

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

**July 2011**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	4	56	208	408	590	789	929	987	997	852	826	598	458	189	96	11	0	0	0	0	7997
2	0	0	0	0	3	46	188	400	590	773	903	995	985	791	682	569	372	226	94	16	0	0	0	0	7632
3	0	0	0	0	2	28	105	99	165	586	524	524	736	822	731	562	424	221	77	8	0	0	0	0	5612
4	0	0	0	0	1	42	150	337	531	694	845	915	886	862	727	535	240	40 ?	1 ?	0	0	0	0	0	6807
5	0	0	0	0	1	22	191	314	509	646	853	818	696	686	349	361	378	165	102	47 ?	0	0	0	0	6139
6	0	0	0	0	2	11	38	73	180	398	432	288	833	265 ?	336 ?	490	88	39 ?	0 ?	0	0	0	0	0	3473 ?
7	0	0	0	0	5	37	148	382	579	549	703	938	691	831	735	324	259	115	74	9	0	0	0	0	6380
8	0	0	0	0	3	54	191	210	292	673	789	933	903	807	853	595	357	155	81	9	0	0	0	0	6905
9	0	0	0	0	0	8	43 ?	67	175	274	368	911	820	797	694	611	463	260	84	9	0	0	0	0	5585
10	0	0	0	0	3	45	202	398	599	776	909	992	1001	949	834	675	482	272	88	8	0	0	0	0	8232
11	0	0	0	0	3	54	214	320	442	758	786	383	987	878	813	639	460	255	81	8	0	0	0	0	7080
12	0	0	0	0	1	28	122	271	401	409	427	892	937	871	763	605	420	234	70	7	0	0	0	0	6459
13	0	0	0	0	4	42	175	336	564	736	868	949	850	509	544	459	203	102	16	4	0	0	0	0	6362
14	0	0	0	0	3	44	202	410	610	785	914	990	1011	948	862	677	493	290	85	11	0	0	0	0	8334
15	0	0	0	0	0	81	226	424	623	791	898	932	926	666	680	639	436	295	94	9	0	0	0	0	7719
16	0	0	0	0	0	51	196	439	494	824	771	960	980	931	792	675	479	273	87	6	0	0	0	0	7958
17	0	0	0	0	0	41	210	310	593	770	770	1011	1037	680	854	669	476	271	86	7	0	0	0	0	7784
18	0	0	0	0	0	45	180	326	588	762	894	978	597	784	717	618	442	274	81	4	0	0	0	0	7291
19	0	0	0	0	0	26	161	282	491	616	630	782	742	486	546	449	295	119	18	17	0	0	0	0	5659
20	0	0	0	0	0	29	152	345	541	705	834	958	951	613	99 ?	71 ?	366	223	64	8	0	0	0	0	5960
21	0	0	0	0	0	32	131	288	526	698	832	903	926	846	750	603	403	210	50	6	0	0	0	0	7203
22	0	0	0	0	0	33	158	338	532	711	836	910	927	862	765	609	401	195	35	4	0	0	0	0	7317
23	0	0	0	0	0	30	152	330	508	634	793	892	911	843	752	617	418	136	39	1	0	0	0	0	7056
24	0	0	0	0	0	26	155	312	571	647	844	679	937	837	756	613	358	223	28	0	0	0	0	0	6987
25	0	0	0	0	0	12	106	300	284	417	676	915	903	854	745	442	348	59	5	0	0	0	0	0	6068
26	0	0	0	0	0	12	58	111	162	240	417	439	523	470	753	659	456	228	65	7	0	0	0	0	4601
27	0	0	0	0	0	21	116	296	463	656	847	818	677	603	637	411	177	36	5	0	0	0	0	0	6671
28	0	0	0	0	0	23	131	332	524	688	835	773	935	805	594	430	314	165	34	6	0	0	0	0	6592
29	0	0	0	0	0	30	104	139	431	705	833	894	923	694	773	587	386	202	51	2	0	0	0	0	6754
30	0	0	0	0	0	27	141	322	511	686	817	899	921	865	743	594	375	145	58	1	0	0	0	0	7106
31	0	0	0	0	0	15	51	121	211	170	182	181	177	122	118	65 ?	?	23 ?	29	10	0	0	0	0	1476 ?
Avg	0	0	0	0	1	34	149	292	461	631	743	822	854	739	671	538	382	186	58	8	0	0	0	0	6555
S/D	0	0	0	0	2	16	52	107	149	173	193	222	176	194	197	156	92	78	31	9	0	0	0	0	1408
S/A	0	0	0	0	1.41	0.47	0.35	0.37	0.32	0.27	0.26	0.27	0.21	0.26	0.29	0.29	0.24	0.42	0.53	1.1	0	0	0	0	0.21
Min	0	0	0	0	0	8	38	67	162	170	182	181	177	122	99	65	88	23	0	0	0	0	0	0	1476
Max	0	0	0	0	5	81	226	439	623	824	929	1011	1037	949	862	677	493	295	102	47	0	0	0	0	8334
n	0	0	0	0	20	358	367	372	372	372	372	372	372	367	362	356	360	345	360	100	0	0	0	0	5227

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.7% exceed the 15% QC threshold -- 5317 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31392F3 Calibration Factor: 7.3961 μV/W/m² Calibration Date: 07/2007

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.

July 2011

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	*	
2	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
3	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
4	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
5	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
6	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
7	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
8	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
9	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
10	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
11	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
12	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
13	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
14	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
16	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
24	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
25	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
26	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	?	?	?	*	*	*	*	0	0	0	0	*	
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
31	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
Avg	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	N/A	*
SD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	N/A	N/A
Max	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	N/A	N/A
n	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 99.2% missing; 0.0% untested; 0.8% exceed the 15% QC threshold -- 5317 total daylight measurements.

Instrument: Eppley NIP Serial Number: 23398E6 Calibration Factor: 7.1447 μV/W/m² Calibration Date: 07/2007

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

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

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

**July 2011**

**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	6 ?	33	74	94	155	155	204	231	240	209	200	194	120	104	62	11	0	0	0	0	2093	
2	0	0	0	0	4 ?	36	99	141	141	127	138	161	204	261	328	226	183	167	66	16	0	0	0	0	2298	
3	0	0	0	0	1	28	105	99	165	363	437	453	490	338	331	298	227	138	62	8	0	0	0	0	3545	
4	0	0	0	0	1	41	119	197	265	285	300	314	334	331	341	265	164	29 ?	2 ?	0	0	0	0	0	2989	
5	0	0	0	0	1 ?	21	117	177	313	330	256	301	359	334	317	289	259	151	98	49 ?	0	0	0	0	3371	
6	0	0	0	0	2 ?	11	38	73	170	361	401	282	486	263 ?	231	407	88	32 ?	0 ?	0	0	0	0	0	2846 ?	
7	0	0	0	0	?	34	107	154	226	424	382	239	357	305	288	218	225	114	74	9	0	0	0	0	3156	
8	0	0	0	0	3	45	108	185	235	287	380	272	306	313	279	243	192	137	73	9	0	0	0	0	3066	
9	0	0	0	0	0	8	31	67	175	271	312	314	296	264	227	212	125	85	42	9	0	0	0	0	2437	
10	0	0	0	0	?	30	68	82	86	105	112	109	107	105	105	95	81	70	40	8	0	0	0	0	1202	
11	0	0	0	0	?	40	95	175	170	183	242	240	217	187	162	159	129	99	48	8	0	0	0	0	2153	
12	0	0	0	0	?	28	113	193	324	389	341	444	314	261	215	189	170	123	47	7	0	0	0	0	3157	
13	0	0	0	0	?	38	112	143	158	169	173	241	447	374	371	245	179	102	16	4	0	0	0	0	2772	
14	0	0	0	0	?	27	65	77	86	92	102	109	147	141	90	92	70	68	38	11	0	0	0	0	1215	
15	0	0	0	0	0	55	69	66	72	106	184	254	395	420	303	193	147	84	42	9	0	0	0	0	2399	
16	0	0	0	0	0	38	66	144	169	173	226	167	139	108	100	80	71	57	32	6	0	0	0	0	1577	
17	0	0	0	0	0	28	77	200	162	131	138	159	174	202	138	89	77	63	36	7	0	0	0	0	1679	
18	0	0	0	0	0	26	82	190	93	97	101	135	291	289	329	159	103	74	35	4	0	0	0	0	2008	
19	0	0	0	0	0	24	88	165	233	291	375	421	457	425	448	273	214	115	18	17	0	0	0	0	3565	
20	0	0	0	0	0	29	100	162	199	247	281	344	343	307	74 ?	55 ?	190	115	49	8	0	0	0	0	2504	
21	0	0	0	0	0	35	109	215	243	255	287	315	299	287	290	241	190	125	45	6	0	0	0	0	2944	
22	0	0	0	0	0	29	99	165	205	220	246	272	274	239	207	182	135	35	4	0	0	0	0	0	2585	
23	0	0	0	0	0	27	103	181	261	342	365	340	349	319	258	241	258	136	39	1	0	0	0	0	3222	
24	0	0	0	0	0	25	118	179	207	265	426	458	308	274	275	234	206	140	20	0	0	0	0	0	3137	
25	0	0	0	0	0	12	102	257	281	409	486	305	255	280	292	254	173	56	6	0	0	0	0	0	3168	
26	0	0	0	0	0	13	58	111	162	240	409	426	415	361	393	261	204	111	44	7	0	0	0	0	3217	
27	0	0	0	0	0	23	112	205	255	287	288	320	351	314	244	203	166	116	34	5	0	0	0	0	2921	
28	0	0	0	0	0	23	85	154	205	275	300	342	328	354	334	287	192	119	34	6	0	0	0	0	3039	
29	0	0	0	0	0	27	95	139	272	178	178	189	206	238	208	204	163	100	37	2	0	0	0	0	2235	
30	0	0	0	0	0	24	89	155	214	255	287	295	326	264	243	200	144	94	45	1	0	0	0	0	2636	
31	0	0	0	0	0	15	51	121	211	169	182	181	177	121	118	57 ?	?	19	29	10	0	0	0	0	1461 ?	
Avg	0	0	0	0	1	28	89	151	197	241	275	278	303	275	251	205	163	99	40	8	0	0	0	0	2600	
S D	0	0	0	0	2	10	24	48	64	96	107	99	101	82	94	79	53	37	21	9	0	0	0	0	670	
S/A	0	0	0	0	1.97	0.37	0.27	0.32	0.33	0.4	0.39	0.36	0.33	0.3	0.38	0.38	0.33	0.37	0.53	1.13	0	0	0	0	0.26	
Min	0	0	0	0	0	8	31	66	72	92	101	109	107	105	74	55	70	19	0	0	0	0	0	0	1202	
Max	0	0	0	0	6	55	119	257	324	424	486	458	490	425	448	407	259	167	98	49	0	0	0	0	3565	
n	0	0	0	0	10	349	372	372	372	372	372	372	372	372	367	368	360	360	356	363	99	0	0	0	0	5236

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.5% exceed the 15% QC threshold -- 5317 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31393F3 Calibration Factor: 7.6820  $\mu\text{V}/\text{W}/\text{m}^2$  Calibration Date: 07/2007

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

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

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

**July 2011**

**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	23.4	22.8	22.1	21.6	21.1	21.2	22.8	25.6	27.1	28.7	29.5	30.2	30.5	30.7	31	29.7	29.5	28.7	28.1	26.7	25.7	25.2	24.6	24.3	26.3
2	23.7	23	22.5	22.6	22.2	22.2	24.3	25.5	27.5	29	30.5	31.2	31.7	31.9	31.5	29.9	29.8	29.2	28.4	27.2	26.1	25.4	25.1	25	26.9
3	25	24.8	24.7	24.3	24	23.8	24.2	24.5	25.1	26.8	28.8	29.8	30.7	32.1	32.7	33.1	33.2	32.9	32.3	31.1	29.5	28.5	27.7	27.1	28.2
4	27	26.5	25.9	25.4	24.6	24.4	25.4	26.4	27.5	28.9	30.1	31.3	32.1	33.1	33.7	33.8	33.4	32.2	30.1	26	23.7	22.6	22.3	22.4	27.9
5	22.5	22.8	22.6	22.7	22.6	22.3	22.8	23.9	25.2	26.3	27.7	29.2	30	29.8	29.7	30.8	31.3	29.2	27.2	25.2	24.7	24.5	24.6	24.5	25.9
6	24.4	24.5	24.5	24.4	24.4	24.5	24.8	25.1	25.7	26.6	27.5	26.9	27.5	27.1	23.1	26.7	26.6	24.4	22.4	21.4	21.8	21.8	21.7	21.8	24.6
7	22.1	22.5	22.5	22.4	22.2	22.3	23	24.3	26.1	27.2	27.9	29.3	30.2	31.3	31.9	29	26	26	26.2	26	26	26.1	26	25.4	25.9
8	25.3	25.1	25	25.2	25.2	25.3	26.1	26.9	27.2	28.3	28.8	29.3	29.9	29.7	28.6	28.8	28.9	28.1	27.5	27.1	26.7	26.4	26.2	26	27.1
9	26	25.8	25.6	25.4	24.1	22.7	22.7	23	23.2	23.9	24.2	26.8	28.7	29.6	29.9	29.8	29.7	28.3	26.8	25.4	24.8	24.2	23.6	23	25.7
10	22.4	22.1	21.8	21.6	21.3	21.3	23.3	25.8	27.6	28.3	29.1	29.6	30.1	30.2	30.4	30.1	29.5	28.8	27.7	26.1	25.1	24.3	24	23.7	26
11	23.6	22.9	22.7	22.5	22.7	23.1	24.7	26	26.8	28.3	29.5	29.6	30.9	31.2	31.8	31.4	30.7	29.8	29	27.8	27.2	26.7	26.6	26.4	27.2
12	26.1	26.1	25.5	25	25.2	25.5	26.1	27.1	28.4	28.7	28.6	30.4	31.8	32.9	33.8	34.3	33.9	33.4	32.9	31.4	30.4	29.8	29.5	28.7	29.4
13	27.8	27.1	25.2	25	24.9	24.9	26.4	28.7	30.9	32.4	32.9	33.5	33.8	33.8	33.4	33.8	32.9	32.2	31.6	30.2	29.6	27.5	25.9	25.2	29.6
14	24.4	24	23.9	23.6	23.3	23.6	23.9	24.7	25.1	25.6	25.8	25.5	25.8	25.7	25.8	25.3	24.8	23.9	23.1	22.3	21.7	21.7	21.6	21.5	24
15	21.3	20.6	19.8	18.7	18.5	20	21.9	23.4	24.6	25.2	25.7	26.2	26.1	26.1	26	26.2	25.9	25.9	25.3	24.4	23.3	22.9	22.8	22.7	23.5
16	22.4	22.3	22.4	21.9	21.5	21.7	23.6	24.7	25	26.2	26.7	27.2	27.5	27.5	27.6	27.4	27.1	26.7	25.9	24.6	24	23.8	23.4	23	24.8
17	22.7	22.7	22.5	22.5	22.4	21.9	23.6	25.2	26.3	27.4	28.1	28.8	29.6	29.3	29.4	29.1	28.5	28	26.9	25.5	24.5	23.8	23.3	22.9	25.6
18	22.5	22.2	21.7	21.2	21	21.1	22.5	23.7	25.4	27	28.2	29.4	29.6	30	30.4	30.4	29.5	28.6	27.9	26.4	25.4	24.9	24.5	24.2	25.7
19	23.5	22.9	22.5	22.5	22.1	22.1	23	24.7	26.2	27.8	29.1	30.9	32	32.2	32.7	32.8	32.9	32.4	31.4	29.7	28.8	28.2	27.8	27.2	27.7
20	26.6	26.2	25.8	25.4	25.1	24.9	25.7	26.9	28.2	29.7	30.9	32.5	33.2	33.6	31.7	26.3	27.2	29	29.3	28.1	27.4	27	26.8	26.7	28.1
21	26.5	26.2	26	25.6	25.3	25.4	26.1	27.2	29.2	31.1	31.4	32.8	33.8	34.5	35	35.2	34	33.4	31.8	30.6	29.8	29.3	29.1	28.7	29.9
22	28	27.5	27.1	27	26.7	26.4	27.2	28.6	29.9	31.7	33.5	33.9	35	36	36.9	37	36.7	36	33.6	31.9	30.6	29.7	28.9	28.3	31.2
23	27.9	27.6	27.4	27.1	26.9	26.8	27.5	28.6	29.8	31.2	31.6	32.1	33.5	34.7	35.5	35.9	35.8	34.1	32.3	31.1	30	29	28.2	27.6	30.5
24	27.2	26.6	26.3	25.9	25.6	25.7	26.4	27.5	29.4	30.6	31.9	32.1	32.9	33.9	35	35.7	35.3	34	30.7	25.4	24.5	24.7	24.4	24.2	29
25	23.8	24	24.1	24.1	24.1	24.1	24.4	25.5	26.1	27.7	29	30.2	31.5	32.4	33.2	32.8	29.6	28.1	26.6	25.3	24.7	24.1	23.5	23.5	26.8
26	23.7	23.9	23.8	23.7	23.7	23.6	23.9	24.4	25	25.6	26.5	27.4	28.3	28	29.7	30.4	30.7	29.3	28	26.7	26	25.4	25	24.7	26.1
27	24.5	24.3	24	23.9	23.6	23.6	23.9	24.9	26.7	28.8	30.7	31.3	31.8	31.5	31.3	31.3	30.6	29.8	28.7	27.8	27.3	27	26.4	26.1	27.5
28	26	25.9	25.8	25.6	25.5	25.8	26.2	27.8	29.4	30.7	31.4	32.1	33.1	33.3	33.7	34.3	34.2	32.6	31.3	30.6	29.8	29.1	28.4	28.1	29.6
29	27.6	27.2	26.6	26.4	26.1	25.7	26.4	27.1	28.4	30.9	32.9	34.6	35.7	36.6	37.1	37.1	35.3	34.8	33.9	32.1	30.6	29.7	29.2	28.5	30.8
30	28.2	27.7	27.5	27.1	26.6	26.3	27.4	29.8	31.2	32.1	31.8	32	33	33.1	32.5	32.1	30.8	29.9	29.6	28.4	27.8	27.5	27	26.4	29.4
31	26.4	25.8	25.5	25.4	25.5	25.6	26.5	27.5	28.4	28.2	26.6	27.4	28.1	26.7	26.2	25.6	25	24.2	23.8	23.9	23.5	23.9	23.9	23.4	25.7
Avg	24.9	24.6	24.3	24.1	23.8	23.8	24.7	26	27.2	28.4	29.3	30.1	30.9	31.2	31.3	31.2	30.6	29.8	28.7	27.3	26.5	26	25.6	25.2	27.3
S D	2	2	1.9	2	2	1.8	1.6	1.7	2	2.2	2.3	2.3	2.5	2.8	3.3	3.4	3.3	3.2	3	2.8	2.6	2.4	2.3	2.2	2.1
S/A	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.11	0.11	0.11	0.11	0.11	0.1	0.1	0.09	0.09	0.09	0.08
Min	21.3	20.6	19.8	18.7	18.5	20	21.9	23	23.2	23.9	24.2	25.5	25.8	25.7	23.1	25.3	24.8	23.9	22.4	21.4	21.7	21.7	21.6	21.5	23.5
Max	28.2	27.7	27.5	27.1	26.9	26.8	27.5	29.8	31.2	32.4	33.5	34.6	35.7	36.6	37.1	37.1	36.7	36	33.9	32.1	30.6	29.8	29.5	28.7	31.2
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**July 2011**

**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	103.9	104.1 ?	?	?	?	?	?	98.2	85.4	65.7	61	55	55.8	55	53.4	64	64.4	65.2	67.6	71.6	75.9	76.9	79	82.5	72.9 ?
2	88.6	94	97.8	99	102.6	104.4	102.2	99.6	88.8	71.9	55.1	46.2	42.8	44.8	54.6	64.2	60.6	68.1	72.4	81	87.7	93.6	98.5	98.6	79.9
3	97	98.7	103	104.6	104.9 ?	104.9	104.4	103	100.6	95	87.9	83.4	79.6	73.1	68.6	67.8	66.3	66.5	68.6	74.3	86	83.8	85.6	87.1	87.3
4	82.5	81.2	83	83.9	90.1	93.5	88.3	81.6	80.4	78.4	77.7	76	74.4	71.6	69.5	66.5	64.6	70.7	79.5	91.8	101.8	?	?	?	80.3 ?
5	?	?	?	?	?	?	?	103.5	99.2	95.9	90.9	83.8	82.8	87.4	86.9	82.2	80.2	91.5	95.1	98.8	100.5	102.8	103.6	104.4	93.5 ?
6	104.6	104.9 ?	?	?	104.2	102.9	104.1	105 ?	103.8	99.4	97	98.8	95.7	94.3	104.3 ?	98.2	96.6	101.2	104.7	?	?	104.9	104.9	105	101.7 ?
7	105	104.9	104.7	104.4	104.5	104.3	103.7	100.6	93	87.6	86.4	81.3	81	76.8	75.6	90.9	99	96.1	98.3	101.3	103.4	104.9 ?	103.7	103.8	96.5
8	104.8	?	?	?	?	?	103.7 ?	101.5	100.8	96.4	95.7	92.5	90.7	92	90.3	95	93.9	96.7	97.7	98.9	99.2	99.8	100.6	100.7	97.4 ?
9	100	100.8	101.9	101.8	100.5	?	?	?	?	103.9 ?	103	93.5	84.1	79.1	79.2	81	81.4	91.2	96.5	99	100	103.3	104.8 ?	?	95 ?
10	?	?	?	?	?	?	102.4 ?	94.9	81.4	75.6	73.1	65.5	61.1	59.5	60.8	66.5	69.8	78.2	86.5	95.3	101.2	104.3 ?	?	?	79.8 ?
11	?	?	?	?	?	?	104.4 ?	101.6	95.8	87.9	85.5	79	69.1	66.3	64.2	70.2	77	84.5	87.2	92.1	90.8	93.6	97.5	99.3	85.9 ?
12	99.3	95.6	95.6	97.9	99.2	101.6	101.8	100.3	97.8	97.4	97.8	92.6	86.3	80.8	77.8	76.2	81.7	85.1	86.8	93.3	96.8	97.9	98.6	101.9	93.3
13	95.5	97.5	104.4 ?	?	?	?	102.3	96.4	87.6	75.9	72.4	69.5	66.5	68.4	70	65.7	70.6	75	77.9	84.1	87	93	98.9	100.8	83.8 ?
14	104.3	104.8 ?	104.9 ?	105 ?	?	100.7	93.9	87.3	82.5	77.4	76.8	77	72.4	72.3	67.7	72.1	75.9	84.6	89.5	90	89.8	91.4	92.6	91.5	87.2 ?
15	93.6	92.8	94.5	100.7	102.2	94.5	85.1	79.5	71.2	68.6	66.3	62.5	65.6	66.9	67.3	68.4	70.4	69.4	70.4	74.6	91.1	96	96.3	97	81
16	98	97.4	97	100.2	102.5	102.7	96.9	90	86.4	80	75.1	72.8	69.3	66.5	63.8	65.6	66.5	67.5	74.3	85.7	92.1	94.1	96.2	98	84.9
17	99.8	99.8	100	98.8	98.1	99	91.8	81.5	74.3	65	62	64.6	58.5	58	60.1	63.6	63.2	62.2	65.9	74.3	82.1	88.7	93.1	95.6	79.2
18	97.8	100.1	102.5	104.7 ?	?	?	101.2	97	88.1	79.5	73.7	69.2	69	64.9	62.4	63.2	72.9	77	77.8	81.3	83.3	86	92.8	94	83.6
19	95.1	97.7	99.7	99.2	98.5	97.5	94.8	86	80.7	80	80.8	78.5	76.9	73	69.8	69.6	69.5	73.6	78.7	86.3	89.2	91.2	92.5	92.1	85.5
20	92.7	95.6	96.5	97.8	100.1	101.1	99.9	96.8	94.3	91.2	88.3	82.4	78.2	75.4	84.6	99	100	95.8	92.5	93.1	101.3	103.7	104.7	104.5	94.6
21	104.8 ?	?	?	?	?	?	?	103.5 ?	98.6	92.7	93.5	85.2	76.2	76.5	76.1	76.3	81.9	80.9	81.3	89.1	95.7	98	93.9	93.8	88.8 ?
22	97.7	100.1	101.7	101.1	101.6	102.7	100.9	97.3	93.5	87.9	82.7	82.6	77.7	73.4	66.6	64.8	68.3	72.4	88.2	83	92.7	95.4	99.3	101.6	88.9
23	103.2	103.4	101.5	101.1	100.6	100.3	98.2	95	91.5	87.5	87.8	85.3	81.5	77	73.1	69.8	70.2	77.7	81	78.5	83.7	88.1	91.4	94	88.4
24	95.9	96.1	97	99.2	102	103.2	102.2	99.7	93.7	88.5	84	82.5	80.8	77.2	74.4	72.9	72.3	73.1	80.9	98.2 ?	?	?	?	?	88.7 ?
25	?	?	?	?	?	?	?	102.8	100.7	96.7	93.8	89	83.3	79.8	75.9	79	93.9	97.5	97.6	103.7 ?	?	?	104.9 ?	?	92.8 ?
26	?	?	?	?	?	?	105 ?	104.3	102.4	100.7	98.5	96.4	93.9	96.5	91	87	85.4	88.6	97.4	102.5	104.4 ?	?	?	?	96.9 ?
27	?	?	?	?	?	?	?	?	101.8	93.4	85.8	82.3	79.3	80.2	73.6	70.3	69.1	67	75.1	82.5	91	95.4	102.4	105 ?	84.6 ?
28	?	?	?	?	?	?	104.8 ?	101.4	94.7	90	85.4	82.9	74.8	77.1	74.4	70.6	71.3	84.3	92.7	93.5	96.6	97.8	99.2	99.9	88.4 ?
29	100.4	101.5	102.6	100.4	99.9	101.1	99.5	96.9	93.7	86.7	79.5	75.7	67.9	62.5	55.3	58	69	69.1	74.8	83.9	92.9	100.7	102.7	104.3	86.6
30	103.6	100.9	100.1	100.7	102	102.7	99.3	89.1	86	82.1	80.2	78	76.3	77.3	79.4	81.6	82.5	80.1	81.4	88.7	93.3	95.2	97.7	100.3	89.9
31	101.4	104	103.7	103.5	103.2	102.1	101.2	98.6	93.5	90.6	101.3	94.7	94	101.9	103.7 ?	?	?	?	?	103.4 ?	?	103.1 ?	103.7 ?	?	100.4 ?
Avg	98.7	98.9	99.6	100.2	100.9	101.1	99.7	96.3	91.4	86.1	83.2	79.3	75.7	74.4	73.4	74	76.3	79.7	83.9	89.1	93	95.7	97.8	98.2	88.3 ?
S D	5.6	5.4	5	4.6	3.3	3.2	5.2	7.3	8.5	10.4	12.1	12.1	11.7	12.3	12.6	10.9	11.2	11.2	10.6	9.4	7.3	7	6.3	5.9	6.8
S/A	0.06	0.05	0.05	0.05	0.03	0.03	0.05	0.08	0.09	0.12	0.15	0.15	0.15	0.16	0.17	0.15	0.15	0.14	0.13	0.11	0.08	0.07	0.06	0.06	0.08
Min	82.5	81.2	83	83.9	90.1	93.5	85.1	79.5	71.2	65	55.1	46.2	42.8	44.8	53.4	58	60.6	62.2	65.9	71.6	75.9	76.9	79	82.5	72.9
Max	105	104.9	104.9	105	104.9	104.9	105	105	103.8	103.9	103	98.8	95.7	101.9	104.3	99	100	101.2	104.7	103.7	104.4	104.9	104.9	105	101.7
n	281	237	224	215	208	215	257	336	359	369	372	372	372	372	358	360	360	360	359	346	317	301	303	278	7536

Data Recovery: 0.0% missing; 0.0% untested; 15.6% failed QC -- 8928 total measurements.

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**July 2011**

**Dry Bulb Temperature (CR10)**  
**Hourly and Daily Averages**  
**Instrument: CSI**  
**Degrees Celsius**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	22.7	22.1	21.5	21	20.8	20.6	22.4	26.8	31.8	35	37.3	38.2	38.1	37.4	37.5	37.2	36.3	35	32.5	29.9	27.1	25.4	24.3	23.7	29.4
2	23.1	22.5	21.5	21.1	21.1	20.9	22.7	27.2	31.4	34.6	36.4	37.9	38.1	38	38.3	37.4	35.7	33.9	32.4	30.2	27.6	26	25.1	24.5	29.5
3	24.2	24.1	24.1	24	23.8	23.6	24	24.8	25.5	27.4	32	33.4	34.3	35.6	36.8	37.6	37.9	37.5	35.9	33.8	31.6	29.9	28.6	27.8	29.9
4	27.3	26.9	26.4	25.7	24.9	24.2	24.9	27.1	29.6	31.7	33.8	35.4	36.2	36.7	37.8	38.5	38.1	35.6	33.2	30.3	26.5	23.9	22.7	22.3	30
5	22.2	22.3	22.4	22.4	22.5	22.4	22.8	25.7	28.9	31.7	34.1	36	37.2	36.5	35.3	34.9	35.8	35.5	32.5	29	26.6	25.2	24.6	24.3	28.8
6	24.2	24.1	24.2	24.3	24.3	24.4	24.7	25.2	26	27.4	30	30.5	29.7	31.6	27.6	27.3	30	28.3	25.2	23.2	22.4	22.3	22.1	22	25.9
7	22.1	22.3	22.5	22.5	22.4	22.3	23	25.1	28.8	31.9	33	34.6	35.7	36	37.4	37.4	32.7	29.9	28.2	27.3	26.5	26.4	26.3	25.9	28.3
8	25.5	25.3	25	24.9	24.9	25	26.2	28.6	29.4	30.5	33.6	34.5	34.9	34.7	34.6	34.4	34.1	32.6	30.7	29.1	27.8	27.1	26.7	26.6	29.5
9	26.5	26.3	26.1	25.8	25.5	24.1	23.2	23.2	23.5	24.5	25.1	27.4	31.5	33.2	34.5	35.1	35.8	35.2	33.1	29.6	26.3	24.5	23.2	22.5	27.7
10	22	21.8	21.4	21.3	21	20.8	22.5	26.8	31.4	34.5	35.8	36	35.6	35	35.1	35.8	36	35.4	33.5	30.1	26.7	25	23.9	23.4	28.8
11	23	22.5	22	21.9	21.9	22.1	23.9	27.6	30.1	32.6	35.8	36.1	35.2	35.9	36.5	37.5	37.5	36.1	34	31.2	28.6	27.4	26.7	26.5	29.7
12	26.3	26.1	25.8	25.3	25.1	25.2	25.7	27.3	29.8	31.7	32.1	33.4	35.9	37.8	39.3	40.4	40.5	39.5	37.7	35.1	32.1	30.4	29.6	29	31.7
13	28.6	28.2	26.8	25.4	25	24.8	25.6	28.5	32.8	37.1	39.7	41.1	41.5	41.1	39.8	39.8	38.8	36.3	34.3	32.4	30.7	29.5	27.7	26.2	32.6
14	25.4	24.6	24.1	23.8	23.5	23.4	24.5	26.6	28.5	29.9	30.9	31.1	30.7	30.3	30.3	30.7	30.4	29.6	27.9	25.1	22.6	21.3	20.7	20.4	26.5
15	20.1	19.7	18.9	18	17.3	17.5	20.8	24.7	27.6	29.5	30.6	31	31	30.8	30.5	30.8	30.8	30.8	30	27.5	24.8	23.5	22.6	22	25.4
16	21.7	21.3	21.2	20.9	20.7	20.7	22.7	26.3	29.1	30.4	32.3	32.9	32.8	32.2	32	32.6	32.7	32.4	31.1	28.3	25.4	24	23.2	22.6	27.1
17	22	21.8	21.8	21.7	21.5	20.9	22.5	26.9	29.5	33.2	35.2	35.6	36.1	35.7	35.6	35.6	35.2	34.1	32.3	29.2	26.1	24.4	23.3	22.4	28.4
18	21.8	21.3	20.9	20.2	19.9	20	22.1	25.1	28.5	31.7	34.3	35.8	36.2	35.3	35.8	36.3	36	34.7	32.9	30	27.1	25.4	24.5	24	28.3
19	23.5	22.9	22.3	22	21.8	21.6	22.5	25.2	27.7	31.1	33.4	35.3	36.9	37.6	37.4	37.4	37.3	36.1	34.3	32.2	30.4	29.1	28.4	27.7	29.8
20	27.1	26.5	26.1	25.7	25.2	24.9	25.6	28.3	31.6	34.9	37.6	39.2	40.2	40.2	38	33.1	29	31.7	32.4	30.8	28.9	27.8	27.2	26.8	30.8
21	26.5	26.2	25.9	25.6	25.3	25.2	25.8	27.7	31.6	36.3	38.7	39.5	40	40.2	40.9	41.5	41.3	39.7	37.1	33.8	31.4	30.2	29.4	29	32.9
22	28.6	28	27.5	27.1	26.8	26.5	27.3	30	33	35.6	38.6	40.1	40.5	40.7	41.7	42.2	42.3	41.6	38.9	35.4	32.8	31.2	30.1	29.2	34
23	28.5	28	27.6	27.3	27	26.8	27.4	29.7	32.5	35.3	37.3	37.9	38.3	39	40.2	41	41.4	39.6	36.5	33.7	31.7	30.3	29.2	28.4	33.1
24	27.8	27.1	26.6	26.2	25.7	25.5	26.2	28.3	31.7	35.1	37	37.9	37.9	38.3	39.4	41.1	41.4	40.2	37.1	31.8	27.1	25.4	24.8	24.4	31.8
25	24.1	23.9	23.9	23.8	23.8	23.9	24.2	25.6	28.1	29.6	32.5	34.9	36.5	37.1	38.1	39.1	37.1	33.6	30.1	27.7	25.9	24.9	24	23.5	29
26	23.5	23.7	23.8	23.8	23.7	23.7	23.9	24.6	25.8	26.9	28.4	30.4	31.6	32.7	33.5	36	37.5	36.9	34.1	30.5	27.7	26.2	25.3	24.7	28.3
27	24.3	24.1	23.8	23.8	23.7	23.7	23.8	25.2	28.8	32.4	36.6	39.3	39.9	39	37.8	37.3	37.5	36	33	30.1	28.3	27.3	26.6	25.9	30.3
28	25.5	25.4	25.4	25.3	25	25	25.5	28.3	32.3	35.9	38.2	38.9	38.9	39	39	38.9	39.7	38.3	35.5	32.8	31.1	29.9	29	28.3	32.1
29	27.8	27.3	26.8	26.3	26	25.7	26.3	27.5	28.9	32.9	36.9	39.3	41.1	42	42.4	43.5	43.3	41.5	39.5	36.1	32.8	30.8	29.4	28.5	33.4
30	28	27.6	27.3	27.1	26.7	26.3	27	30.6	34	36.7	37.8	38.2	38.9	39.5	39.5	39.1	38.3	35.7	33.9	31.3	28.9	27.7	27.2	26.6	32.2
31	26	25.6	25.3	25.2	25.1	25	25.4	26.6	28.5	30.3	29.3	28.4	29.6	29.7	28.2	26.9	25.9	25.2	24.5	23.8	23.5	23.4	23.6	23.6	26.2
Avg	24.8	24.5	24.2	23.9	23.6	23.4	24.4	26.8	29.6	32.2	34.3	35.5	36.2	36.4	36.5	36.7	36.3	35.1	33	30.4	28	26.6	25.8	25.2	29.7
S D	2.4	2.4	2.3	2.3	2.3	2.2	1.7	1.7	2.4	3.1	3.5	3.6	3.4	3.3	3.7	4	4.1	3.9	3.5	3.1	2.9	2.7	2.6	2.5	2.3
S/A	0.1	0.1	0.1	0.1	0.1	0.09	0.07	0.07	0.08	0.1	0.1	0.1	0.09	0.09	0.1	0.11	0.11	0.11	0.11	0.1	0.1	0.1	0.1	0.1	0.08
Min	20.1	19.7	18.9	18	17.3	17.5	20.8	23.2	23.5	24.5	25.1	27.4	29.6	29.7	27.6	26.9	25.9	25.2	24.5	23.2	22.4	21.3	20.7	20.4	25.4
Max	28.6	28.2	27.6	27.3	27	26.8	27.4	30.6	34	37.1	39.7	41.1	41.5	42	42.4	43.5	43.3	41.6	39.5	36.1	32.8	31.2	30.1	29.2	34
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**July 2011**

**Wind Speed**  
**Hourly and Daily Averages**  
**Instrument: NRG MAX-40**  
**Meters per Second**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0.4	0.1	0	0	0.2	0.7	0.8	1.6	1.5	1.8	2.1	2.3	3.3	2.8	2.5	2.8	2.2	0.9	0.6	0.5	0.3	1.1
2	0.3	0	0.2	0.1	0.2	0.2	0	0.9	0.7	1.7	1.3	1.9	1.8	1.2	2.1	4	3.5	3.2	3.5	2.4	2.2	1.7	1.1	1.3	1.5
3	1.1	1.1	1.9	1.6	2.3	2.2	2.1	2.2	2	1.6	2.2	3	3.3	3	3.4	3.3	3.2	3.8	2.8	2.2	3.9	3.5	3.6	3.8	2.6
4	2.6	1.7	0.7	0.6	0.4	0.8	2.4	3.8	4.2	4	4.1	4	4	3.7	3.6	3.7	3.2	2.1	2.2	2.9	1.7	0.9	0.5	0.5	2.4
5	0.5	0.1	0	0.2	0.1	0.1	0.4	0.8	1.3	1.1	1	0.8	2.1	3.2	2.8	1.1	1.8	3.5	4.9	3.7	2.6	1.9	1.4	1.3	1.5
6	1.2	1.4	1.4	0.7	1.2	1.1	1.5	1.5	2.6	2.8	3.1	2.6	1.6	3.9	1.6	1.1	2.1	2.2	1.8	1.8	3.1	1.6	0.5	0.1	1.8
7	0.7	0.6	0.5	0.5	0.4	0.2	0.9	1.6	1.7	1.9	1.8	1.9	2	2.2	2.2	4.6	5	3.6	2.1	1.3	1.2	2.3	2.5	1	1.8
8	0.1	0.4	1.2	1.4	1.8	2	2.7	2.6	2	2.5	4	3.8	4.4	5	4.4	4.5	4.5	4.6	5.1	4.3	4.8	4.7	4.2	4.5	3.3
9	4.2	3.7	2.8	2.1	2.1	1	0.7	0.6	1.3	2.4	1.8	2.4	2.8	3	3.2	2.9	2.6	2.8	2.5	1.4	0.6	0.1	0.1	0	2
10	0.1	0.1	0.2	0.1	0	0.2	0.3	0.3	0.8	1.9	2.5	3.1	3	3.4	3	3.2	2.9	2.7	2.5	2.1	1.9	1.2	0.7	0.4	1.5
11	0.3	0	0	0	0	0	0.2	1.1	1.5	1.7	1.7	1.1	2.7	2.9	2.6	2.8	3.6	3.9	3.3	2.6	2	2.2	3.2	4.5	1.8
12	4.8	2.9	2.1	2.2	2.5	2.5	2.9	3.8	2.7	2.9	3	2.9	2.2	1.7	1.8	2.1	2.5	2.1	1	0.3	0.1	0.4	0.8	2.1	2.2
13	1.5	2	0.4	0.1	0.2	0.1	0.8	1.2	1	1.4	1.2	1.5	1.6	1.4	2	1.8	1.2	0.8	0.6	0.5	0.7	2.4	0.5	1.4	1.1
14	1.5	0.8	0.5	0.8	1.9	3	3.2	3.9	4.2	3.8	3.8	4.3	4	4.1	4.1	4.8	4.4	4.6	4.2	2.9	2.1	1.9	2	1.5	3
15	1.5	0.8	0.3	0.6	0.7	1.1	1.4	2.6	3.5	3.7	4.5	4.7	4.8	4.3	4.6	4.5	4	3.7	3.3	1.5	1.5	1.9	1.8	1.5	2.6
16	1.4	1	0.7	0.1	0.4	0.4	1.4	2.5	3	3	3.2	3.6	3.9	4.2	3.7	3.9	3.7	3.4	2.7	2.4	2.2	1.3	0.9	0.4	2.2
17	0.6	0.1	0.1	0	0	0	0.5	1.5	1.1	1.2	1.3	2.2	2.2	1.8	2.7	3.3	3.3	3.3	3.1	2.2	1.8	1.2	0.5	0.5	1.4
18	0.1	0.2	0	0	0.1	0.8	1.3	1	2.1	1.6	1.8	1.7	1.8	2.3	2.7	3.2	3.6	3.9	3.4	2.9	2.1	2	2.1	2.3	1.8
19	1.5	1.6	2	1.7	1.1	1.8	2	2.7	2.2	2	1.9	2.2	2	2.6	2.8	3	2.4	1.3	1.6	1.7	1.9	2	2	2.1	2
20	2.3	2.6	2.4	1.5	1.2	0.7	1.3	2.1	1.7	1.4	1.9	2	2.1	2.3	2.6	1.9	0.7	2.4	1.5	1.8	2.6	2.2	2.6	1.9	1.9
21	1.2	0.8	0.1	0.1	0.2	0.3	1.1	1.7	0.9	1.2	2.2	2.1	2.4	2	2.6	2.7	3.2	2.9	2.5	1.6	1.6	1.8	1.8	2.2	1.6
22	2.5	2.3	2.2	1.1	1.1	0.5	1.1	2.4	2.7	2.3	2.4	3	3	3	3.2	3.7	3.1	3	3.1	3	2.9	2.9	2.9	2.7	2.5
23	2.6	2.7	2.3	2.1	1.5	1	2.3	2.8	2.6	2.3	3.4	3.6	3.4	3	3.8	3.6	3.9	3.1	4	2.6	2.1	1.5	1.9	1.8	2.7
24	2	2.1	2.3	1	1.2	1.6	2.1	2.6	2.3	2.6	3	3.5	3.1	3.1	2.5	2.2	2.7	3.6	3	1.6	0.8	0.5	0.5	0.2	2.1
25	0.8	0.6	0	0.1	0.6	0.6	0.2	1.4	1.6	1.1	2.2	2.6	2.7	2.5	2.7	3.6	4.7	4.3	4.5	3.2	3.4	1.7	0.2	1.5	2
26	1	2.7	1.7	1.1	1.1	0.6	0.6	1	1.5	1.8	2.3	2.3	1.8	2.7	2.1	2	2.3	2.7	2.6	2.6	2	1.6	1.3	1.4	1.8
27	1.7	0.9	1.2	1.2	1.2	1.2	1	1.4	2	1.1	1.5	1.4	1.9	2.6	3	3.1	3.2	3.1	2.5	2.4	2.2	1.8	1.1	0.8	1.8
28	0.8	0.7	0.6	0.1	0.3	0.4	0.4	1.2	1.7	1.7	2.5	2.5	3	3.3	3	2.2	2.3	3.1	2.4	1.8	1.7	1.3	1.4	1.6	1.7
29	2	1.3	1.1	1.5	1.8	1.9	1.6	1.9	2.4	2.5	2.5	1.8	1.8	1.9	2.3	1.9	2.8	1.8	0.8	0.7	1.3	0.6	0.2	0.9	1.6
30	1.2	1.1	1.2	1	0.9	0.8	0	1.7	2.5	3.6	3.7	3.4	2.1	2.5	3.5	3.1	3.4	2.2	1.6	1.1	0.2	0.3	0.1	0	1.7
31	0.1	0.5	0.2	0	0	0.1	0.5	0.3	0.8	1.9	0.1	0	0.3	0.5	1.3	1.1	0.4	0.8	1.3	0.3	0.3	0.1	0.5	0.3	0.5
Avg	1.4	1.2	1	0.8	0.9	0.9	1.2	1.8	2	2.1	2.4	2.5	2.6	2.8	2.9	3	3	2.9	2.7	2.1	1.9	1.6	1.4	1.5	1.9
SD	1.1	1	0.9	0.7	0.8	0.8	0.9	1	0.9	0.9	1	1.1	1	1	0.8	1	1.1	1	1.1	0.9	1.1	1	1.1	1.2	0.6
S/A	0.84	0.85	0.91	0.93	0.88	0.92	0.76	0.57	0.48	0.41	0.43	0.43	0.38	0.36	0.28	0.35	0.35	0.33	0.42	0.46	0.56	0.61	0.78	0.82	0.3
Min	0	0	0	0	0	0	0	0.2	0.7	0.8	0.1	0	0.3	0.5	1.3	1.1	0.4	0.8	0.6	0.3	0.1	0.1	0.1	0	0.5
Max	4.8	3.7	2.8	2.2	2.5	3	3.2	3.9	4.2	4	4.5	4.7	4.8	5	4.6	4.8	5	4.6	5.1	4.3	4.8	4.7	4.2	4.5	3.3
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**July 2011**

**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	133	0	0	342	342	0	239	139	254	20	19	338	343	349	13	88	80	86	118	121	126	132	120	144	64
2	127	134	203	188	227	339	278	283	348	23	46	61	49	46	94	101	116	129	124	155	152	158	157	160	110
3	158	182	191	188	190	192	201	224	219	246	209	212	218	226	229	222	208	201	204	188	188	189	191	191	204
4	194	246	261	254	148	173	210	228	219	216	219	212	221	231	219	216	215	193	248	17	322	320	86	152	222
5	153	168	270	268	291	303	294	304	260	267	249	243	84	76	65	43	84	109	160	191	195	197	200	196	153
6	191	193	195	202	198	202	196	200	210	214	231	223	227	204	184	151	96	154	339	146	166	231	203	281	197
7	197	198	215	219	204	204	225	235	228	225	231	219	222	212	209	133	137	153	174	202	154	167	184	203	186
8	205	202	158	176	176	180	192	187	214	185	147	162	164	172	174	182	182	181	188	189	192	191	195	191	181
9	202	214	207	254	296	203	221	301	322	338	343	356	352	5	11	12	31	59	67	67	76	75	81	321	347
10	277	305	338	309	355	327	332	55	70	86	98	92	95	99	104	95	97	95	84	78	112	129	140	147	95
11	134	0	227	215	0	0	157	214	213	171	148	195	167	158	170	162	128	122	148	156	172	178	187	188	164
12	187	207	216	211	213	207	212	220	229	250	248	255	257	236	232	238	217	223	220	201	201	213	175	206	222
13	216	357	173	308	321	319	328	353	21	22	358	325	289	285	313	303	314	318	316	89	14	12	46	356	335
14	358	355	335	319	339	1	11	15	15	19	33	43	33	36	34	35	38	39	39	39	41	46	52	57	28
15	55	45	16	339	11	34	51	69	86	94	92	88	108	108	108	107	115	113	118	116	65	66	70	70	93
16	71	84	79	50	54	54	81	82	89	87	88	87	87	107	97	100	92	93	97	98	99	108	117	122	92
17	129	133	144	159	0	178	145	152	208	220	106	87	79	112	133	96	116	115	127	123	124	129	139	143	120
18	154	170	158	202	246	261	259	251	242	230	216	227	177	168	153	159	139	134	138	154	165	176	184	195	175
19	200	200	196	202	202	197	212	220	221	221	209	179	208	217	224	211	217	205	164	173	167	179	191	188	202
20	187	187	197	198	198	206	191	191	200	201	161	142	139	154	116	315	69	83	139	136	153	161	159	168	164
21	166	162	165	131	112	127	141	149	167	104	69	133	171	178	168	174	166	174	182	179	177	195	196	190	165
22	193	195	195	204	229	208	209	222	228	214	201	172	175	176	208	208	187	178	172	183	187	190	192	193	194
23	192	193	197	196	202	207	225	232	228	204	187	194	180	192	178	169	185	175	181	232	230	201	196	201	196
24	197	213	229	216	211	216	227	231	216	214	235	238	251	254	229	226	201	229	320	320	257	240	271	232	234
25	210	215	240	189	225	226	200	213	233	213	194	192	197	210	228	180	179	199	248	250	274	297	301	194	216
26	240	198	236	252	270	283	275	260	248	260	248	248	213	200	189	180	174	172	186	190	199	198	203	206	212
27	199	210	202	230	248	247	256	248	254	304	53	60	66	43	42	51	53	66	62	82	88	89	113	118	68
28	111	104	126	104	138	141	150	144	151	140	134	152	156	144	143	170	157	134	140	137	122	139	171	190	146
29	194	196	223	228	235	236	246	255	261	257	255	255	270	311	316	26	83	75	69	72	96	98	123	180	248
30	203	223	235	237	247	332	10	4	32	48	52	50	44	70	59	51	61	70	57	78	103	133	58	50	53
31	346	309	290	2	335	74	80	88	162	189	83	77	352	303	3	344	193	172	48	170	221	127	337	330	28
Avg	188	202	206	219	224	216	214	220	223	208	169	166	162	163	150	140	136	137	146	152	164	170	175	184	170
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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



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

**July 2011**

**Peak Wind Speed (1-Minute Gust)**  
**Hourly and Daily Averages**  
**Instrument: NRG MAX-40**  
**Meters per Second**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0.2	0	0	0.9	0.3	0	0.1	0.7	1.8	1.9	3.3	3.5	3.6	4.3	4.8	5.9	4.7	4.3	4.6	3.6	1.9	1.6	1.1	1.2	2.3
2	1	0.2	0.6	0.6	0.5	0.6	0.2	2	2	3.4	3.3	3.9	3.5	2.8	4.4	6.6	5.9	5	5.4	4.4	4	3.4	2.5	2.5	2.9
3	2.4	2.5	3.4	3.2	3.7	3.5	3.8	4.3	3.9	3.4	3.9	5.3	5.9	5.6	6.4	6.6	6.3	6.8	5.3	4.1	7.1	6.2	6.4	6.3	4.8
4	4.9	3.5	1.9	1.5	1	1.9	4.9	7.1	7.7	7	7	7	7.3	6.8	6.8	6.6	5.8	3.7	4.4	5.1	3.7	2.4	1.2	1.5	4.6
5	1.5	0.6	0.3	1	0.6	0.6	1.5	2	2.8	2.6	2.8	2.4	3.7	4.9	4.6	2.3	3.2	5.7	8	6.6	4.5	3.4	2.8	2.4	2.9
6	2.3	2.8	2.8	1.8	2.4	2.4	3	3.1	5.1	5.2	5.8	4.5	3.6	7	3.1	2.6	3.3	4.5	3.5	3.1	5	3.4	1.5	0.6	3.4
7	1.8	1.7	1.5	1.3	1.2	0.9	2	3	3.4	3.7	3.9	4	4	4	4.2	7.1	8.4	5.9	4	2.5	2.4	4.3	4.4	2.3	3.4
8	0.4	1.2	2.4	2.7	3.3	3.9	4.6	4.4	3.8	4.4	6.4	6.2	7.2	8	7	7.6	7.8	8	8.5	7.3	8.1	8.1	7.9	7.7	5.7
9	7.7	7	5.3	4.1	4.3	2.4	1.9	1.9	2.9	4.2	3.6	4.5	5.1	5.5	5.9	5.4	4.6	4.8	4.1	2.3	1.3	0.4	0.2	0.1	3.7
10	0.4	0.4	0.7	0.5	0	0.8	0.8	0.9	1.9	3.3	4.3	5.1	5.3	5.7	5.3	5.4	5	4.4	4.4	3.4	3.1	2.2	1.9	1.5	2.8
11	0.8	0	0.2	0	0	0	0.8	2.5	3	3.4	3.3	2.7	4.8	4.8	4.6	5	5.8	6.3	5.6	4.4	4.1	4.4	5.4	7.2	3.3
12	8.1	5.5	4.3	4	5	5	5.5	7.6	5.4	5.7	5.5	5.5	4.1	3.7	3.8	4.1	4.3	3.7	2.3	1.2	0.7	1.2	1.8	3.7	4.2
13	3.2	4.2	1	0.3	0.9	0.4	1.8	2.6	2.4	3	2.7	3.1	3.6	3.1	4	4.1	2.8	2	1.7	1.2	1.8	4.5	1.4	2.6	2.4
14	3	2	1.4	2	3.8	5.4	5.8	6.8	7.2	7.2	7	7.3	7.1	7.6	7.6	8.3	8	8	7.5	5.5	4.2	3.7	3.9	3.3	5.6
15	3	1.9	1.1	1.1	1.5	2.1	2.9	5	6.3	6.5	7.5	7.7	7.9	7.5	7.7	7.4	7	6.3	5.3	2.7	3.1	3.8	3.1	2.6	4.6
16	2.6	2.3	2	0.3	1.2	1.2	2.8	4.4	5.1	5.2	5.4	5.9	6.6	7	6.2	6.7	6.1	5.5	4.6	4	3.6	2.5	2.1	1.1	3.9
17	1.6	0.9	0.3	0	0	0.1	1.1	2.6	2.3	2.7	2.5	4	4.2	3.8	5.1	5.3	5.2	5.4	4.9	3.4	3.1	2.1	1.3	1.4	2.7
18	0.6	1.1	0.2	0.2	0.6	1.7	2.6	2.2	4	3.4	3.6	3.6	3.7	4.2	4.7	5.7	5.8	6.4	5.5	5	3.8	3.7	3.9	3.8	3.3
19	3	3	3.4	3.3	2.6	3.2	3.8	4.6	4.1	3.7	3.5	4	4	4.3	5.2	5.4	4.7	2.7	3	3.4	3.4	3.4	3.3	3.6	3.7
20	3.8	4.6	4.4	3.3	2.4	2	2.4	3.8	3.3	3	3.6	3.8	4.5	4.3	4.4	4.8	1.8	3.8	2.7	3.2	4.5	4.4	4.7	4.1	3.6
21	2.8	1.9	0.7	0.6	0.8	0.7	2.2	3.1	2.1	2.5	3.7	4	4.7	4.4	4.7	4.8	5.3	5	4.8	3.2	3.1	3.2	3.1	3.9	3.1
22	4.1	3.8	3.6	2.8	2.4	1.7	2.7	4.3	4.9	4.1	4.1	5.3	5.4	5	5.9	6.6	5.5	5.3	6	5.2	5	4.8	5.1	4.8	4.5
23	4.9	4.7	4.1	3.7	3	2.4	4.4	4.9	4.8	4.3	6	6.1	5.6	5.5	6.2	6.1	6.6	5.9	7.1	5.2	4.1	2.9	3.2	3.4	4.8
24	3.8	4.2	4.2	2.5	2.8	3.8	4	4.5	4.2	4.8	5.9	6.2	6	5.9	4.7	4.3	4.7	6.3	5.8	3.7	2.2	2	1.3	0.8	4.1
25	2	1.6	0.5	0.4	1.7	1.8	1	2.7	3	2.6	4	4.5	4.9	4.9	5	6.4	8	7.4	8.3	5.8	6.2	3.8	0.9	2.7	3.8
26	2	4.7	3.1	2.5	2.4	1.9	1.7	2.5	2.8	3	4	4.1	3.2	4.2	3.7	3.8	4.1	4.3	4.4	4.2	3.7	2.8	2.7	2.5	3.3
27	3	2	2.6	2.4	2.6	2.7	2.3	2.9	3.8	2.6	3.2	2.9	3.6	4.4	5.2	5.2	5.3	5.1	4.2	4	3.8	3.2	1.9	1.6	3.3
28	1.7	1.4	1.3	0.6	0.8	1.1	0.9	2.2	3.1	3.5	4.6	4.6	5.3	5.9	5.8	4.2	3.9	5.3	4.3	2.9	2.9	2.2	2.5	2.8	3.1
29	3.2	2.5	2.4	3	3.3	3.6	3.4	3.9	4.5	4.5	4.3	3.7	3.8	4.3	4.7	4	4.5	3.1	1.6	1.6	2.3	1.3	0.8	1.8	3.2
30	2.4	2.2	2.3	1.9	1.9	2.5	0.2	3.3	4.6	6.1	6.4	5.9	4.1	4.6	5.8	5.3	5.8	3.9	3	2	0.8	0.8	0.2	0.2	3.2
31	0.4	1.4	0.6	0	0.2	0.5	1.3	1.1	2.1	3.4	0.3	0.3	1.1	1.5	2.7	2.1	0.8	1.9	2.4	0.8	0.9	0.5	1.1	1.1	1.2
Avg	2.7	2.5	2	1.7	1.8	2	2.5	3.4	3.8	4	4.4	4.6	4.8	5	5.2	5.3	5.2	5.1	4.8	3.7	3.5	3.1	2.7	2.8	3.6
SD	1.9	1.7	1.5	1.3	1.4	1.4	1.6	1.7	1.5	1.4	1.6	1.6	1.5	1.5	1.2	1.5	1.7	1.5	1.8	1.5	1.7	1.6	1.8	1.9	1
S/A	0.71	0.71	0.75	0.76	0.75	0.73	0.64	0.49	0.39	0.35	0.36	0.34	0.31	0.29	0.23	0.29	0.34	0.3	0.38	0.42	0.49	0.52	0.68	0.68	0.27
Min	0.2	0	0	0	0	0	0.1	0.7	1.8	1.9	0.3	0.3	1.1	1.5	2.7	2.1	0.8	1.9	1.6	0.8	0.7	0.4	0.2	0.1	1.2
Max	8.1	7	5.3	4.1	5	5.4	5.8	7.6	7.7	7.2	7.5	7.7	7.9	8	7.7	8.3	8.4	8	8.5	7.3	8.1	8.1	7.9	7.7	5.7
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**July 2011**

**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	1013	1013	1013	1014	1014	1014	1015	1015	1015	1015	1015	1014	1014	1014	1014	1014	1014	1014	1014	1014	1015	1016	1016	1016	1014
2	1016	1015	1015	1015	1015	1016	1017	1017	1017	1017	1017	1016	1016	1016	1015	1015	1014	1014	1014	1014	1015	1014	1014	1014	1015
3	1014	1014	1013	1013	1013	1013	1014	1014	1014	1014	1013	1013	1012	1012	1011	1011	1010	1010	1010	1010	1011	1011	1011	1011	1012
4	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1011	1011	1010	1010	1009	1008	1009	1010	1011	1013	1013	1012	1012	1011
5	1012	1011	1011	1011	1012	1012	1013	1013	1014	1014	1013	1013	1012	1012	1012	1011	1011	1012	1012	1013	1012	1013	1013	1013	1012
6	1013	1013	1013	1013	1014	1014	1015	1014	1015	1015	1015	1014	1014	1013	1012	1012	1012	1012	1014	1013	1013	1014	1013	1013	1013
7	1013	1013	1013	1013	1013	1013	1014	1014	1014	1014	1014	1013	1013	1013	1012	1012	1012	1011	1012	1012	1012	1012	1012	1012	1013
8	1011	1011	1011	1011	1011	1011	1011	1011	1011	1011	1010	1010	1010	1008	1007	1007	1007	1006	1006	1007	1007	1007	1007	1008	1009
9	1008	1007	1007	1007	1008	1008	1008	1009	1010	1010	1011	1011	1011	1011	1011	1011	1012	1012	1012	1013	1013	1014	1014	1014	1010
10	1014	1014	1014	1014	1014	1015	1015	1016	1016	1016	1017	1016	1016	1016	1016	1015	1015	1015	1015	1015	1016	1016	1016	1016	1015
11	1016	1015	1015	1015	1015	1016	1017	1017	1017	1017	1016	1015	1015	1014	1014	1013	1013	1012	1012	1012	1013	1013	1012	1011	1014
12	1009	1010	1010	1010	1010	1010	1009	1009	1009	1009	1009	1009	1009	1008	1008	1007	1007	1007	1007	1007	1007	1007	1008	1008	1009
13	1007	1007	1006	1007	1007	1007	1008	1008	1008	1008	1008	1008	1008	1007	1007	1007	1006	1006	1007	1007	1008	1008	1008	1008	1007
14	1009	1009	1009	1009	1009	1010	1011	1012	1012	1013	1013	1014	1014	1014	1014	1014	1014	1013	1014	1014	1015	1015	1015	1016	1013
15	1015	1015	1015	1015	1015	1016	1016	1017	1017	1017	1018	1018	1017	1017	1017	1017	1016	1016	1017	1017	1017	1018	1018	1018	1017
16	1018	1018	1018	1019	1019	1019	1019	1020	1020	1020	1021	1021	1021	1020	1020	1020	1020	1020	1020	1020	1020	1020	1021	1021	1020
17	1020	1020	1020	1021	1021	1021	1021	1022	1022	1022	1022	1022	1021	1021	1021	1020	1020	1019	1019	1019	1019	1019	1019	1019	1020
18	1019	1018	1018	1018	1018	1018	1019	1019	1018	1018	1017	1017	1016	1015	1015	1014	1013	1013	1013	1013	1013	1013	1013	1013	1016
19	1013	1012	1011	1011	1011	1011	1011	1011	1011	1011	1010	1010	1010	1009	1008	1008	1008	1008	1008	1008	1008	1009	1009	1009	1010
20	1009	1008	1008	1008	1009	1009	1010	1010	1010	1010	1010	1010	1010	1009	1009	1009	1009	1009	1009	1009	1010	1010	1010	1010	1009
21	1010	1009	1009	1009	1009	1010	1010	1011	1011	1010	1010	1010	1010	1009	1009	1008	1008	1009	1009	1009	1010	1010	1010	1010	1010
22	1010	1010	1010	1011	1011	1012	1012	1013	1013	1013	1013	1013	1012	1012	1011	1011	1011	1011	1011	1012	1013	1013	1013	1013	1012
23	1013	1013	1013	1013	1013	1014	1014	1015	1015	1015	1015	1015	1014	1014	1013	1012	1012	1012	1013	1013	1014	1013	1013	1014	1014
24	1014	1013	1013	1013	1013	1013	1013	1013	1014	1013	1013	1013	1012	1011	1011	1010	1010	1010	1010	1012	1013	1013	1013	1012	1012
25	1011	1011	1011	1011	1010	1010	1010	1010	1010	1010	1010	1009	1008	1007	1007	1006	1006	1005	1006	1006	1008	1007	1006	1005	1008
26	1006	1006	1006	1006	1006	1006	1007	1007	1008	1008	1009	1009	1009	1008	1008	1007	1007	1007	1007	1007	1008	1008	1009	1009	1007
27	1009	1009	1009	1009	1010	1010	1011	1012	1012	1012	1012	1012	1011	1011	1011	1012	1012	1012	1012	1013	1013	1014	1014	1014	1011
28	1014	1014	1014	1014	1014	1014	1015	1015	1016	1016	1016	1016	1015	1015	1014	1014	1014	1014	1014	1014	1014	1015	1014	1014	1014
29	1014	1013	1013	1012	1013	1013	1013	1014	1014	1014	1014	1013	1013	1012	1012	1011	1011	1011	1011	1011	1011	1011	1011	1011	1012
30	1011	1011	1011	1011	1011	1012	1012	1013	1013	1014	1014	1014	1014	1013	1013	1012	1012	1012	1013	1013	1014	1014	1014	1014	1013
31	1014	1014	1014	1014	1014	1015	1015	1016	1016	1016	1016	1016	1016	1016	1015	1015	1015	1015	1015	1014	1015	1015	1015	1015	1015
Avg	1012	1012	1012	1012	1012	1013	1013	1013	1014	1014	1014	1013	1013	1013	1012	1012	1012	1011	1012	1012	1013	1013	1013	1013	1013
SD	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	3	3	3	3	3	3	3	
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	
Min	1006	1006	1006	1006	1006	1006	1007	1007	1008	1008	1008	1008	1008	1007	1007	1006	1006	1005	1006	1006	1007	1007	1006	1005	1007
Max	1020	1020	1020	1021	1021	1021	1021	1022	1022	1022	1022	1022	1021	1021	1021	1020	1020	1020	1020	1020	1020	1021	1021	1021	1020
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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

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

**July 2011**

**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	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	12.9	13	13	13	13	13	13	12.8	12.8	12.7	12.7	12.7	12.7	12.8
2	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	12.9	13	13	13	13	13	13.1	12.9	12.8	12.7	12.7	12.7	12.7	12.8
3	12.7	12.6	12.6	12.6	12.6	12.6	12.9	13.1	13.1	13.2	13.1	13.1	13	13	13	13	13	13	12.8	12.8	12.8	12.7	12.7	12.7	12.9
4	12.7	12.7	12.6	12.6	12.6	12.6	13	13.2	13.1	13.1	13	13	13	13	13	13	13	12.8	12.8	12.7	12.7	12.7	12.7	12.6	12.8
5	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13.1	13	13	13	13	13	13	13	13	13	12.8	12.7	12.7	12.7	12.7	12.9
6	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	13.2	13.1	13.2	13.1	13.1	13	13	13.2	13	12.8	12.7	12.7	12.7	12.7	12.7	12.8
7	12.7	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13.1	13	13	13	13	13	13	13	13.1	13.1	12.9	12.8	12.7	12.7	12.7	12.9
8	12.7	12.7	12.7	12.7	12.6	12.7	13	13.1	13.1	13.1	13	13	13	13	13	13	13	13.1	13	12.9	12.8	12.8	12.7	12.7	12.9
9	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.7	13.1	13.3	13.2	13.1	13.1	13.1	13	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.9
10	12.7	12.7	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.8
11	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.8
12	12.7	12.6	12.6	12.6	12.6	12.6	12.9	13.2	13.1	13.1	13.1	13	13	13	12.9	12.9	12.9	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.8
13	12.7	12.7	12.6	12.6	12.6	12.6	13	13.1	13	13	12.9	12.9	12.9	12.9	12.9	12.9	13	12.9	12.8	12.7	12.7	12.7	12.7	12.6	12.8
14	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.7	12.7	12.7	12.9
15	12.7	12.7	12.6	12.6	12.6	12.7	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.8	12.8	12.8	12.7	12.7	12.7	12.9
16	12.7	12.7	12.7	12.7	12.6	12.7	13	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.7	12.7	12.7	12.9
17	12.7	12.7	12.7	12.6	12.6	12.6	13	13.2	13.1	13	13	13	13	13	13	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.9
18	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.1	13.1	13	13	13	13	13	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.9
19	12.7	12.6	12.6	12.6	12.6	12.6	13	13.2	13.2	13.1	13	13	13	13	13	13	13	13	12.8	12.8	12.7	12.7	12.7	12.7	12.9
20	12.7	12.7	12.6	12.6	12.6	12.6	13	13.1	13.1	13	13	12.9	12.9	12.9	12.9	12.8	13.1	13	12.8	12.7	12.7	12.7	12.7	12.6	12.8
21	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.2	13.1	13	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.6	12.8
22	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.1	13	13	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.6	12.8
23	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.1	13	13	13	13	13	12.9	12.9	12.9	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.8
24	12.6	12.6	12.6	12.6	12.6	12.5	12.9	13.1	13.1	13	13	13	13	13	12.9	12.9	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.6	12.8
25	12.6	12.6	12.6	12.6	12.5	12.5	12.7	13.2	13.2	13.1	13	13	13	13	13	13	13	13	12.8	12.7	12.7	12.7	12.7	12.6	12.8
26	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.8	13.1	13.2	13.1	13.1	13.1	13.1	13	13	13	13	12.8	12.8	12.7	12.7	12.7	12.7	12.8
27	12.7	12.7	12.6	12.6	12.6	12.6	12.9	13.2	13.1	13	13	12.9	12.9	13	13	13	13	13	12.9	12.8	12.7	12.7	12.7	12.7	12.8
28	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.1	13	13	12.9	12.9	12.9	13	12.9	13	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.8
29	12.6	12.6	12.6	12.6	12.6	12.6	12.8	13	13.1	13	13	12.9	12.9	12.9	12.9	12.9	12.9	12.8	12.7	12.7	12.7	12.7	12.6	12.6	12.8
30	12.6	12.6	12.6	12.6	12.6	12.5	12.9	13.1	13	13	12.9	12.9	12.9	12.9	12.9	12.9	13	12.8	12.8	12.7	12.7	12.7	12.7	12.6	12.8
31	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.8	13.1	13	13.1	13.1	13.1	13.1	13.1	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.8
Avg	12.7	12.6	12.6	12.6	12.6	12.6	12.9	13.1	13.1	13.1	13	13	13	13	13	13	13	12.9	12.8	12.7	12.7	12.7	12.7	12.7	12.8
SD	0	0	0	0	0	0	0.1	0.2	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	
StA	0	0	0	0	0	0	0.01	0.01	0	0.01	0.01	0	0	0.01	0.01	0.01	0.01	0.01	0	0	0	0	0	0	
Min	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.7	13	13	12.9	12.9	12.9	12.9	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.6	12.6	
Max	12.7	12.7	12.7	12.7	12.6	12.7	13.2	13.2	13.2	13.3	13.2	13.1	13.1	13.1	13.1	13.2	13.1	13.1	13	12.8	12.8	12.7	12.7	12.7	12.9
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928

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

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

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

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