

June 2012

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	8	41	196	367	366	667	801	691	751	850	416	79 ?	58 ?	126	37	2	0	0	0	0	5456	
2	0	0	0	0	3	70	194	383	422	664	840	956	609	322	451	302	306	110	40	3	0	0	0	0	5675	
3	0	0	0	0	4	67	233	441	637	806	931	1008	977	927	691	544	390	210	68	4	0	0	0	0	7941	
4	0	0	0	0	6	49	174	381	389	517	797	518	927	720	715	619	295	42 ?	25	4	0	0	0	0	6177	
5	0	0	0	0	4	66	237	349	276	248	541	547	206	246	182	222	180	278	80	6	0	0	0	0	3665	
6	0	0	0	0	12	47	115	242	550	817	941	1008	836	758	776	659	471	268	74	5	0	0	0	0	7578	
7	0	0	0	0	5	70	242	444	639	806	929	921	823	775	442	347	421	265	83	7	0	0	0	0	7221	
8	0	0	0	0	5	72	249	376	283	305	647	915	981	819	790	696	322	141	76	7	0	0	0	0	6683	
9	0	0	0	0	5	70	249	398	344	389	746	931	1023	912	598	572	354	206	59	5	0	0	0	0	6860	
10	0	0	0	0	10	95	288	416	366	421	732	969	580	670	881	517	436	159	54	6	0	0	0	0	6599	
11	0	0	0	0	9	65	232	447	416	486	602	656	664	814	690	533	330	189	35	3	0	0	0	0	6172	
12	0	0	0	0	2	10	51 ?	114	147	110	307	243	706	326	131	203 ?	127	40	21	4	0	0	0	0	2541	
13	0	0	0	0	4	43	198	311	262	375	683	761	687	732	715	549	433	187	60	12	0	0	0	0	6011	
14	0	0	0	0	1	13	66	138	219	300	469	608	754	868	775	662	506	289	97	14	0	0	0	0	5779	
15	0	0	0	0	5	68	256	475	524	794	730	689	1004	905	797	662	487	284	95	7	0	0	0	0	7784	
16	0	0	0	0	5	78	250	447	607	803	952	1033	975	962	653	609	482	269	92	10	0	0	0	0	8228	
17	0	0	0	0	4	75	240	452	415	458	373	402	511	455	475	245	171	83	42	6	0	0	0	0	4406	
18	0	0	0	0	6	69	226	438	585	749	813	759	758	454	220	253	201	182	101	7	0	0	0	0	5821	
19	0	0	0	0	5	29	55	149	405	636	767	951	949	895	687	336	221	156	21	4	0	0	0	0	6266	
20	0	0	0	0	3	57	209	403	566	710	859	906	939	869	728	585	431	253	88	11	0	0	0	0	7618	
21	0	0	0	0	3	51	194	386	550	710	854	946	489	739	775	534	396	249	66	7	0	0	0	0	6950	
22	0	0	0	0	4	58	208	403	567	719	860	934	934	874	776	608	303	71 ?	3 ?	0	0	0	0	0	7323	
23	0	0	0	0	3	22	101	364	598	694	717	854	626	197	? 247 ?	422	252	76	14	0	0	0	0	0	5186	
24	0	0	0	0	3	33	233	356	582	785	917	942	982	966	684	462	460	266	57	9	0	0	0	0	7736	
25	0	0	0	0	5	53	224	287	566	750	772	902	964	886	664	567	427	80 ?	15 ?	36	0	0	0	0	7197	
26	0	0	0	0	5	66	242	452	651	824	952	1016	1031	989	783	451	309	189	84	18	0	0	0	0	8060	
27	0	0	0	0	5	64	233	437	631	801	925	992	1001	947	829	667	475	274	86	3	0	0	0	0	8370	
28	0	0	0	0	5	50	196	404	595	770	866	944	950	901	788	631	436	243	77	10	0	0	0	0	7866	
29	0	0	0	0	4	51	197	377	559	726	850	918	928	838	739	578	396	216	67	7	0	0	0	0	7452	
30	0	0	0	0	1	46	177	384	591	765	890	954	958	904	802	641	442	256	78	8	0	0	0	0	7895	
Avg	0	0	0	0	5	55	199	367	477	620	769	829	817	751	643	486	356	194	62	8	0	0	0	0	6617	
S D	0	0	0	0	2	20	62	95	143	204	169	200	201	230	200	173	118	77	27	7	0	0	0	0	1390	
S/A	0	0	0	0	0.48	0.35	0.31	0.26	0.3	0.33	0.22	0.24	0.25	0.31	0.31	0.36	0.33	0.4	0.44	0.82	0	0	0	0	0	0.21
Min	0	0	0	0	1	10	51	114	147	110	307	243	206	197	131	79	58	40	3	0	0	0	0	0	2541	
Max	0	0	0	0	12	95	288	475	651	824	952	1033	1031	989	881	696	506	289	101	36	0	0	0	0	8370	
n	0	0	0	0	82	359	352	360	360	360	360	360	360	360	347	350	354	337	351	112	0	0	0	0	5165	

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.3% exceed the 15% QC threshold -- 5234 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31392F3 Calibration Factor: 7.3961  $\mu\text{V}/\text{W}/\text{m}^2$  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.

June 2012

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	*	
16	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
17	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
18	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
19	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
20	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
21	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
22	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
23	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
24	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
25	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
26	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
27	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
28	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
29	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
30	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	?	*	*	*	0	0	0	0	*	
Avg	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
S/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	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	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

Daylight Data Recovery: 99.8% missing; 0.0% untested; 0.2% exceed the 15% QC threshold -- 5234 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.

June 2012

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	10 ?	41	196	340	340	477 ?	673 ?	628	654 ?	702 ?	333	64	48 ?	126	37	2	0	0	0	0	4671 ?
2	0	0	0	0	4 ?	68	171	300 ?	398	554 ?	745 ?	668 ?	417 ?	275	312 ?	277	240 ?	110	40	2	0	0	0	0	4582 ?
3	0	0	0	0	6 ?	67	233	?	?	?	?	?	?	?	457 ?	337 ?	252 ?	210	68	4	0	0	0	0	1635 ?
4	0	0	0	0	7 ?	49	161	358 ?	354	462 ?	542 ?	270 ?	701 ?	527 ?	488 ?	455 ?	212 ?	36 ?	25	3	0	0	0	0	4650 ?
5	0	0	0	0	6 ?	66	228	301 ?	247	248	400 ?	544	205	246	182	222	180	233 ?	80	6	0	0	0	0	3392 ?
6	0	0	0	0	18 ?	47	115	242	466 ?	?	?	?	641 ?	583 ?	584 ?	?	?	242 ?	74	5	0	0	0	0	3018 ?
7	0	0	0	0	7 ?	70	233	?	?	?	?	625 ?	459 ?	350 ?	442	300	317 ?	248	83	7	0	0	0	0	3143 ?
8	0	0	0	0	6 ?	71	223 ?	379 ?	283	305	582 ?	642 ?	580 ?	545 ?	537 ?	?	150 ?	141	76	7	0	0	0	0	4528 ?
9	0	0	0	0	7 ?	70	231	408 ?	344	389	654 ?	729 ?	?	635 ?	481 ?	429 ?	273 ?	187	59	5	0	0	0	0	4901 ?
10	0	0	0	0	11 ?	80	?	403 ?	366	421	681 ?	?	423 ?	432 ?	?	404 ?	320 ?	159	54	6	0	0	0	0	3760 ?
11	0	0	0	0	11 ?	65	223	?	407	486	602	636	644	638 ?	540 ?	345	295	189	35	3	0	0	0	0	5120 ?
12	0	0	0	0	2 ?	10	40 ?	111	143	109	302	241	605	318	122	176	126	38	21	4	0	0	0	0	2369
13	0	0	0	0	5 ?	43	168	287	262	375	456 ?	610 ?	595 ?	596 ?	480 ?	507 ?	379 ?	97 ?	60	12	0	0	0	0	4932 ?
14	0	0	0	0	1	13	66	138	219	300	469	608	659 ?	692 ?	?	483 ?	?	228 ?	97	14	0	0	0	0	3987 ?
15	0	0	0	0	6 ?	68	209 ?	355 ?	363 ?	628 ?	572 ?	578 ?	?	762 ?	?	?	?	250 ?	95	7	0	0	0	0	3893 ?
16	0	0	0	0	7 ?	74	223 ?	?	537 ?	?	?	?	805 ?	?	529 ?	399 ?	373 ?	190 ?	92	10	0	0	0	0	3240 ?
17	0	0	0	0	6 ?	75	231	?	374	433	373	402	511	455	475	245	171	83	42	6	0	0	0	0	3882
18	0	0	0	0	8 ?	69	186 ?	339 ?	?	?	436 ?	561	485	413	218	253	200	173	88	7	0	0	0	0	3436 ?
19	0	0	0	0	6 ?	29	55	149	347	425	331	232	205	215	268	233	183	120	21	4	0	0	0	0	2822
20	0	0	0	0	5 ?	37	84	113	134	168	201	286	274	269	271	208	150	114	64	11	0	0	0	0	2387
21	0	0	0	0	5 ?	40	99	141	179	205	225	283	338	324	284	236	210	154	52	7	0	0	0	0	2783
22	0	0	0	0	5 ?	35	86	121	149	177	209	229	237	232	209	205	174	34 ?	3 ?	0	0	0	0	0	2106
23	0	0	0	0	3 ?	22	97	147	270	258	321	334	433	182	46 ?	208	235	151	66	14	0	0	0	0	2788
24	0	0	0	0	3	33	153	150	138	165	149	206	169	210	434	297	150	101	46	9	0	0	0	0	2414
25	0	0	0	0	5	37	93	188	225	273	296	254	201	209	248	229	175	70 ?	15 ?	44 ?	0	0	0	0	2564
26	0	0	0	0	5	28	50	57	61	64	68	81	104	113	253	329	261	158	69	18	0	0	0	0	1720
27	0	0	0	0	5	28	50	60	68	77	88	99	103	103	103	90	72	58	33	3	0	0	0	0	1041
28	0	0	0	0	6 ?	30	72	101	122	130	199	191	198	185	178	158	132	97	48	9	0	0	0	0	1856
29	0	0	0	0	3	30	73	111	142	166	183	190	195	213	213	204	166	113	49	7	0	0	0	0	2060
30	0	0	0	0	1	34	72	81	88	96	106	115	127	135	130	123	111	87	47	8	0	0	0	0	1362
Avg	0	0	0	0	6	48	142	215	260	296	379	394	406	377	327	275	206	140	55	8	0	0	0	0	3168 ?
S D	0	0	0	0	3	21	71	118	129	161	204	211	214	201	158	116	84	65	25	8	0	0	0	0	1165
S/A	0	0	0	0	0.56	0.43	0.5	0.55	0.49	0.54	0.54	0.54	0.53	0.53	0.48	0.42	0.41	0.47	0.46	0.97	0	0	0	0	0.37
Min	0	0	0	0	1	10	40	57	61	64	68	81	103	103	46	64	48	34	3	0	0	0	0	0	1041
Max	0	0	0	0	18	80	233	408	537	628	745	729	805	762	584	507	379	250	97	44	0	0	0	0	5120
n	0	0	0	0	58	358	318	243	294	273	257	259	260	252	253	265	266	314	351	110	0	0	0	0	4141

Daylight Data Recovery: 0.0% missing; 0.0% untested; 20.9% exceed the 15% QC threshold -- 5234 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**

**June 2012**

**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	22.7	21.9	21.7	21.1	21	21.1	22.5	24.3	25.1	26.2	27.1	27.6	28.3	28.3	27.6	25.8	22.8	24.7	25.6	25.2	25.4	25.2	25	24.4	24.6
2	24.3	23.1	19	18	17.9	18	18.5	19.3	20.4	21.3	22.6	24.2	25.3	23.4	22.7	22.2	22.1	21.9	21.4	20.8	19.9	19.8	19.4	18.8	21
3	17.8	16.9	16.6	16.1	15.6	15.6	16.9	18.5	20.7	22	23	23.5	24	24.3	24.5	24.8	24.9	24.7	23.7	22.3	20.7	20.2	19.7	19.3	20.7
4	19.4	19.7	19.8	18.6	17.8	17.9	19	21	22.4	23.8	25	25.9	26.8	27.4	27.6	28	27.3	24.1	22	20.9	19	18.1	18.1	17.7	22
5	17.7	17.4	16.8	16.9	16.6	17.2	18.5	19.3	19	18.9	19.3	19.4	18.1	16.6	16.6	17	17.6	18.3	17.8	16.6	15.7	15.3	15.4	14.9	17.4
6	14.1	13	12.1	12.1	12.7	13.3	15	16.5	18.6	20	20.3	20.4	20.5	20.5	20.3	20.5	20.6	20	18.9	17.7	17.1	16.2	15.6	15.3	17.1
7	14.9	14.6	14.2	13.8	13.3	13.8	16.2	18.5	20.7	21.9	23.1	23.6	24.1	24.3	23.2	23.1	23.3	23.2	22.2	20.9	20.1	19.2	18.7	18.6	19.6
8	18.2	18	17.2	16.7	16.3	16.3	18.3	20.3	22.9	24.5	25.3	26	26.8	27.2	27.5	28.2	26.4	25.2	24.8	23.4	22.3	21.7	21	20.6	22.3
9	19.8	19.4	18.8	18.6	18.3	18.4	19.9	22.6	24.9	26.9	28.7	29.3	30.1	30.5	30.2	30.2	30.3	29.6	28.2	26.6	25.4	24.5	23.9	23	24.9
10	21.9	21.2	20.8	20.8	20.6	20.5	22	24.1	25.5	26.9	28	29.1	30	30.5	31.4	30.8	30.5	29.4	28.3	26.6	25.5	24.5	23.4	22.6	25.6
11	21.9	21.4	20.9	20.5	20.2	20.6	22	24	25.4	26	26.7	27.1	27.3	28	28.3	28.4	28.1	27.6	26.1	25	24.4	23.9	23.7	23.9	24.7
12	23.7	23.1	22.5	22.4	22.7	23	22.8	23	23.8	22.9	22.7	23.9	24.6	25	24.3	23.9	23.5	23.1	23.5	23.4	23	23.1	23.1	23.1	23.3
13	23	22.8	22.7	22.5	22.1	22.1	22.4	23.2	23.2	24.1	25.6	26.6	27	27.3	27.6	27.6	27.5	26.8	24.8	23.3	22.3	21.7	21	20.3	24.1
14	19.5	19.4	19.3	19.7	20	20	19.9	20.5	21	21.1	21.5	22.1	22.5	22.5	22.5	22.3	21.8	21.5	20.8	19.7	18.9	18.5	18.1	18	20.5
15	17.2	16	16	16.2	17.2	18.5	19.4	20.8	21.5	22.4	22.5	22.3	22.6	22.1	22	21.7	21.2	21.1	20.6	19.5	18.7	18.2	17.4	17.8	19.7
16	17.2	16.5	16.5	16.2	16.2	16.6	17.9	19.7	21.1	21.3	21.4	21.5	21.8	21.9	21.5	21.5	21.5	20.8	20	19	18.5	17.9	17.1	16.8	19.2
17	16.3	16	16.1	16	15.7	15.6	17.5	19.2	19.9	20.8	20.6	20.8	20.8	20.9	20.7	20	19.4	18.9	18.5	17.7	17	16.6	16.3	16.1	18.2
18	15.8	16	15.3	13.6	12.8	13.3	15.7	19	20.7	22.3	24	25	25.9	26.2	24.4	23.1	22.3	21.9	21.5	20.5	20.1	19.9	20.1	20.1	20
19	20.2	20.4	20.2	19.9	19.4	19.9	20.4	21.2	22.9	25	26.3	28.4	29.4	30.2	31.1	30.8	28.9	25.1	24.8	23.9	23.4	22.9	22.9	22.9	24.2
20	22.7	22.4	22	21.5	21.2	21.4	22.8	24.9	27.2	29.5	30.5	31	31.5	31.4	31.3	30.6	30.7	30.3	29.6	28.1	27.1	26.4	25.8	25	26.9
21	24.5	24	23.5	23.2	23	23	24.1	26.1	27.9	30	31.9	33.2	32.8	32.9	33.7	33.7	32	32	30.8	29.4	28.4	27.8	27	26.3	28.4
22	25.5	24.9	24.5	24	23.5	23.4	24.2	25.9	27.4	29.2	30.2	30.9	31.7	32.2	32.8	33.2	33.1	27.1	24.1	22.3	21.4	21.5	21.7	22.1	26.5
23	22.1	22	21.8	21.8	21.6	21.5	21.8	22.8	25	26.3	27.8	29.1	30.1	29.1	25.3	22.1	24.9	25.5	24.9	24.3	23.3	22.7	22.2	21.8	24.2
24	21.3	20.8	20.6	20.8	20.8	20.9	21.7	23.7	27.2	28.6	29	29.4	29.7	29.8	29.3	28.6	28.6	28.1	27.1	26.2	25.5	24.9	24.3	24	25.5
25	23.4	23.2	23.1	22.8	22.6	22.7	23.8	25.1	26.4	27.7	28.5	29.3	29.9	30.6	31	31.3	31.2	27.1	19.7	20.3	20.8	20.8	20.8	20.3	25.1
26	20.2	19.8	19	18.9	18.4	18.2	18.9	19.7	21	21.7	22.6	22.9	23.6	24.1	24.4	24.3	24.1	24.1	22.6	21.4	20.8	20.1	19.1	18.1	21.2
27	17.7	17.7	17.2	16.9	16.8	16.8	18.2	20.9	23.5	25.1	26	27	27.5	28	28.5	28.7	28.9	28.8	28	25.9	23.6	22.4	21.8	21.8	23.2
28	21.6	20.8	20.1	19.5	19.2	19.3	20.7	22.9	25.5	27.5	28.8	29.8	30.2	30.8	31.3	31.6	31.9	31.4	30.2	28.6	27.4	26.8	26.5	25.6	26.2
29	24.8	24.1	23.6	23.2	23	23	24.1	25.6	27	28.5	30.4	31.9	32.9	34.2	35	35.5	35.6	34.9	33.6	31.6	29.8	28.7	28.1	27.9	29
30	27.2	26.1	25.4	24.1	23.1	22.6	23.5	25.2	26.6	28.4	29.8	31.9	32.4	32.9	33.5	34.8	34.9	34.1	32.3	30.5	28.7	27.6	26.7	24.1	28.6
Avg	20.5	20.1	19.6	19.2	19	19.2	20.3	21.9	23.5	24.7	25.6	26.4	26.9	27.1	27	26.8	26.5	25.7	24.5	23.4	22.5	21.9	21.5	21	23.1
S D	3.4	3.3	3.2	3.2	3.2	3	2.7	2.6	2.8	3.2	3.5	3.8	4	4.3	4.6	4.9	4.8	4.3	4.2	3.9	3.7	3.6	3.6	3.4	3.3
S/A	0.16	0.16	0.17	0.17	0.17	0.16	0.13	0.12	0.12	0.13	0.14	0.14	0.15	0.16	0.17	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.14
Min	14.1	13	12.1	12.1	12.7	13.3	15	16.5	18.6	18.9	19.3	19.4	18.1	16.6	16.6	17	17.6	18.3	17.8	16.6	15.7	15.3	15.4	14.9	17.1
Max	27.2	26.1	25.4	24.1	23.5	23.4	24.2	26.1	27.9	30	31.9	33.2	32.9	34.2	35	35.5	35.6	34.9	33.6	31.6	29.8	28.7	28.1	27.9	29
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.

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

**June 2012**

**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	103.4	104.6	102.7	103.2	103.7	104.1	102.8	101	98.4	94.5	89.2	88.4	86.2	88.7	92.4	99.9	102.3	99.3	96.4	98.1	95.3	97.5	98.4	101.3	98
2	99.9	101.7	?	104.3 ?	104.7	104.7	101.4	94.3	85.8	85.1	87.5	83.1	78	86.9	88.3	89	86.9	87.8	89.7	93.9	98.8	99.4	99.4	101.4	93.6
3	?	?	?	?	?	100.8 ?	95.1	86.8	76	68.3	61.1	57.7	57.8	57.8	59.3	59.1	59.9	62.5	68.4	74.9	84.1	88.5	92.1	94.1	73.9 ?
4	94.6	93	91	96.3	99.3	99.9	97.8	92.7	87.9	79.5	74.7	66	58	49.8	46.2	45.1	48.1	72.7	84.7	87.9	94.8	100.2	101	103.6 ?	81.9
5	104.9 ?	104.4	104.4	103.4	103.3	101.6	95.7	91	90.5	89.1	86.7	87.8	93.6	103.5 ?	102.1	99.1	90.4	85.5	86.5	92.6	98.5	99.4	99.3	100.9	96.4
6	103.8	?	?	?	?	104.5 ?	102.2	99.2	85.7	75	75.8	75.9	75.7	75.3	74.3	72.3	72.6	74.6	84.9	92	94.5	98.5	101.9	102.8	87.1 ?
7	103	103.6	104.3	?	?	104.3 ?	99	89.3	77.8	72.3	65.5	63.1	61.8	63.6	69.3	70.1	69.8	70.4	74.6	80.6	84.5	89.4	91.1	88.7	81.6 ?
8	91.5	95.6	101.3	104.6 ?	?	?	101.3	95.3	80.6	68.1	63.8	61.3	58.5	56.6	52.6	49.7	69.1	73.5	76.5	84.8	90.3	93.5	99.5	103.3	80.5
9	?	104.8 ?	104.8 ?	102.7	99.5	97.2	91.8	82.1	74.2	66.5	57.1	53.1	44.3	45.5	48.5	49.2	50	52.1	58.9	68	76.1	78.6	73.7	75.5	71.9
10	81.6	90	94.2	95.5	96.7	98.1	95.6	88.4	81.8	78.8	75.6	68	61.5	57.8	56.5	58.4	53.5	60.7	68.5	80.1	80.6	84.8	90.1	95.4	78.8
11	99.4	102	103.9	?	?	?	104.2 ?	98.4	91.7	87	78.8	76.6	78.1	73.5	68.8	65.9	68.5	72	81.1	87.5	94.7	95.7	95.5	92.9	86.5 ?
12	92.9	97.6	102.1	101.7	100.9	101.4	103.4	103.9	102.2	104.5 ?	102.5	99.2	98.1	99.3	103	104	104.2 ?	103.7	100.8	101.6	104.2	104.6	104.7	104.6	101.9
13	104.7	104.9 ?	?	?	?	?	101.2 ?	97.6	99.4	97.5	91.7	86.1	83.3	80.6	79	74.2	71	74.2	86.1	87.6	88.7	86.1	86.7	90.3	88.5 ?
14	94.4	95.4	97.2	99.5	104.1 ?	?	?	103.8	100.4	97.1	94.7	90.6	89	87.9	87	85.8	86.1	80.7	81.4	90.6	98.5	100.9	102.2	100	94 ?
15	102.2	?	?	?	103.8 ?	102.2	100.7	96	92.6	87.4	88.3	89.2	86	85.6	84.1	82.4	86.2	79.5	81.9	89.3	92.4	95.3	101.2	104.7 ?	92 ?
16	?	?	?	?	?	?	103.8 ?	98	85.7	79.4	73.6	73.4	74.2	77.9	78.9	82.4	82	89.9	94.6	99.2	101.6	104.1	?	?	87.4 ?
17	?	?	?	?	?	?	103 ?	97.8	94.5	87.9	89.8	89.7	87.1	86.7	86.7	89.5	91.4	93.9	92.5	96.7	100.6	102.2	103.5	103.8 ?	94.3 ?
18	?	?	?	?	?	?	?	99.8	92.4	81	77.2	73.5	72.2	72.4	83	92.1	94.4	95	94.7	94.4	97.2	97	96.5	96.9	88.8 ?
19	96.8	94.1	95.7	97.9	101.4	101.2	100.7	100	92.9	83.6	84.6	79.8	76.1	73.9	71	74.7	85	96.1	94.7	101.7	103.3	104.7 ?	?	?	91.4 ?
20	102.8	100.3	100.6	104	104.5	103.7	100.1	96.3	90.4	82.8	80.6	79.1	75.4	77.7	77.4	78.7	75.2	73.8	78	88.6	95.8	98.9	100.7	103.6	90.4
21	103.4	103.9	?	?	?	?	103.9 ?	99.1	94.3	86.6	78.3	71.9	73.6	69.8	65.5	66.4	78.2	78.3	82.7	90.5	95.4	96.6	99	101.7	87 ?
22	104 ?	?	?	?	?	?	103.8 ?	99	94	89	88	84	79.8	79.6	75.8	74.4	74.4	89.4	99.1	103.1 ?	?	?	?	?	89.2 ?
23	?	?	?	?	?	?	?	103.4 ?	98.2	92.8	88.1	83.2	80.9	83.8	91.4 ?	?	103.7 ?	99.4	99.5	100.8	103	103.7	104.9 ?	?	95.8 ?
24	?	?	?	?	?	?	?	100.5 ?	85.6	73.5	69.6	66.9	60.7	57.5	68.7	64	68.6	77.6	84.7	88.1	90.6	98.1	103.8	104.9 ?	80.2 ?
25	?	?	?	?	?	?	?	103.9 ?	98.9	92.1	88.3	83.2	76.7	75.8	75.4	75.9	77	87.1	?	?	?	?	?	?	84.9 ?
26	?	104.6 ?	87.2	79.2	81.4	81.8	78.3	77.2	71.9	62.7	55.2	54.8	57	56.4	56.7	58	58.8	59.7	73.1	77.5	79.8	85.1	92.7	97.8	73.3
27	97.1	98.8	102.2	104.2	102.5	100.6	93.4	84.2	74.1	64.5	54.5	53.3	52.2	51.9	52.7	50.6	48.1	48.4	51.4	61	74.3	80.5	86.5	83.9	73.8
28	88.9	93.5	96.6	98.7	100	99.6	96	86	76.1	64.8	57.2	56.8	57	55.3	55.9	57.1	58.1	60.4	66.2	72.1	79.7	80	80.7	86.2	76
29	90.5	94.4	95.8	97	97.7	98.3	96.5	92	87.6	84	78.6	76.7	76	73.4	72.6	72.1	73.1	74.9	78.9	90.2	99.3	103.1	104	101.4	87.8
30	78.5	82.2	86.3	93	96.7	99.2	96.5	92.1	87.7	82.9	78	72.8	70.1	69.6	66.3	62.4	65.3	69.6	81.3	87.2	99.7	101.8	93.3	93.4	83.6
Avg	97.1	98.5	98.3	99.1	100	100.2	98.7	95	88.3	81.9	77.8	74.8	72.6	72.5	73	72.5	75.1	78.1	82.5	88.3	92.7	95.3	96.2	97.3	86.3 ?
S D	7.6	6.2	5.9	6.4	5.7	5.1	5.6	6.9	8.7	10.8	12.7	12.6	13.1	14.7	15.2	16	16	14.3	12.2	10.3	8.6	8	7.8	7.6	7.9
S/A	0.08	0.06	0.06	0.07	0.06	0.05	0.06	0.07	0.1	0.13	0.16	0.17	0.18	0.2	0.21	0.22	0.21	0.18	0.15	0.12	0.09	0.08	0.08	0.08	0.09
Min	78.5	82.2	86.3	79.2	81.4	81.8	78.3	77.2	71.9	62.7	54.5	53.1	44.3	45.5	46.2	45.1	48.1	48.4	51.4	61	74.3	78.6	73.7	75.5	71.9
Max	104.9	104.9	104.8	104.6	104.7	104.7	104.2	103.9	102.2	104.5	102.5	99.2	98.1	103.5	103	104	104.2	103.7	100.8	103.1	104.2	104.7	104.9	104.9	101.9
n	242	222	197	186	176	192	263	337	360	354	358	360	360	356	353	346	351	360	348	340	336	329	303	281	7313

Data Recovery: 0.0% missing; 0.0% untested; 15.4% 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.

Prepared by: Afshin M. Andreas, NREL

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

**June 2012**

**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	21.8	21.5	20.8	20.2	19.9	20.1	21.7	25.7	28.4	29.8	32.1	32.7	32.4	32.4	32.4	29.7	25.9	23.6	25	25.3	25.2	25.2	25.1	24.7	25.9
2	24.4	24.3	22.4	19.8	18.2	17.7	19.1	20.9	23.4	24.9	27.3	29.6	31.7	31.4	28.9	27.7	26.6	26.1	24.3	22.4	20.5	19.6	19.2	18.6	23.7
3	17.4	16.6	16.3	15.8	15.2	14.9	16.6	20.1	24	27.6	29.1	29.4	28.8	28.3	28.4	29.1	29.5	29	27.4	24.8	21.9	20	19	18.4	22.8
4	18.1	18.1	18.8	18.6	17.7	17.4	18.5	21.4	24.5	26.5	28.3	30.4	30.5	31.1	31.5	32.3	32.7	30.1	25.7	23.1	21.3	19.3	18.4	17.6	23.8
5	17.2	17.1	16.8	16.3	16.2	16	18.3	21.4	23.1	22.5	22.5	23.7	23.5	20.8	19.1	18.1	18.3	19.9	21.3	19.5	16.7	15	14.1	13.9	18.8
6	13.3	12.4	11.6	11.1	11.2	11.7	12.9	15	18.3	22	24.6	25.5	25.5	25.4	25.4	25.8	26.3	26	24.4	21.1	17.8	15.9	14.8	14.1	18.8
7	13.8	13.5	13.2	12.7	12.3	12.3	15.2	19.7	23.8	26.6	28.6	30.3	30.1	31.1	30.1	28.5	28.1	28.5	27.6	24.5	21.3	19.5	18.2	17.6	22
8	17.2	16.9	16.6	16	15.7	15.6	18	22.2	26.6	30.1	32.2	33.2	33.3	33.5	33.6	34.6	35	30.8	28.4	26.3	23.5	21.7	20.6	19.7	25
9	19.2	18.7	18.2	17.8	17.4	17.5	19.8	23.8	28.1	31.1	33.4	34.6	34.9	35.2	35.8	35.3	35.6	34.7	32.1	29	26.5	25	24.1	23.2	27.1
10	22.1	21.1	20.3	19.9	19.8	20	22.3	25.7	28.5	30.8	33	34.4	35.2	35.1	36.5	37.4	37	35.4	32.2	29.3	26.9	25.3	24	23	28.1
11	22.1	21.3	20.7	20.1	19.7	19.6	21.3	25.2	29.1	30.7	32.5	33	32.8	32.9	33.3	33.7	33	32.2	30	27.2	25.6	24.7	24.1	23.9	27
12	24.1	23.9	23.5	23	22.8	23	23.1	23	24	24.4	23.7	25.2	26.7	28.1	27.2	25.5	24.5	23.9	23.4	23.3	23.1	22.9	22.9	23	24.1
13	23	23	22.9	22.9	22.5	22.2	22.8	25	26.2	26.5	28	30.6	31.6	31.9	32.5	33	32.8	32.2	29.1	26.1	23.7	22.1	21	20.1	26.3
14	19.2	18.6	18.8	19.2	19.8	20.1	20.2	20.6	21.8	22.7	23.6	24.8	25.8	26.6	27.1	27.1	26.8	26.5	25.2	22.8	20.1	18.6	17.8	17.2	22.1
15	16.9	16.1	15.4	15.2	15.6	16.9	19.3	22.6	24.9	26.7	27.8	27.8	27.2	26.6	26.6	26.6	26.5	26	24.9	22.5	19.7	18.3	17.2	16.7	21.8
16	16.8	16.3	15.9	15.9	15.7	15.9	17.7	20.8	23.7	25.3	26	26.1	25.9	25.9	26.3	26.2	26.6	26.5	24.8	22.2	19.6	18.1	17.1	16.4	21.3
17	15.9	15.5	15.3	15.4	15.3	15.2	17	20.5	23.3	24.6	25.3	25.2	25.2	25.9	25.9	25.4	23.8	22.3	21	19.3	17.2	15.9	15.1	14.8	20
18	14.6	14.5	14.5	13.7	12.7	12.6	15.3	19.8	24.9	28.7	31.3	32.7	33.5	33.5	32.1	28.9	26.7	25.4	24.6	23.3	21.2	20.2	19.8	19.9	22.7
19	20	20.1	20.1	20	19.6	19.4	20.1	21.1	23.1	27.3	30.3	32.9	34.8	35.3	36.7	37.3	35.9	32.1	28.3	26.2	24.8	23.7	23	22.6	26.5
20	22.4	22.3	22.1	21.7	21.2	21.1	23.1	27	31.6	35.9	38.3	38.8	38.5	38	37.7	37.3	36.9	36.4	34.9	31.9	28.9	27.2	26.1	25.5	30.2
21	24.9	24.3	23.8	23.3	23	22.9	24.3	27.8	31.9	35.4	38.5	40.4	40.9	38.7	38.9	40	39.1	38.2	36.2	32.9	30.1	28.6	27.7	26.9	31.6
22	26.1	25.3	24.7	24.2	23.7	23.3	24.8	27.7	31.3	34.5	36.9	37.5	37.5	37.1	37.6	38.2	38.6	35.9	29.7	25.4	23.1	22.1	21.8	21.9	29.5
23	22	21.9	21.8	21.7	21.7	21.6	21.8	23.3	27.2	30.7	33.6	35.6	37.3	37.1	33	26.6	25.8	28.6	28.5	26.8	24.6	23.2	22.2	21.5	26.6
24	21	20.5	20.1	19.9	20.2	20.4	21.2	24.4	30.1	34.9	36.6	36.5	35.6	34.8	35	34.3	33.6	33.6	31.9	28.8	26.6	25.3	24.4	23.8	28.1
25	23.1	22.6	22.4	22.3	22.1	22.2	23.7	26.9	29.5	32.9	34.8	35.5	35.5	35.1	35.7	36.2	36.7	35.1	27.2	22.6	21.5	21.2	21	20.8	27.8
26	20.4	19.9	18.8	17.8	17.7	17.8	19.3	21.7	23.7	25.6	26.8	27.5	27.7	28.2	29.7	30.4	29.5	28.7	26.8	24.4	21.7	19.8	18.3	16.9	23.3
27	16.1	15.9	15.9	15.7	15.6	15.8	18.1	22.3	26.3	29.7	31.4	32.5	33.1	32.7	33.6	34.7	35.4	35.1	33.5	29.9	25.3	22.6	21	20.3	25.5
28	20.1	20.1	19.6	19	18.5	18.4	20.3	23.9	27.9	31.2	33	34.3	34.7	34.6	35	35.9	36.6	36.4	35.1	32	28.9	27.4	26.5	26	28.1
29	25.3	24.5	23.9	23.3	22.9	22.8	24.2	27.2	30.2	32.6	34.9	37.3	38.5	39.1	40.4	41.5	42.1	41.4	39.5	36	32.6	30.4	29.1	28.4	32
30	28.1	27.2	26.2	25.1	23.9	22.9	23.4	26.2	29.7	32.9	35.5	37.9	39.3	39.2	39.7	40.6	42.2	41.6	39.2	35.2	31.5	29.3	27.9	26.6	32.1
Avg	20.2	19.8	19.4	18.9	18.6	18.6	20.1	23.1	26.3	28.8	30.7	31.9	32.3	32.2	32.2	31.9	31.6	30.7	28.7	26.1	23.7	22.3	21.4	20.8	25.4
S D	3.8	3.8	3.6	3.6	3.5	3.4	3	3	3.3	4	4.5	4.6	4.8	4.7	5	5.6	6	5.6	4.9	4.4	4.1	4	4	4	3.7
S/A	0.19	0.19	0.19	0.19	0.19	0.18	0.15	0.13	0.13	0.14	0.15	0.15	0.15	0.15	0.16	0.18	0.19	0.18	0.17	0.17	0.18	0.19	0.19	0.19	0.15
Min	13.3	12.4	11.6	11.1	11.2	11.7	12.9	15	18.3	22	22.5	23.7	23.5	20.8	19.1	18.1	18.3	19.9	21	19.3	16.7	15	14.1	13.9	18.8
Max	28.1	27.2	26.2	25.1	23.9	23.3	24.8	27.8	31.9	35.9	38.5	40.4	40.9	39.2	40.4	41.5	42.2	41.6	39.5	36	32.6	30.4	29.1	28.4	32.1
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.

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

**June 2012**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	1.4	0.6	0.6	0.9	0.5	0.5	0.5	1.7	2.7	3	4	4.7	5.3	5.9	5.9	4.4	3.3	4.3	5.1	4.7	4.4	5	4.9	3.1	3.2
2	3.7	3.9	0.6	0.6	0.5	1.2	1.7	2.1	2.5	2.7	1.9	1.3	1	2.3	2.8	2.9	2.1	1.9	1.4	0.4	0.9	0.9	0.4	0	1.7
3	0.1	1.1	1.2	1	1.3	1.9	2.1	2.1	1.2	2.1	2.6	3.4	3.8	4.2	3.9	3	3.3	3.1	2.4	1	0.9	0.8	0.8	1.1	2
4	1	1.8	2.2	1.6	1.9	2.2	1.9	2.3	2.1	2.8	3.1	2.3	2.7	2.9	3.6	3.1	2.6	2.9	3	2.9	3.2	1.4	0.6	1.1	2.3
5	1.3	1.5	1	1.3	0.6	0.9	2	2.1	2.9	2.8	3.4	3.7	4	3.1	2.8	2.6	3.1	3.4	2.8	2.1	1.2	1.2	1.4	1.2	2.2
6	0.3	0.5	0.3	0.7	1.1	1	1.4	1.9	3.6	3.9	4.2	4.4	3.9	3.6	3.7	3.4	3.2	3.4	2.6	1.2	0.6	0.7	0.7	1.1	2.1
7	1.2	1.1	0.8	0.8	0.6	0.6	1.3	1.7	1.8	2.3	1.8	2.2	1.2	2.2	2.5	2.3	2.7	2.4	2.2	1.9	1.4	1.1	1.1	1.4	1.6
8	1.4	1.1	0.9	1.3	1.2	1.2	1.4	1.1	1.1	1.4	1.6	1.4	1.4	1.7	1.9	1.8	3.1	2.1	2	1.5	1.5	1.3	0.9	1.6	1.5
9	1.1	1.2	1.1	1.4	1.3	1.4	1.5	1.4	2.1	2.3	2.5	2.6	3.2	2.6	2.4	2.7	1.9	2.3	1.3	0.7	1.6	3	2.5	1.8	1.9
10	1.2	1.3	1.1	1.5	1.4	1.4	2.2	3.2	3.1	2.4	2.5	2.7	2	2.1	2.6	2.5	2.9	2.2	1.9	2.7	2.4	2.5	2.3	2	2.2
11	1.8	1.4	1.1	0.8	0.9	1.1	1.4	2.2	2.2	1.6	2.2	2.4	2.5	3.4	3.3	3.9	3.7	3.1	2.5	3.1	2.9	2.3	2.6	2.8	2.3
12	3.3	3.6	3.4	3.2	2.7	2.2	2.3	2.5	3.4	2.8	2.6	3.1	5.2	4.7	4	2.5	2.5	2.7	3.4	3.3	2.2	2.1	2.1	2.3	3
13	2.1	2	1.5	1.1	0.7	0.6	2	3	3.2	3	3.5	3.8	3.7	3.1	3.6	3.3	3.4	3.2	2.4	2.6	2.1	2	1.4	1	2.4
14	1.5	1.8	1.2	1.7	2.9	3.6	3.2	3.2	5	6	5.5	6	5.2	6.1	6.2	6.2	5.8	5.6	4.5	2.8	1.9	1.6	1.9	2.5	3.8
15	1.9	1.9	1.8	1.9	2	3.1	2.4	3.6	3.7	4	4.2	4.6	4.9	5.3	4.7	5.1	4.9	4.7	4.1	2.8	2.7	1.8	1.7	2.3	3.3
16	1.5	1.6	1.7	1.6	1.2	1.8	2.3	3.5	4.5	5.2	5.1	4.9	4.8	4.8	4.3	4.4	4	3.9	3	2.3	2	1.3	1.2	1.3	3
17	0.7	0.7	1.7	1.6	1.3	1	1.5	2.8	2.9	2.6	3.1	3.3	3.3	2.9	3.1	2.6	2.8	2.3	1.7	0.9	0.7	0.7	1	1.2	1.9
18	1.2	1	0.2	0.1	0	0	0.2	0.2	0.6	0.9	0.8	1.2	1.4	0.8	2.4	3.1	2.7	2.4	2.8	2.3	1.6	1.6	1.2	0.6	1.2
19	0.8	0.6	0.8	0.6	0.5	0.2	0.5	1.1	1.7	2.5	2.3	1.8	2	1.8	1.8	1.1	2.9	4.9	3.1	2.1	1.3	1.1	0.8	1.3	1.6
20	1.9	1.4	1.6	1.5	1	0.3	1	0.9	0.4	0.7	1.6	2.1	2.6	2.9	3	3.2	2.7	2.6	1.9	1.4	0.7	0.9	1.7	2.1	1.7
21	1.5	1.5	1.1	1.5	1.3	1.1	1.2	1.3	1.4	1.1	1.3	1.4	2.7	3	2.9	2.7	2.1	2.1	2.2	1.1	1.7	1.9	2.4	1.7	1.8
22	1.5	1.6	2	1.7	1.3	1.4	2	2.1	2	1.6	2.5	2.7	3.6	3.8	4.3	3.6	2.8	4	4.2	2.3	1.2	1	1.9	1.8	2.4
23	2	1.5	1	0.7	0.4	0.5	1.1	1.6	2.3	1.9	1.5	0.8	0.8	0.9	2.5	1.8	1.9	2.8	2	1.1	1.1	1	0.1	0.1	1.3
24	0	0	0	0.4	0.5	0.2	0.7	0.2	0.4	1.3	2.3	2.8	3.4	3.5	3.9	3.5	3.4	3.2	2.6	1.8	0.9	1	1.4	0.8	1.6
25	0.8	0.3	0.4	0	0.1	0.2	0.6	1.7	2	2.3	2.8	3.2	3.7	3.1	3.2	3.3	4.1	5.3	2	0.7	0.9	0.2	1	1.4	1.8
26	1.4	0.8	2.6	2.8	2.7	3.3	3.2	4.1	3.9	4.1	3.9	3.8	2.8	2.1	2.2	1.4	0.7	0.5	1.6	1.4	0.7	0.2	0.1	0.2	2.1
27	0.5	1.2	0.9	1.5	1.4	1.2	1	1.3	1.5	2.4	2.4	1.9	2.3	2.1	1.7	1.9	1.6	1.6	1.3	0.1	0.1	0.3	0.3	0.7	1.3
28	1.4	1.1	0.9	1	1	0.7	1.3	2.1	2.1	3.2	3.2	3.1	3.5	4.1	3.9	3.4	2.7	2.3	1.9	1.9	2.7	2.4	2.6	2.9	2.3
29	3.1	2.9	2.1	2.2	2.2	2	2.5	2.6	3	2.8	2.3	2.3	1.9	2	1.7	2	2.1	1.6	1.6	1.8	2.3	2.2	2	3.3	2.3
30	3.8	3.1	1.3	1.5	1.7	1.7	1.8	2	2.1	1.7	1.4	0.7	1.2	1.4	1.8	1.2	1.1	1.7	1.7	1.9	2.9	2.2	4.2	1.6	1.9
Avg	1.5	1.5	1.2	1.3	1.2	1.3	1.6	2	2.4	2.6	2.7	2.8	3	3.1	3.2	3	2.9	2.9	2.5	1.9	1.7	1.5	1.6	1.5	2.1
S/D	0.9	0.9	0.7	0.7	0.7	0.9	0.8	0.9	1.1	1.2	1.1	1.3	1.3	1.4	1.2	1.1	1	1.2	1	1	0.9	1	1.1	0.9	0.6
S/A	0.62	0.61	0.59	0.55	0.61	0.72	0.47	0.46	0.48	0.46	0.41	0.46	0.44	0.44	0.36	0.38	0.36	0.4	0.39	0.52	0.56	0.64	0.69	0.56	0.3
Min	0	0	0	0	0	0	0.2	0.2	0.4	0.7	0.8	0.7	0.8	0.8	1.7	1.1	0.7	0.5	1.3	0.1	0.1	0.2	0.1	0	1.2
Max	3.8	3.9	3.4	3.2	2.9	3.6	3.2	4.1	5	6	5.5	6	5.3	6.1	6.2	6.2	5.8	5.6	5.1	4.7	4.4	5	4.9	3.3	3.8
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

Data Recovery: 0.0% missing; 0.0% 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**

**June 2012**

**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	250	264	268	252	256	212	214	226	227	229	205	186	197	199	199	201	244	207	213	215	231	239	247	236	217
2	245	275	349	351	320	314	346	358	9	25	52	106	93	113	137	154	155	166	189	216	100	102	84	46	98
3	272	316	328	318	324	327	330	344	352	331	331	315	314	311	318	329	321	304	299	287	262	273	265	259	316
4	268	288	304	297	289	288	297	292	320	332	336	353	348	0	355	358	17	88	100	98	82	49	87	88	353
5	106	100	97	92	97	107	108	103	112	117	114	106	94	97	86	95	105	107	105	95	97	103	104	69	102
6	56	7	354	33	46	38	58	93	104	111	112	111	114	112	100	96	106	114	115	106	67	44	44	40	99
7	34	38	30	27	14	9	46	64	78	74	72	139	157	140	179	171	159	172	175	198	209	237	242	247	140
8	251	265	270	300	275	314	329	343	53	46	22	25	2	346	359	19	131	165	176	186	203	217	231	255	303
9	277	285	284	297	306	302	293	310	318	314	309	295	302	298	305	306	311	297	279	255	244	250	258	267	292
10	256	255	271	286	287	282	300	319	328	308	309	298	300	280	266	251	248	249	246	247	249	250	253	254	276
11	256	255	260	261	261	250	244	255	251	240	238	247	236	215	207	196	214	227	225	216	219	208	202	209	226
12	229	214	213	189	194	221	201	197	211	243	244	201	188	185	194	236	230	237	242	239	241	244	248	248	217
13	253	277	295	257	300	356	23	44	58	63	66	59	50	37	36	29	46	51	66	63	50	42	24	358	41
14	354	9	40	54	58	63	62	64	75	85	86	86	87	87	87	86	84	82	85	82	77	74	68	85	77
15	52	41	40	41	67	86	73	77	87	88	83	85	83	78	84	81	75	87	84	88	89	64	57	80	78
16	57	50	51	43	45	47	50	69	86	86	85	86	90	85	92	88	94	88	88	92	83	52	44	47	79
17	30	45	54	47	38	30	56	63	70	77	76	88	87	94	91	83	89	94	98	89	102	101	110	108	79
18	115	121	86	329	359	0	10	45	52	6	21	15	23	51	179	154	152	147	154	157	163	173	190	202	143
19	219	222	192	251	273	285	271	262	268	280	273	283	297	314	301	293	208	189	237	245	278	262	234	238	253
20	251	267	271	280	284	281	324	342	295	128	141	163	150	154	152	176	210	190	195	193	228	238	247	253	203
21	257	282	281	287	284	294	297	319	292	301	280	265	211	223	238	248	242	243	244	248	249	247	253	258	257
22	259	253	252	259	253	255	273	277	268	252	227	231	231	241	241	239	244	73	36	350	27	270	261	285	258
23	305	308	344	325	328	288	325	317	322	348	22	248	351	264	74	136	142	170	184	221	258	264	283	343	300
24	269	356	57	56	47	89	239	280	109	136	137	166	170	177	167	174	184	184	183	191	188	210	220	204	175
25	218	223	250	249	205	261	260	270	261	266	251	253	267	273	260	257	250	44	60	116	225	300	327	339	270
26	319	310	21	26	25	31	30	38	38	39	45	54	62	36	31	15	334	343	149	163	185	189	194	246	36
27	270	293	305	315	323	344	354	21	55	63	58	55	15	42	349	346	354	357	358	292	212	254	272	294	6
28	299	292	291	289	300	314	320	297	288	291	283	280	277	262	266	274	255	252	247	250	253	248	249	274	274
29	248	252	254	254	255	254	255	269	267	281	263	258	288	264	275	262	244	241	221	193	221	219	235	297	255
30	29	117	191	341	330	342	346	12	31	45	43	52	358	292	288	259	303	239	219	195	216	216	40	106	356
Avg	273	279	299	316	323	337	346	4	30	38	60	106	112	148	159	164	171	142	162	182	206	232	249	256	282
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**

**June 2012**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	2.3	1.3	1.1	1.4	1.1	1	1.1	3.3	4.3	5.1	6.6	7.7	9	9.8	9.7	7.3	6.3	7.8	8.3	7.8	7.8	8.3	7.7	5.1	5.5
2	6.1	6.6	1.9	1.8	1.8	2.7	3.9	4.6	5.3	4.9	3.9	3.1	2.2	4	4.6	4.7	3.4	3	2.3	0.9	1.8	1.7	1	0.3	3.2
3	0.3	1.7	2.1	1.8	2.3	3	4	4.1	2.4	4.2	5.3	6.2	6.9	7.9	7.3	5.9	6.4	5.8	4.5	1.9	1.7	1.9	1.4	1.8	3.8
4	2.1	3.3	3.8	2.7	3.1	3.6	3.3	3.7	3.7	5.1	5.6	4.9	6	6.1	7	6.3	5.2	5.1	5.3	5.2	5.6	2.7	1.5	2.1	4.3
5	2.6	2.8	2.1	2.4	1.3	1.8	3.6	3.7	4.6	5	5.7	6.6	7.2	5.9	4.9	5.1	5.9	5.9	4.9	3.7	2.2	2.2	2.8	2.1	4
6	0.7	1	0.8	1.4	2.1	1.9	2.7	3.6	6.4	6.8	7.5	7.2	6.8	6.6	6.1	5.8	5.7	5.9	4.4	2.4	1.5	1.4	1.5	2.1	3.9
7	2.3	2.1	1.8	1.7	1.6	1.8	2.6	3.1	3.6	4.3	3.6	4	3.1	4	4.2	4	4.5	3.8	3.5	2.8	2.3	2.1	2	2.3	3
8	2.2	2	1.5	2.1	1.9	2.1	2.5	2.3	2.6	2.9	3.6	3	3.1	3.9	4.1	3.8	5.2	3.3	3.1	2.6	2.5	2.2	1.7	2.4	2.8
9	1.7	1.8	1.8	2.1	2	2.3	2.6	2.8	4.2	4.4	4.8	4.5	5.5	4.7	4.5	4.6	3.8	3.8	2.3	1.4	2.9	4.8	4.3	3.6	3.4
10	2.1	2	2.2	2.4	2.5	2.4	4	5.6	6	4.7	4.8	4.7	3.7	3.9	4.6	4.2	5	3.4	2.9	4.3	4	4	3.4	3.2	3.8
11	3	2.4	2.1	1.7	1.7	1.9	2.3	3.6	3.4	2.8	3.8	4.4	4.3	5.7	5.6	6.5	5.7	5.4	4.3	5	4.8	3.7	4.3	4.5	3.9
12	5.7	6.3	5.7	5.3	4.6	4	3.9	4.3	5.8	5.3	4.5	5.3	8.1	7.8	6.4	4.3	4.4	5	5.7	5.3	3.9	3.4	3.4	3.8	5.1
13	3.4	3.2	3	2.1	1.6	1.5	4	5.7	5.9	5.6	6.4	6.9	6.5	5.9	6.5	6.4	6	5.8	4.7	4.6	3.8	3.6	2.8	2.3	4.5
14	3.2	3.7	2.6	3.3	5	6.5	5.8	5.9	8.3	10.3	9.8	10.8	9.3	11.1	10.5	10.6	10.1	9.6	7.9	5.6	4	4	3.6	4.8	6.9
15	3.4	3.2	3.2	3.4	4.2	5.7	5.1	6.7	6.9	7.5	7.6	8.1	9.1	9.7	8.7	8.9	8.6	8.3	7.6	5.3	4.8	3.2	2.9	4.5	6.1
16	3	3.1	3.3	2.8	2.6	3.2	4.3	6.5	8.1	9.1	8.9	8.9	8.9	8.8	8.1	7.6	7.2	7	5.9	4.3	4	2.9	2.4	2.8	5.6
17	1.8	1.8	3.1	2.8	2.7	2.4	3.2	4.9	5	5	5.5	6.1	5.9	5.3	5.9	5	4.9	4.2	3.6	1.9	1.6	1.5	2	2.2	3.7
18	2.2	2.1	0.9	0.4	0.2	0	1	1.1	1.8	2.1	2.4	2.7	3.2	2.3	3.8	4.8	4.5	4.1	4.4	3.8	2.8	2.5	2.2	1.4	2.4
19	1.6	1.4	1.4	1.3	1.3	0.9	1.3	2	3.2	4.4	4	3.6	3.9	3.8	3.6	2.4	5	7.7	5.7	3.5	2.2	2.1	1.8	2.3	2.9
20	2.9	2.5	2.8	2.7	1.8	1.1	2.1	1.9	1.4	2	3	3.8	4.5	4.8	5.2	5.2	4.5	4	3.1	2.4	1.4	1.8	2.8	3.1	2.9
21	2.6	2.7	2.1	2.4	2.3	2.1	2.4	2.7	2.8	2.6	2.8	3.2	4.4	5.1	4.8	4.6	3.9	3.6	3.5	2	2.8	3.1	3.8	2.9	3.1
22	2.8	2.6	3.1	3	2.5	2.5	3.3	3.6	3.5	3.1	4.3	4.7	6	6.3	7	6.2	5	6.9	8.3	5.3	2.5	2	3.5	3.1	4.2
23	3.5	2.9	2.3	2	1.4	1.4	2.7	3.1	4.5	4	3.5	2	1.8	1.8	5.1	3.3	3.5	4.6	3.4	2	2	1.8	0.5	0.5	2.6
24	0.2	0	0.1	0.9	1.3	0.8	1.6	0.7	1.4	2.6	3.8	4.6	5.4	5.6	6	5.7	5.5	5.2	4.2	3	1.7	1.8	2.3	1.4	2.7
25	1.6	1	1.2	0.1	0.5	1	1.6	3.1	3.5	4.1	4.7	5.4	6.4	5.6	5.8	5.8	7.1	9.3	4.4	2	1.9	0.7	2.3	3	3.4
26	2.6	2.1	5.3	5.2	5.2	6.1	6.1	7.2	7.4	7.2	7	6.8	6	4.7	4.4	3.2	1.7	1.5	2.9	2.4	1.4	0.6	0.4	0.6	4.1
27	1.1	1.9	1.6	2.4	2.4	2.6	2.6	2.9	3.3	4.8	4.6	3.8	5.2	4.6	3.8	4.4	4.2	3.4	2.7	0.5	0.4	0.8	0.8	1.4	2.7
28	2.3	1.7	1.6	1.7	1.6	1.4	2.5	3.6	3.4	5.3	5.5	5.3	6.2	7.4	6.8	6.1	4.7	4	3.1	3	4.2	3.8	4	4.5	3.9
29	4.6	4.3	3.4	3.4	3.4	3.3	4.1	4.4	4.8	4.8	4.2	3.9	3.6	3.6	3.3	3.4	3.6	2.7	2.7	2.8	3.7	3.7	3.4	5.5	3.8
30	7.8	5.5	2.6	3.3	3.1	3.2	3.7	4.2	4.1	3.7	3.1	2	2.7	3	3.3	2.6	2.3	2.9	2.8	3.1	4.9	3.7	7.8	3.3	3.7
Avg	2.7	2.6	2.3	2.3	2.3	2.5	3.1	3.8	4.4	4.8	5	5.2	5.5	5.7	5.7	5.3	5.1	5.1	4.4	3.4	3	2.7	2.8	2.8	3.9
S/D	1.6	1.5	1.2	1.1	1.2	1.5	1.3	1.6	1.8	1.9	1.8	2.1	2.1	2.2	1.8	1.8	1.7	2	1.8	1.6	1.6	1.5	1.7	1.4	1.1
S/A	0.6	0.57	0.52	0.49	0.53	0.62	0.41	0.41	0.42	0.4	0.36	0.4	0.38	0.39	0.32	0.34	0.33	0.4	0.4	0.49	0.52	0.56	0.61	0.49	0.28
Min	0.2	0	0.1	0.1	0.2	0	1	0.7	1.4	2	2.4	2	1.8	1.8	3.3	2.4	1.7	1.5	2.3	0.5	0.4	0.6	0.4	0.3	2.4
Max	7.8	6.6	5.7	5.3	5.2	6.5	6.1	7.2	8.3	10.3	9.8	10.8	9.3	11.1	10.5	10.6	10.1	9.6	8.3	7.8	7.8	8.3	7.8	5.5	6.9
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**

**June 2012**

**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	1010	1010	1010	1010	1010	1011	1011	1011	1011	1011	1010	1009	1008	1008	1006	1006	1006	1005	1006	1005	1006	1006	1006	1005	1008
2	1005	1005	1005	1005	1005	1006	1006	1007	1008	1008	1008	1007	1007	1007	1007	1007	1007	1007	1007	1008	1008	1009	1009	1009	1007
3	1009	1009	1009	1008	1009	1009	1010	1011	1010	1010	1010	1010	1009	1009	1008	1007	1007	1007	1007	1007	1007	1007	1007	1006	1008
4	1005	1005	1004	1004	1004	1004	1004	1004	1003	1003	1003	1002	1002	1002	1001	1001	1001	1002	1002	1002	1003	1004	1004	1004	1003
5	1004	1004	1004	1004	1005	1006	1006	1007	1008	1008	1008	1009	1009	1009	1010	1010	1010	1010	1011	1011	1011	1011	1011	1011	1008
6	1011	1011	1012	1012	1012	1012	1013	1013	1013	1013	1013	1014	1014	1014	1013	1013	1013	1013	1014	1014	1014	1014	1014	1014	1013
7	1014	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015	1015	1014	1014	1014	1014	1013	1014	1014	1014	1015	1014	1014	1014
8	1014	1014	1013	1013	1013	1014	1014	1015	1015	1015	1015	1014	1014	1014	1013	1013	1013	1013	1013	1013	1013	1013	1014	1014	1014
9	1014	1014	1014	1014	1014	1015	1015	1015	1016	1016	1015	1015	1015	1014	1014	1014	1013	1013	1014	1014	1015	1015	1016	1016	1015
10	1016	1016	1016	1016	1016	1017	1017	1018	1018	1018	1018	1018	1018	1018	1018	1017	1017	1018	1018	1018	1019	1019	1019	1019	1018
11	1019	1019	1019	1018	1019	1019	1020	1020	1020	1020	1020	1020	1020	1020	1019	1019	1018	1018	1018	1018	1018	1018	1018	1018	1019
12	1017	1016	1016	1015	1015	1016	1016	1015	1015	1015	1015	1014	1013	1013	1012	1011	1010	1010	1010	1010	1010	1010	1011	1010	1013
13	1009	1009	1009	1008	1008	1009	1009	1010	1010	1011	1011	1011	1010	1010	1011	1011	1011	1011	1011	1011	1012	1012	1013	1013	1010
14	1012	1013	1013	1013	1013	1014	1015	1015	1016	1016	1017	1017	1017	1017	1017	1018	1018	1018	1018	1018	1019	1019	1019	1019	1016
15	1018	1018	1018	1018	1018	1018	1019	1020	1020	1020	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1020	1020
16	1020	1020	1020	1020	1020	1021	1021	1022	1022	1022	1022	1022	1022	1022	1021	1021	1021	1020	1020	1020	1020	1020	1020	1019	1021
17	1019	1018	1018	1018	1018	1019	1019	1019	1019	1019	1019	1019	1019	1018	1018	1018	1017	1017	1016	1016	1017	1017	1017	1017	1018
18	1016	1016	1016	1016	1016	1016	1017	1017	1018	1018	1018	1018	1017	1017	1017	1017	1017	1017	1017	1017	1017	1018	1018	1018	1017
19	1018	1019	1019	1018	1019	1019	1019	1020	1020	1019	1019	1019	1018	1018	1018	1017	1017	1017	1018	1018	1018	1019	1019	1019	1018
20	1018	1018	1018	1017	1018	1018	1019	1019	1019	1019	1019	1019	1018	1018	1017	1017	1016	1016	1016	1016	1016	1016	1016	1015	1017
21	1015	1015	1014	1014	1015	1015	1015	1015	1015	1014	1014	1013	1012	1012	1011	1011	1010	1010	1010	1010	1010	1010	1010	1010	1012
22	1010	1010	1010	1009	1009	1009	1009	1009	1009	1009	1009	1009	1009	1008	1007	1006	1006	1007	1008	1010	1010	1009	1009	1009	1009
23	1009	1010	1010	1010	1010	1010	1011	1011	1012	1012	1012	1012	1011	1012	1012	1012	1013	1013	1013	1013	1014	1014	1014	1014	1012
24	1014	1014	1014	1014	1014	1014	1014	1015	1015	1015	1015	1014	1014	1013	1013	1013	1013	1012	1012	1012	1012	1012	1012	1011	1013
25	1011	1010	1009	1009	1009	1009	1009	1009	1009	1008	1008	1007	1006	1005	1004	1003	1003	1002	1003	1004	1003	1004	1005	1006	1006
26	1006	1006	1006	1006	1006	1007	1008	1009	1009	1009	1009	1009	1009	1009	1008	1008	1008	1008	1008	1008	1009	1009	1009	1009	1008
27	1009	1009	1009	1009	1009	1009	1010	1011	1011	1012	1012	1012	1011	1011	1011	1010	1010	1010	1011	1011	1011	1012	1012	1012	1011
28	1011	1011	1011	1011	1011	1012	1012	1013	1012	1012	1012	1012	1011	1011	1010	1010	1009	1009	1009	1009	1009	1009	1009	1009	1011
29	1008	1008	1007	1007	1007	1007	1007	1008	1007	1007	1007	1007	1007	1007	1006	1006	1005	1005	1005	1005	1005	1006	1006	1007	1007
30	1008	1006	1006	1006	1007	1008	1009	1010	1010	1010	1009	1009	1009	1009	1008	1008	1008	1008	1008	1008	1008	1009	1011	1011	1009
Avg	1012	1012	1012	1012	1012	1013	1013	1013	1013	1014	1013	1013	1013	1013	1012	1012	1012	1012	1012	1012	1012	1013	1013	1013	1013
S D	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
S/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0.01	0.01	0	0	0	0	0	0	0
Min	1004	1004	1004	1004	1004	1004	1004	1004	1003	1003	1003	1002	1002	1002	1001	1001	1001	1002	1002	1002	1003	1004	1004	1004	1003
Max	1020	1020	1020	1020	1020	1021	1021	1022	1022	1022	1022	1022	1022	1022	1021	1021	1021	1021	1021	1021	1021	1021	1021	1020	1021
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

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

**June 2012**

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