013	1013	1013	1013	1013	1013	1012	1015
14	1012	1012	1011	1011	1011	1011	1011	1011	1012	1012	1012	1012	1011	1011	1010	1010	1010	1010	1010	1010	1011	1011	1011	1011	1011
15	1011	1010	1010	1010	1010	1011	1011	1012	1012	1013	1013	1013	1013	1012	1012	1012	1012	1013	1013	1013	1013	1013	1013	1013	1012
16	1013	1013	1013	1012	1012	1013	1013	1013	1014	1015	1015	1015	1014	1014	1014	1014	1014	1014	1013	1014	1015	1015	1014	1014	1014
17	1014	1013	1013	1013	1013	1013	1014	1014	1015	1015	1015	1014	1014	1013	1012	1012	1012	1012	1012	1012	1013	1012	1012	1012	1013
18	1012	1011	1012	1012	1011	1012	1012	1013	1013	1013	1013	1012	1012	1011	1011	1010	1010	1009	1009	1010	1010	1010	1010	1010	1011
19	1010	1009	1009	1008	1008	1008	1008	1009	1008	1008	1007	1007	1006	1005	1005	1004	1004	1004	1004	1004	1004	1005	1005	1005	1006
20	1005	1005	1005	1005	1005	1006	1007	1007	1008	1008	1009	1008	1008	1008	1008	1008	1008	1009	1010	1011	1012	1012	1013	1013	1008
21	1014	1014	1014	1014	1015	1015	1016	1017	1017	1018	1018	1018	1018	1018	1017	1017	1018	1017	1018	1018	1019	1020	1020	1020	1017
22	1019	1019	1019	1019	1019	1020	1021	1021	1021	1021	1021	1021	1020	1020	1020	1019	1020	1020	1019	1019	1019	1019	1019	1018	1020
23	1018	1017	1017	1017	1017	1017	1017	1017	1017	1017	1017	1016	1016	1015	1014	1013	1013	1013	1012	1013	1013	1013	1013	1013	1015
24	1013	1013	1012	1012	1011	1011	1011	1011	1011	1011	1011	1010	1009	1008	1008	1007	1007	1007	1007	1007	1007	1008	1007	1007	1009
25	1006	1008	1009	1009	1009	1010	1010	1010	1011	1012	1012	1012	1012	1011	1011	1011	1011	1011	1011	1012	1013	1013	1013	1013	1011
26	1013	1013	1012	1012	1013	1014	1014	1015	1016	1016	1016	1016	1015	1014	1014	1014	1014	1014	1014	1015	1015	1015	1015	1014	1014
27	1014	1013	1013	1013	1013	1013	1013	1014	1014	1014	1014	1014	1013	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1011	1013
28	1011	1011	1011	1011	1011	1011	1011	1011	1012	1011	1011	1011	1010	1009	1008	1008	1007	1006	1006	1006	1006	1006	1006	1006	1009
29	1006	1006	1005	1006	1007	1007	1008	1009	1010	1011	1011	1011	1011	1011	1011	1012	1013	1013	1014	1015	1015	1016	1016	1016	1011
30	1016	1016	1016	1016	1017	1017	1017	1018	1019	1019	1019	1019	1018	1017	1017	1017	1017	1017	1016	1016	1016	1017	1017	1016	1017
Avg	1013	1013	1013	1013	1013	1013	1014	1014	1014	1015	1015	1014	1014	1013	1013	1013	1013	1013	1013	1013	1014	1014	1014	1014	1013
SD	4	4	4	4	4	4	4	4	4	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4
S/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	1005	1005	1005	1005	1003	1003	1002	1001	1000	1000	999	999	1000	1000	1001	1001	1002	1003	1003	1004	1004	1005	1005	1005	1003
Max	1021	1021	1021	1021	1021	1021	1021	1022	1022	1022	1022	1022	1022	1022	1021	1021	1021	1021	1021	1021	1021	1022	1022	1021	1020
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% untested; 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

**September 2006**

**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	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.6
2	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6	13.1	13.3	13.3	13.3	13.3	13.2	13.2	13.2	13.1	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9
3	12.7	12.7	12.7	12.7	12.7	12.7	13	13.3	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.9
4	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	13.2	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.9
5	12.7	12.7	12.7	12.7	12.7	12.7	12.8	13.2	13.2	13.2	13.3	13.2	13.2	13	12.8	12.8	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
6	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.7	13.1	13.1	13.3	13.4	13.3	13.3	13.3	13.3	13.3	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9
7	12.7	12.7	12.7	12.6	12.6	12.6	13	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
8	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.1	13.3	13.3	13.2	13.2	13.2	13.2	13.2	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.9
9	12.7	12.7	12.6	12.6	12.6	12.6	12.9	13.4	13.4	13.3	13.2	13.1	13.1	13.1	13.1	13.2	13.2	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.9
10	12.7	12.7	12.7	12.6	12.6	12.6	12.8	13.3	13.4	13.4	13.4	13.3	13.3	13.3	13.3	13.4	13.1	12.8	12.7	12.7	12.7	12.7	12.7	12.7	13
11	12.7	12.7	12.6	12.6	12.6	12.6	13.1	13.5	13.4	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.4	13	12.8	12.7	12.7	12.7	12.7	12.7	13
12	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13	13.4	13.4	13.3	13.3	13.3	13.3	13.3	13	13.1	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
13	12.7	12.6	12.6	12.6	12.6	12.6	12.8	13	13.4	13.4	13.3	13.3	13.3	13.3	13.3	13	13.1	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
14	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.8	13	13.2	13.3	13.2	13.2	13.2	13.2	13.1	13	12.8	12.8	12.7	12.7	12.7	12.7	12.9
15	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.3	13.3	13.3	13.3	13.2	13.2	13.2	13.2	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.9
16	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.9	13	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.1	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
17	12.7	12.7	12.6	12.6	12.6	12.6	13.1	13.4	13.4	13.3	13.3	13.3	13.2	13.2	13.2	13.2	13.2	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.9
18	12.7	12.7	12.7	12.6	12.6	12.6	13	13.4	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.2	13.2	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
19	12.7	12.7	12.7	12.6	12.6	12.6	12.7	13.1	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
20	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.4	13.4	13.3	13.2	13.2	13.2	13.2	13.3	13.3	13.1	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9
21	12.7	12.6	12.6	12.6	12.6	12.5	13.1	13.6	13.5	13.4	13.4	13.3	13.3	13.3	13.3	13.4	13.4	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13
22	12.7	12.6	12.6	12.6	12.5	12.5	13	13.6	13.5	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.3	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13
23	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.2	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.1	13.1	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9
24	12.7	12.7	12.7	12.7	12.6	12.6	12.8	13.3	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
25	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.2	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
26	12.7	12.6	12.6	12.6	12.6	12.5	13	13.5	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
27	12.7	12.6	12.6	12.6	12.6	12.6	13	13.5	13.5	13.3	13.3	13.2	13.2	13.2	13.2	13.3	13.2	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
28	12.6	12.6	12.6	12.6	12.6	12.6	12.8	13.5	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.2	13.2	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.9
29	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13.4	13.5	13.4	13.4	13.3	13.3	13.3	13.4	13.4	13.2	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13
30	12.6	12.6	12.6	12.6	12.5	12.5	13.1	13.6	13.5	13.4	13.3	13.3	13.3	13.2	13.3	13.3	13.3	12.8	12.8	12.7	12.7	12.7	12.7	12.7	13
Avg	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.2	13.2	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.9
S D	0	0	0	0	0	0	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0.1
S/A	0	0	0	0	0	0	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0	0	0	0	0	0.01
Min	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6	12.6	12.6	12.6	12.6	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.6
Max	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.6	13.5	13.4	13.4	13.4	13.4	13.3	13.3	13.4	13.4	13	12.8	12.8	12.8	12.7	12.7	12.7	13
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% untested; 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.