

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

**October 2009**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	56	216	343	582	366	330	754	428	414	330	141	40	0	0	0	0	0	0	4001
2	0	0	0	0	0	0	71	191	381	580	713	767	602	399	246	61	40	8	0	0	0	0	0	0	4061
3	0	0	0	0	0	0	8	48	144	522	591	692	622	671	571	368	168	33	0	0	0	0	0	0	4438
4	0	0	0	0	0	0	45	171	414	584	604	644	717	710	547	285	116	21	0	0	0	0	0	0	4860
5	0	0	0	0	0	0	13	39	179	395	490	638	497	710	481	285	106	22	0	0	0	0	0	0	3855
6	0	0	0	0	0	0	28	106	230	389	426	441	277	298	213	164	59	4	0	0	0	0	0	0	2637
7	0	0	0	0	0	0	20	47	65	95	419	745	760	694	555	373	163	28	0	0	0	0	0	0	3965
8	0	0	0	0	0	0	45	214	414	580	698	759	749	666	533	353	153	24	0	0	0	0	0	0	5186
9	0	0	0	0	0	0	42	199	389	550	538	712	717	640	490	330	137	22	0	0	0	0	0	0	4765
10	0	0	0	0	0	0	36	187	197	478	542	245	363	151	60 ?	74	34	15	0	0	0	0	0	0	2383
11	0	0	0	0	0	0	9	46	138	242	419	493	626	527	501	344	96	14	0	0	0	0	0	0	3454
12	0	0	0	0	0	0	25	160	331	200	178	191	196	143	61	35	15 ?	3	0	0	0	0	0	0	1538
13	0	0	0	0	0	0	18	92	192	437	611	623	667	583	496	318	112	17	0	0	0	0	0	0	4166
14	0	0	0	0	0	0	18	59	115	215	220	211	204	255	84	68	23	6	0	0	0	0	0	0	1478
15	0	0	0	0	0	0	9	54	96	93	80	112	268	280	236	137	35	3	0	0	0	0	0	0	1402
16	0	0	0	0	0	0	9	57	105	146	220	256	197	128	108	45	21	4	0	0	0	0	0	0	1297
17	0	0	0	0	0	0	8	51	158	177	169	162	120	91	108	93	26	5	0	0	0	0	0	0	1167
18	0	0	0	0	0	0	6	33	41	98	122	177	100	56	43	27 ?	14	3	0	0	0	0	0	0	721
19	0	0	0	0	0	0	34	172	356	530	656	719	713	634	495	311	112	10	0	0	0	0	0	0	4743
20	0	0	0	0	0	0	42	164	370	534	655	708	700	621	485	303	106	9	0	0	0	0	0	0	4695
21	0	0	0	0	0	0	34	165	356	514	630	687	675	595	460	285	97	8	0	0	0	0	0	0	4506
22	0	0	0	0	0	0	30	120	250	445	547	617	514	397	290	268	85	5	0	0	0	0	0	0	3567
23	0	0	0	0	0	0	30	153	279	478	577	673	573	470	280	176	76	3	0	0	0	0	0	0	3767
24	0	0	0	0	0	0	14	74	168	353	544	649	587	554	381	146	47	9	0	0	0	0	0	0	3527
25	0	0	0	0	0	0	17	98	360	472	356	353	502	326	175	102	32	5	0	0	0	0	0	0	2798
26	0	0	0	0	0	0	21	90	158	199	166	147	90	83	66	37	4 ?	1	0	0	0	0	0	0	1060
27	0	0	0	0	0	0	6	33	108	143	174	247	237	154	105	71	28	2	0	0	0	0	0	0	1308
28	0	0	0	0	0	0	15	68	112	196	456	500	644	572	436	257	76	2	0	0	0	0	0	0	3334
29	0	0	0	0	0	0	22	67	99	132	147	129	148	107	66	41	17	2	0	0	0	0	0	0	977
30	0	0	0	0	0	0	22	126	305	381	431	489	571	492	242	102	45	8	0	0	0	0	0	0	3213
31	0	0	0	0	0	0	17	127	279	414	425	425	339	217	185	122	28	9	0	0	0	0	0	0	2587
Avg	0	0	0	0	0	0	25	111	230	360	425	469	475	408	304	191	71	11	0	0	0	0	0	0	3079
S D	0	0	0	0	0	0	16	60	117	174	193	228	229	222	186	122	50	10	0	0	0	0	0	0	1391
S/A	0	0	0	0	0	0	0.63	0.54	0.51	0.48	0.45	0.49	0.48	0.55	0.61	0.64	0.7	0.91	0	0	0	0	0	0	0.45
Min	0	0	0	0	0	0	6	33	41	93	80	112	90	56	43	27	4	1	0	0	0	0	0	0	721
Max	0	0	0	0	0	0	71	216	414	584	713	767	760	710	571	373	168	40	0	0	0	0	0	0	5186
n	0	0	0	0	0	0	297	372	372	372	371	372	372	372	368	362	365	148	0	0	0	0	0	0	4143

Daylight Data Recovery: 0.0% missing; 0.0% untested; 0.6% exceed the 15% QC threshold -- 4166 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.

October 2009

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily	
1	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
2	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
3	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
4	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
5	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
6	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
7	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
8	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
9	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
10	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
11	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
12	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
13	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
14	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
15	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
16	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
17	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
20	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
21	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
22	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
23	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
24	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
25	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
26	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
27	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
28	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
29	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
30	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
31	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
Avg	0	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	0	0	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	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	0	0	0	0	0	0	N/A	
Max	0	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	0	0	0	0	0	0	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: 100.0% missing; 0.0% untested; 0.0% exceed the 15% QC threshold -- 4166 total daylight measurements.

Instrument: Eppley NIP Serial Number: 23398E6 Calibration Factor: 7.1447  $\mu\text{V}/\text{W}/\text{m}^2$  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**

**October 2009**

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	0	30	141	140	126	181	206	154	147	161	120	76	25	0	0	0	0	0	0	1508
2	0	0	0	0	0	0	54	143	206	154	111	154	323	288	234	54	40	8	0	0	0	0	0	0	1770
3	0	0	0	0	0	0	9	48	133	175	224	202	229	236	120	87	56	19	0	0	0	0	0	0	1536
4	0	0	0	0	0	0	18	47	61	87	239	256	116	68	75	100	90	21	0	0	0	0	0	0	1178
5	0	0	0	0	0	0	13	39	173	280	374	336	405	182	119	133	103	22	0	0	0	0	0	0	2179
6	0	0	0	0	0	0	27	105	211	315	373	383	277	286	213	163	59	3	0	0	0	0	0	0	2415
7	0	0	0	0	0	0	20	47	65	95	210	104	81	69	61	51	33	10	0	0	0	0	0	0	848
8	0	0	0	0	0	0	16	41	50	56	60	60	59	58	58	49	37	12	0	0	0	0	0	0	556
9	0	0	0	0	0	0	21	49	69	229	322	104	99	101	123	84	50	15	0	0	0	0	0	0	1268
10	0	0	0	0	0	0	25	72	152	219	320	195	354	151	53	74	34	15	0	0	0	0	0	0	1664
11	0	0	0	0	0	0	10	46	138	242	317	354	266	220	147	79	37	11	0	0	0	0	0	0	1867
12	0	0	0	0	0	0	24	99	246	200	178	191	196	143	61	34	14	3	0	0	0	0	0	0	1390
13	0	0	0	0	0	0	20	91	190	164	102	206	178	199	149	62	42	13	0	0	0	0	0	0	1418
14	0	0	0	0	0	0	20	59	115	215	220	211	204	255	84	68	23	6	0	0	0	0	0	0	1480
15	0	0	0	0	0	0	10	54	96	93	77	112	268	280	231	136	35	3	0	0	0	0	0	0	1394
16	0	0	0	0	0	0	10	57	105	146	220	256	197	128	108	45	21	4	0	0	0	0	0	0	1298
17	0	0	0	0	0	0	8	51	158	177	169	162	120	91	108	93	26	5	0	0	0	0	0	0	1167
18	0	0	0	0	0	0	6	33	41	98	122	177	100	56	42	25	14	3	0	0	0	0	0	0	717
19	0	0	0	0	0	0	19	46	62	68	71	66	62	60	54	44	26	4	0	0	0	0	0	0	582
20	0	0	0	0	0	0	17	38	50	58	60	59	58	54	53	45	24	4	0	0	0	0	0	0	521
21	0	0	0	0	0	0	18	43	58	64	68	69	68	63	59	48	26	5	0	0	0	0	0	0	590
22	0	0	0	0	0	0	28	106	176	205	272	216	198	197	211	186	49	5	0	0	0	0	0	0	1849
23	0	0	0	0	0	0	26	103	137	94	183	101	218	230	229	160	69	3	0	0	0	0	0	0	1553
24	0	0	0	0	0	0	16	69	166	221	215	158	202	181	189	132	47	9	0	0	0	0	0	0	1603
25	0	0	0	0	0	0	13	72	184	286	334	345	357	315	175	102	32	5	0	0	0	0	0	0	2222
26	0	0	0	0	0	0	20	89	158	199	166	147	90	83	66	37	5	1	0	0	0	0	0	0	1060
27	0	0	0	0	0	0	7	33	108	143	174	247	237	154	105	71	28	2	0	0	0	0	0	0	1308
28	0	0	0	0	0	0	15	68	112	170	218	146	78	62	55	45	22	2	0	0	0	0	0	0	992
29	0	0	0	0	0	0	20	59	99	132	147	129	148	107	66	41	17	2	0	0	0	0	0	0	967
30	0	0	0	0	0	0	18	58	134	219	219	298	275	185	225	102	45	8	0	0	0	0	0	0	1786
31	0	0	0	0	0	0	14	45	116	217	379	380	329	213	184	113	28	9	0	0	0	0	0	0	2027
Avg	0	0	0	0	0	0	18	66	126	166	204	195	192	157	123	83	39	8	0	0	0	0	0	0	1378
S/D	0	0	0	0	0	0	9	30	54	71	97	96	100	81	65	43	22	7	0	0	0	0	0	0	509
S/A	0	0	0	0	0	0	0.49	0.45	0.43	0.43	0.47	0.49	0.52	0.52	0.53	0.51	0.57	0.79	0	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	6	33	41	56	60	59	58	54	42	25	5	1	0	0	0	0	0	0	521
Max	0	0	0	0	0	0	54	143	246	315	379	383	405	315	234	186	103	25	0	0	0	0	0	0	2415
n	0	0	0	0	0	0	280	372	372	372	372	372	372	372	372	372	370	148	0	0	0	0	0	0	4146

Daylight Data Recovery: 0.0% missing; 0.0% untested; 0.5% exceed the 15% QC threshold -- 4166 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**

**October 2009**

**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	13.8	12.9	13.3	14.8	14.6	13.9	14.6	16.9	18.3	19.8	20.7	20.7	22	21.7	21.9	22.3	21.7	20	18.1	17.3	17.1	16.9	16.4	16.1	17.7
2	16.2	16.1	16	15.2	15.5	14.9	15.6	17.5	19.7	22	22.9	23.7	24.3	24.3	24.1	23.7	23.2	22.7	21.7	20.6	20.3	20	20.6	20.9	20.1
3	21	21	21	20.9	21	21.1	20.9	20.6	21	22.3	24.2	25.4	25.8	25.9	26.6	26.5	26.1	24.2	22.6	22	21.7	21.1	20.4	19.9	22.6
4	19.4	19.3	19.1	18.5	17.6	16.6	15.6	16.5	18.3	20.8	22.4	23.2	23.9	24.2	24.3	23.6	22.3	20.5	19.4	18.6	17.6	17	16.7	16.3	19.7
5	16.2	16.6	17.5	17.2	17.2	16.4	15.7	16	17	19.3	20.8	21.8	21.5	22.3	21.9	21.6	20.8	19.4	18.2	17.6	17.1	16.6	16.5	16.3	18.4
6	16.5	16.6	16.7	16.7	16.7	16.8	16.7	17.4	18.8	20.5	21.8	22.4	22.2	21.9	21.8	21.5	21.1	20.6	19.9	19.4	19.1	18.9	18.6	18.6	19.2
7	19	19.5	19.7	19.4	19.1	18.8	18.8	19.3	19.4	20.2	21.6	24.1	26.3	27.3	27.6	27.7	26.7	24.6	22.3	20.9	20.2	19	18.3	16.9	21.5
8	15.6	14.3	12.8	12	11.5	11.4	10.5	13.2	16	17.4	18.5	19.6	20.6	21.5	21.7	21.3	20	18.8	17.2	16.6	15.9	15.8	15.8	15.8	16.4
9	15.6	15.5	15.4	15.4	15.8	16	15.8	18	21	23.1	24.1	26	27.6	28.4	28.9	29.1	28.5	26.7	25.6	24.8	24.6	24.3	24.1	24	22.4
10	23.8	23.8	23.8	23.8	23.7	23.8	24.1	25.3	25.8	27	28	26.4	25.4	25	22.9	20.6	19.8	19.3	18.7	18.3	18	17.8	17.6	17.4	22.5
11	17.4	17.2	16.9	16.7	16.6	16.3	16	16	16.7	17.9	18.8	19.5	19.9	20.1	20.2	20	18.7	17.1	16.2	16.2	15.9	15.6	15.7	15.6	17.4
12	15	14.5	14.2	13.5	13.5	13.8	14.1	15.3	18.2	18.8	18.8	18.9	19	18.9	18.6	18.2	17.6	17.1	17.2	16.8	16.5	16.7	16.7	16.4	16.6
13	16.2	15.8	15.1	14.6	14.2	13.7	13.3	13.3	13.3	14.2	16.8	19.4	21.3	22.9	23.7	24	23.3	21.5	19.9	19.4	18.2	18.5	18.7	17.9	17.9
14	17.2	16.3	15.2	14.5	13.7	13.2	13	12.9	13.1	13.9	14.7	14.8	14.7	14.9	13.8	12.6	12.3	12.3	12.3	12.7	13.6	13.9	12.5	12.6	13.8
15	13.3	13.6	14	14.4	14.5	14.5	15	16.1	17.2	18.1	17.6	16	15.6	17.1	17.8	17.4	16.9	16	15.6	15.2	14.7	14.1	13.8	13.2	15.5
16	12.8	12.6	12.2	11.9	12.1	12.1	12	12.1	12.4	12.1	12.4	13.4	13.8	13.2	12.8	12.6	12	11.6	11.1	10.5	10.3	9.8	9.4	8.9	11.8
17	8.5	8	7.9	7.9	8.1	8.4	8.6	8.3	8.7	9.2	9.3	9.3	9.8	9.7	9.9	10.2	9.3	9	8.7	8.7	8.5	8.3	7.9	7.6	8.7
18	7.3	7.2	7.1	7	6.7	6.4	6.5	7	7	7.2	7.7	8.1	8.1	8	8	7.8	7.6	7.7	7.9	7.9	7.9	7.9	7.8	7.7	7.5
19	7.4	6.9	6.6	6.5	6.3	6	5.8	7	9	10.6	12	13.3	14	14.4	15	15	14.2	12.3	10.3	8.6	7.2	6.5	6	5.3	9.4
20	5	4.9	4.7	4.3	4.8	5.4	5.9	7.7	10.5	13	15.1	17.3	18.4	19.5	19.2	19.1	18.4	15.9	13.8	13.1	12.6	12.2	11.6	11.5	11.8
21	10.8	10.4	10.1	9.6	9.2	9	8.8	10.4	13.7	17.1	19.8	21.7	23.1	23.9	24.1	23.9	22.5	19.8	17	16.2	15.3	14.6	13.8	13	15.7
22	12.1	11.3	11.1	10.9	10.8	10.8	11	11.9	13.7	17	19.9	21.5	22.3	22.6	22.8	23.2	23.1	21.3	19.7	18.7	18.1	17.6	17.2	16.8	16.9
23	16.7	16.5	16.3	15.8	15.2	15.1	15.1	16.8	19.1	22.4	24.4	25.3	25.6	25.7	25.1	24.8	24	23.1	22.6	21.9	21.6	20.7	20.7	20.6	20.6
24	20.4	20.3	20.7	20.6	20.3	20.4	20.8	21.7	22.8	24.1	25.7	26.8	27.3	27.4	27.4	25.9	24.7	23.4	23.3	23.4	23	22.7	22.4	21.8	23.2
25	21.2	20.1	19	18.1	16.4	15.5	14.8	14.7	15.8	17	16.7	16.2	16.6	16.9	15.6	14.6	14.1	13.6	13.1	12.9	12.7	12.3	12	11.5	15.5
26	11.5	11	10.7	10.5	10.6	11.1	11.3	13.6	15.8	16.8	17.2	17.3	17.5	17.3	17.1	15.7	15.1	15	15.1	15.4	15.7	16.1	17.1	17.8	14.7
27	18.3	18.7	19.2	19.5	19	18.2	16.7	15.1	14.5	14.7	14.8	15.6	16.3	16.8	16.5	16.7	16.7	16.6	16.4	16.3	16	15.8	16	16	16.7
28	16.3	16.7	17.4	18.9	20.7	22.2	23	23.1	23.7	24.5	25.3	25.3	25.8	25.8	25.6	25.1	23.7	21.5	20.2	19.8	19.1	18.1	17.2	16.6	21.5
29	16.5	16.1	15.7	15.1	14.6	14.2	14.3	15	15.8	16.1	16.5	16.6	16.5	16.3	16.3	16	15.6	15.2	15	15	14.8	14.6	14.5	14.3	15.4
30	13.8	13.2	13	13.1	12.8	12.6	12.7	13.6	15.8	17.6	18.7	19.5	20.1	20.7	20.1	19.2	18.3	17.6	17.1	16.9	16.8	16.8	17.1	17.9	16.5
31	19.5	19.4	19.8	19.9	19.7	19.8	20.4	20.9	22.4	24	25.2	25.8	25.9	25.5	25.7	25.7	25.1	24	23.6	23.2	22.3	21.7	21.4	21.1	22.6
Avg	15.3	15	14.9	14.7	14.6	14.5	14.4	15.3	16.6	18	19.1	19.8	20.4	20.6	20.6	20.2	19.5	18.3	17.4	16.9	16.5	16.2	15.9	15.7	17.1
S D	4.4	4.5	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.7	4.9	5	5.1	5.2	5.3	5.3	5.2	4.7	4.5	4.4	4.3	4.2	4.3	4.4	4.2
S/A	0.29	0.3	0.31	0.31	0.32	0.32	0.32	0.3	0.27	0.26	0.26	0.25	0.25	0.25	0.26	0.26	0.27	0.26	0.26	0.26	0.26	0.26	0.27	0.28	0.25
Min	5	4.9	4.7	4.3	4.8	5.4	5.8	7	7	7.2	7.7	8.1	8.1	8	8	7.8	7.6	7.7	7.9	7.9	7.2	6.5	6	5.3	7.5
Max	23.8	23.8	23.8	23.8	23.7	23.8	24.1	25.3	25.8	27	28	26.8	27.6	28.4	28.9	29.1	28.5	26.7	25.6	24.8	24.6	24.3	24.1	24	23.2
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**

**October 2009**

**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	104.5 ?	104.4 ?	?	101.1	100.7	102	100.6	95.9	91.5	85.1	81.7	78.1	64.4	64.6	65.2	66	66.9	83.7	94.3	98.1	100	102.2	103.9	?	88.9 ?
2	104.9 ?	?	?	?	?	?	?	102.2	94.3	75.6	69.9	69.1	69.3	72.7	78.8	83	86.7	88.3	93.7	101	103.3	?	104.7 ?	?	87.4 ?
3	?	?	?	?	?	?	?	?	?	99.9 ?	89.1	81.4	79	78.5	73.5	74.4	76.9	91.5	100.5	103.1	101.6	103.1	?	?	88.6 ?
4	?	?	?	?	?	102.6 ?	100.5	91.3	82.1	71.3	63.5	57.5	51.5	49.1	50.6	52.4	58.8	65.9	71	74.1	78.7	81.8	84.1	88.1	72.4 ?
5	92.1	90.1	83.3	86.4	85.8	91.3	97.5	96.7	92	80.2	74.3	68	71.1	66.7	68	72.7	80.5	87.4	95.1	99.3	102.1	104.1	104.9 ?	?	86.5
6	?	?	?	?	?	?	?	103.4 ?	100.7	97.5	92.7	91.3	91.1	91.8	92.1	92.6	94.5	97	100.1	102.3	103.7	104.3 ?	?	?	97 ?
7	?	?	?	104.3	104	104.9 ?	105 ?	104.7	?	104.7 ?	101.1	88.7	70	52.4	49.7	48.1	46.6	52.2	57.3	59.9	60	64.2	70	74.6	76.1 ?
8	75.9	81	88.6	90.7	91.1	89.2	94.9	83.3	71.6	67.4	61.3	56.2	53.3	51.8	51.4	58.2	66.3	72.7	81	85.5	92	97.8	99.4	100	77.5
9	100.1	101.7	102.8	101.4	100.5	99.9	101.7	99.5	92.6	87.7	90	84.6	76.5	76	77.9	79	82	91.5	97.3	100.5	100.8	100.2	101.9	102.9	93.7
10	103.1	104.1	105 ?	?	?	?	104.8 ?	102.5	100.7	96.4	92.1	91.8	90.3	93	103.5	104.4	102.5	98.5	97	96.1	94.5	94.5	95.5	94.8	98.3 ?
11	92.1	90.9	88.9	89.5	90	91.1	93.8	95.7	95.8	90.4	81.8	78.8	75.8	73.3	72.3	70.3	73.4	77.9	82	82.4	84	87.6	90.1	90.5	84.9
12	96	98.3	98.6	100.1	101.3	102.1	102.2	98.5	88.5	85.6	87.6	89	88.2	89.4	91.8	95.7	101.3	104.3 ?	?	?	?	?	?	?	95.5 ?
13	?	?	?	?	?	?	?	?	?	?	?	99.2	89.8	81.5	73.6	70.4	65.2	69.2	79.9	89.3	91.6	98	98.8	93.6	84.1 ?
14	76.8	75.2	78.8	77.3	74.3	74.2	76.6	79	83.8	83.5	76.4	77.3	77.6	78.3	89.6	99.1	101.4	101.7	102.4	101.1	95.5	97.1	103.8 ?	?	86.1
15	?	?	?	?	?	?	?	?	?	?	?	?	?	104.7 ?	102.9	102.3	103.7	?	?	?	?	?	?	?	103.4 ?
16	?	?	?	?	?	?	?	?	?	?	103.9 ?	102	101.4	103.7	105 ?	?	?	?	?	?	?	?	?	?	103.2 ?
17	?	?	?	?	?	?	?	?	104.7 ?	103.6	103.1	103.6	101.9	102.1	100.9	99.8	103.2	103.8	104.4	103.7	104	104.5	104.5	104.3	103.3 ?
18	103.3	103.1	103.8	104.4	104.5 ?	?	?	?	?	104.2 ?	102.5	100.7	100.3	101.2	102.1	104	104.7 ?	104.8	104.8	104.6	104.9 ?	?	?	?	103.4 ?
19	?	?	?	104	102.6	102.4	102	98.1	92.5	88.1	75.7	61.2	54.7	54.2	56.5	56.8	58.6	70.4	83.6	94.6	100.2	103.4	103.5	104.5 ?	84.2 ?
20	?	104.2 ?	104.3 ?	104.8 ?	102.7 ?	104.4 ?	104.8 ?	100	90.2	78.8	68.2	58	51.6	51.1	59.4	57.2	57.5	70.1	85.4	91.6	97	99.8	102.6	101.9	84.6 ?
21	102.7	102.1	102.5	103.9	104.8 ?	?	?	101.2	91.8	78.8	66	56.3	50.8	47.3	50.2	46	48.4	66	79.8	84	92.6	95	96.1	98.9	80.2 ?
22	102.7	104.9 ?	?	104.8	103.1	101.8	101.5	98.9	91.5	78.2	66.1	64.8	73.9	76.3	73.9	72.1	74.9	83.7	91.7	95.6	98.8	102	103.4	104.7 ?	90
23	?	?	?	?	?	?	?	?	102.3 ?	92	80.3	75.8	75.6	72.8	76.8	80.7	84.9	86.7	89.1	94.5	98	100.8	100.2	101.5	88.3 ?
24	102.9	103.5	101.7	102	103.3	103.6	102.9	100.6	100.2	98.7	92.8	85.6	82.6	80.5	83.1	93.2	97.7	103.6	104.9 ?	?	?	?	?	?	97 ?
25	103.6 ?	103.5	104.5	98.9 ?	96.3	97.3	97.2	94.1	86.3	78.7	79.9	81.5	79.3	78.6	81.7	85.4	86.7	89.5	92.8	93.5	94.9	95.2	95.9	98.1	91.4
26	98	101.1	103.4	104.4 ?	?	?	?	101 ?	96.9	92.5	91.4	94.2	95.9	97.3	98.5	104.5 ?	?	?	?	?	?	?	?	?	98.4 ?
27	?	?	?	?	?	?	?	?	?	?	?	?	104.3 ?	102.1	101.7	101	100.7	101.2	102.5	102.6	104.3	?	?	?	102.3 ?
28	?	?	?	?	?	?	?	?	103.9	100.6	95.8	87.6	76.2	73	69.1	68	72.7	78.4	84	85.4	87.8	93	96.7	98.1	85.6 ?
29	98.6	100.1	100.5	102	103.6	104.4	104.2	104.3	99.8	97.7	98.2	98.4	98.9	98.7	98.3	99.4	100.7	102.1	101.1	98.4	98.4	98.6	97.6	97.6	100.1
30	100.6	103	104.2	104.8 ?	?	?	?	104.7 ?	101.5	95.1	90.9	88.3	87.8	86.5	89.4	93.6	97.1	99.7	101.9	103.5	104.8	?	?	?	97.6 ?
31	103.2	103.4	102.5	101.9	102.7	103	101.4	100.4	96.1	90.5	85.2	82.9	83	85.1	82.9	83	86.1	94.3	98.3	100.3	103	104.5 ?	?	?	95.1 ?
Avg	97.8	98.6	98.3	99.3	98.3	98.4	99.5	98	93.8	89	84.9	80.8	78.6	78.3	79.6	80.3	82.2	87.4	92	94.1	96.3	96.9	97.6	96.1	91.1 ?
S D	8.7	8.6	8.4	7.7	8.4	8.2	6.8	6.5	7.8	10.4	12.9	14.3	15.9	17.7	17.7	18.5	17.9	14.1	11.3	10.5	9.9	9.3	8.5	9.1	8.6
S/A	0.09	0.09	0.09	0.08	0.09	0.08	0.07	0.07	0.08	0.12	0.15	0.18	0.2	0.23	0.22	0.23	0.22	0.16	0.12	0.11	0.1	0.1	0.09	0.09	0.09
Min	75.9	75.2	78.8	77.3	74.3	74.2	76.6	79	71.6	67.4	61.3	56.2	50.8	47.3	49.7	46	46.6	52.2	57.3	59.9	60	64.2	70	74.6	72.4
Max	104.9	104.9	105	104.8	104.8	104.9	105	104.7	104.7	104.7	103.9	103.6	104.3	104.7	105	104.5	104.7	104.8	104.9	104.6	104.9	104.5	104.9	104.7	103.4
n	200	190	176	192	183	173	175	245	277	307	344	348	357	362	364	350	341	326	315	312	300	254	221	182	6500

Data Recovery: 0.0% missing; 0.0% untested; 27.2% failed QC -- 8928 total measurements.

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

**October 2009**

**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	11.8	11.8	11.4	12	12.5	12.6	12.7	16.1	20	24.1	27.5	26.5	26.7	27.1	26.2	26.5	25.9	24.6	20.9	17.9	16.4	15.9	15.3	14.4	19
2	14.3	14.2	14.2	13.9	13.6	13.6	13.8	16.1	19.3	24.1	27.6	29.6	30.8	30.3	28.7	27.2	25.5	24.3	23.2	21.6	20.7	20.3	19.9	20.1	21.1
3	20.4	20.7	20.8	20.9	21	21.1	21.1	21	21.4	23.6	29.2	32.7	33.7	32.7	32.7	32.6	31.9	29.7	25.5	22.8	21.7	20.9	20.1	19.6	24.9
4	19.3	19.2	19	18.6	18	17.1	15.7	17	21	25.3	28.6	29.7	30	30	29.7	28.7	26.4	23.6	20.9	19.3	18.1	17.1	16.6	16.1	21.9
5	16	16.1	16.5	17	17.1	16.8	16.3	16.2	16.8	20.3	25.1	28.2	29.5	28.9	28.6	27.6	25.5	22.9	20.3	18.7	17.7	16.8	16.4	16.3	20.5
6	16.2	16.4	16.4	16.5	16.5	16.6	16.7	17.3	19.1	22.3	25.2	26.8	27.3	26.2	25.9	25	24.1	22.7	21.3	20.3	19.8	19.6	19	18.6	20.7
7	18.7	19.1	19.6	19.8	19.7	19.5	19.3	19.5	19.6	19.8	21.3	25.3	28.7	30	30.9	31.4	31.2	29.2	24.9	21.5	19.6	18.5	17.7	17	22.6
8	15.9	14.5	12.7	11.1	10	9.5	9.4	12.4	17.3	21.3	24.5	26.8	28.2	28.8	28.8	28.7	27.2	24.1	19.8	17.1	15.7	14.8	14.7	14.6	18.7
9	14.5	14.3	14.2	14.1	14.2	14.4	14.6	17.5	22.3	26.2	28.6	29.8	31.6	32.5	32.9	33.1	32.8	31.1	28	26.1	25.1	24.6	24.3	24	23.8
10	23.9	23.7	23.6	23.7	23.7	23.7	23.7	25.3	27.6	28.8	31.1	32.1	29.3	29.3	26.2	23.4	21.2	19.8	19.1	18.8	18.6	18.2	17.7	17.6	23.7
11	17.6	17.6	17.4	17.2	17	16.8	16.5	16.4	16.8	18.4	20.5	22.7	24.7	25.9	26	26.4	25.2	21.2	17.8	16.6	16.1	15.4	15.1	15.1	19.2
12	14.7	13.8	13.3	12.9	12.7	12.7	12.8	13.6	17.3	20.4	20.8	20.8	21	20.9	20.5	19.7	18.7	17.7	17.1	17.1	16.9	16.8	16.9	16.8	16.9
13	16.5	16.4	16.1	15.6	15.1	14.8	14.3	14.2	14.8	16.8	20.8	24.8	26.5	28.3	29.3	30.3	29.3	26.5	22.1	19.4	18.1	17.6	18.2	18.5	20.2
14	18.1	17.4	16.2	15.3	14.8	14.1	13.7	13.4	13.8	14.5	15.8	16.7	16.8	17.1	17	15.3	13.4	12.7	12.5	12.4	12.8	13.3	13.4	12.9	14.7
15	13	13.4	13.8	14.2	14.6	14.8	14.9	15.5	16.6	18.1	19	18.4	17.4	18.2	19.8	20.2	19.5	18.2	17.1	16.4	15.9	15.4	14.8	14.4	16.4
16	13.8	13.4	13.1	12.7	12.5	12.5	12.5	12.5	12.9	13.5	14	15	16.2	16.1	15.1	14.2	13.4	12.7	12.1	11.5	11	10.6	10.2	9.8	13
17	9.4	8.9	8.4	8.1	8.1	8.3	8.6	8.8	9.3	10.5	11.3	11.6	11.9	11.8	11.6	11.8	11.5	10.5	9.8	9.5	9.2	9	8.8	8.5	9.8
18	8.2	7.9	7.7	7.6	7.3	7	6.8	6.9	7.3	7.5	7.9	8.7	9.6	9.5	9.2	8.7	8.2	7.9	7.9	7.9	7.9	7.9	8	8	8
19	7.7	7	6.3	5.8	5.4	5.1	4.9	6.3	10	13.6	16.6	18.6	19.7	19.7	19.8	20.1	19.4	16.7	11.7	8.1	6	4.9	4.4	3.8	10.9
20	3.2	2.8	2.5	2.3	2.3	2.7	3.4	6.3	11.3	16	19.7	23.2	25.4	26	26	25.1	24.1	21.1	16.1	13	11.9	11.2	10.7	10.3	13.2
21	10.2	9.6	9.2	8.8	8.4	8.1	7.8	9.7	14.4	19.9	25.1	28.5	30.2	30.8	31	30.3	29	25.3	20.2	17.1	15.4	14	12.9	11.8	17.8
22	10.8	10	9.4	9.4	9.2	9.1	9.2	10.4	13	17.1	22	24.7	26.4	26.2	25.7	25.7	26.1	24.2	21.2	19.2	18.1	17.2	16.8	16.3	17.4
23	16	16	15.7	15.4	14.9	14.7	14.7	16	19.1	24	28.7	30.8	31.5	30.8	29.4	28.2	27	25.4	23.8	22.8	22.2	21.5	20.8	20.7	22.1
24	20.6	20.4	20.3	20.4	20.3	20.2	20.3	20.9	22.4	24.7	27.7	30.3	31.6	31.7	31.7	30.4	28.1	25.9	24.4	23.8	23.3	22.8	22.5	22.3	24.5
25	21.8	20.8	19.7	18.6	17.8	16.3	15.2	14.9	16.4	19.7	21	20.6	20.7	21.3	20.5	18.3	16.6	15.2	13.9	13.1	12.6	11.9	11.3	10.8	17
26	10.5	10.3	9.9	9.5	9.5	9.7	10	11	13.6	16.4	18.1	18.7	18.9	18.8	18.6	17.5	16.3	15.7	15.4	15.4	15.6	15.9	16.3	17.1	14.5
27	17.8	18.4	18.9	19.3	19.3	19.2	18.5	17.3	16.3	16	16.5	17.3	18.5	19.2	18.9	18.5	18.3	17.8	17.3	17	16.6	16.2	16.1	16.1	17.7
28	16.3	16.5	16.9	17.7	18.9	20.4	21.8	22.5	23.3	24.7	26.3	28.7	29.9	30.3	30.1	29.6	28.5	25.4	21.7	19.7	18.7	17.8	16.8	16	22.5
29	15.5	15.4	15.1	14.8	14.3	13.7	13.5	14.5	15.7	16.6	17.5	18.1	18.3	18.3	18	17.6	17	16.4	15.8	15.5	15.4	15.2	15	14.8	15.9
30	14.3	13.5	12.8	12.9	12.7	12.2	12	12.8	16.2	19.8	23	24.5	25.7	26.7	26.2	24.3	22	20.1	18.5	17.7	17.3	17.2	17.1	17.2	18.2
31	18	18.7	19.2	19.6	19.7	19.7	19.9	20.8	23.7	26.6	28.8	29.7	30.1	29.4	28.6	28.2	27.3	25.9	24.5	23.9	23.2	22.2	21.4	21	23.7
Avg	15	14.8	14.5	14.4	14.2	14.1	14	14.9	17	19.7	22.3	23.9	24.7	24.9	24.6	24	22.9	21.1	18.9	17.5	16.7	16.2	15.8	15.5	18.4
S D	4.5	4.6	4.8	4.9	5	5	5	4.7	4.6	5	5.7	6.2	6.4	6.3	6.3	6.4	6.3	5.7	4.9	4.6	4.5	4.4	4.4	4.5	4.4
S/A	0.3	0.31	0.33	0.34	0.35	0.35	0.35	0.31	0.27	0.25	0.26	0.26	0.26	0.25	0.26	0.27	0.28	0.27	0.26	0.26	0.27	0.28	0.29	0.29	0.24
Min	3.2	2.8	2.5	2.3	2.3	2.7	3.4	6.3	7.3	7.5	7.9	8.7	9.6	9.5	9.2	8.7	8.2	7.9	7.9	7.9	6	4.9	4.4	3.8	8
Max	23.9	23.7	23.6	23.7	23.7	23.7	23.7	25.3	27.6	28.8	31.1	32.7	33.7	32.7	32.9	33.1	32.8	31.1	28	26.1	25.1	24.6	24.3	24	24.9
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: 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**

**October 2009**

**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	0.6	0.1	0.9	1.7	1.4	1.2	1.1	0.8	0.7	1.6	1.3	1.4	2.9	3.1	2.7	2.1	1.3	1.5	1	1	1.4	1.1	0.1	0.4	1.3
2	0.4	0.1	0	0	0.2	0.1	0	0.5	1.6	3.1	3.1	2.9	2.6	3.1	3	2.5	2.4	1.9	1.9	0.4	0.7	0.6	1.3	1.3	1.4
3	0.6	0.6	0.7	0.6	1	0.2	0.6	0.6	1.3	1.5	1.1	1.4	2.1	2.7	3	2.4	2	1.7	1.1	0.7	1.1	1.1	1.2	1	1.3
4	0.4	0.2	1.5	1	1.6	1.6	1.2	1.6	1.5	1.6	1.9	2.5	2.3	2.7	3.8	3.8	2.8	2.1	1.8	1.5	1.1	1.2	0.6	0.5	1.7
5	0.5	1.5	2.3	2.5	1.9	0.9	0.8	0.9	0.6	0.4	0.3	1	1.9	2.3	2.8	2.5	1.6	1.7	1.4	0.9	0.8	0.2	0.6	0.3	1.3
6	0.1	0	0	0.1	0.3	0.3	0.9	0.8	1.2	2	2.6	2.8	2.8	2.8	2.9	2.4	2	1.1	0.5	0.2	0.6	0.6	1.1	1.7	1.2
7	2.1	3.3	3.6	4.1	3.4	2.9	3.5	4.7	5	4.3	4.7	4.6	6.1	5.4	4.6	3.9	2.9	2.1	1.8	1.6	2	2	3.1	3.4	3.5
8	2.7	1.2	0.9	0.4	0.9	0.9	0.6	1.7	2.3	2.3	2	1.8	1.5	1.3	1.4	1.4	2.3	0.8	0.9	0.7	0.5	1.1	1.3	1	1.3
9	0.9	1	0.7	1.1	0.9	0.3	0.2	1.2	2.7	3.7	4.7	4.7	4.9	5.3	5	5.2	3.6	3.8	4.2	3.7	4.2	4.1	4	4.1	3.1
10	4.2	3.9	4.1	3.8	3	2.8	3.1	4.2	4.7	5.3	4.6	3.3	2.2	2.2	0.4	2.7	2.6	2	2.2	3.2	2.7	1.6	2.2	1.9	3
11	1.9	2.4	2.8	2.6	3	2.8	2.7	2.5	2.2	2.5	3.4	3	2.8	2.2	2.5	2.4	2.6	1.9	1.6	1.7	1.4	1.2	0.7	0.8	2.2
12	1	1.1	1.1	0.8	1.1	0.7	0.8	1.6	3.1	3.8	3.5	3.5	3.7	3.5	2.8	2.6	1.2	1.2	0.7	1.6	1.8	1.3	1.4	1.1	1.9
13	1.2	1.5	1.4	1.4	1.3	1.5	1.1	1.4	1.2	1.2	1.5	2	1.8	1.3	1.2	1.5	1	0.5	0.3	0.3	0.3	1.1	3.3	4.3	1.4
14	3.6	4.1	4	3.9	3.3	2.9	3	3	2.8	2.8	3.3	3.5	3.2	3.4	3.6	2.9	2.6	2.3	1.6	1.1	0.8	0.6	0.3	0.4	2.6
15	1.1	0.6	0.8	0.5	0.9	1.1	1.5	1.1	0.4	0.1	1.4	3	2.9	2.3	2.6	2.8	2.6	2.6	2.4	1.2	1.2	1.4	2	2.2	1.6
16	2	1.9	2.5	1.9	1.6	2.5	2.1	2	1.9	2.8	2.9	2.6	3.2	2.8	3	2.4	2.2	2.2	2.5	2.9	2.7	2.9	3	2.8	2.5
17	2.5	2.8	3.3	2.7	2.7	2.4	2.6	2	2.4	2.4	2.7	2.3	1.9	1.9	2.3	3	2.8	2.4	2.1	2.2	1.9	2.4	3.9	4.2	2.6
18	3.4	2	1.8	1.7	2.6	2.5	2.7	3.2	3.4	4.2	3.6	3.9	3.7	3	2.9	3	2.7	3.1	3.3	1.9	0.9	0.5	0.1	0.8	2.5
19	1.2	1	1.5	1.7	1.8	2	1.7	2.1	3	3.2	3.8	3.5	3.7	3.6	2.6	2.3	2	0.3	0.1	0	0	0.1	0	0	1.7
20	0	0	0	0.1	0.2	0.3	0.6	0.7	1.6	2.1	2	1.2	1.4	1	2.4	1.7	0.8	0.5	0.1	0.8	0.3	0.4	0.2	1.2	0.8
21	0.5	0.8	0.4	0.4	0.4	0.2	0.3	1.2	1	0.8	1.1	1.1	1.1	0.8	1.2	0.9	0.9	1	1.2	1.3	0.4	0.3	0.3	0.1	0.7
22	0	0	0.3	0.2	0.5	0.3	0.4	0.2	0.9	1.3	2.8	3.8	4.8	3.5	2.9	2.8	1.3	0.4	0.3	0.6	0.5	1.2	1.2	0.7	1.3
23	1.4	0.6	0.1	0	0	0	0	0	0.4	1.6	2.9	3.6	4	4.6	4	4	3	1.7	1.9	2	2.5	1.1	1.3	1.6	1.8
24	2.2	2.2	2.3	1.9	1.6	2.1	2.2	3.3	3.2	3.4	5.1	5.9	5.9	6.2	5.6	5.5	4.7	3.6	3.2	3.1	2.4	2.9	2.9	1	3.4
25	1.9	1.8	1.4	2.7	3.3	3.1	3.1	3.1	4.1	4.5	4	3.9	3.6	3	3.7	2.8	2.7	2.2	1.8	1.5	1.5	1.8	1.8	1.7	2.7
26	2	1.1	1.3	1.2	1.6	1.5	1.3	2.3	3.7	4.2	4.6	4.1	4.1	4.6	4.7	3.8	3.7	3	2.2	3	2	1	1	1.4	2.6
27	1.7	1.1	0.7	0	0.6	1.7	3	3	2.7	1.9	2.6	2.4	2.4	2.3	2.8	1.2	0.7	0.4	0.1	0.4	0.5	1.5	2.2	2.7	1.6
28	2.8	2.8	2.9	2.7	2.3	2.7	3.3	3.2	3.4	4	4.2	4.8	5	4.3	4.1	3.7	2.5	1.7	1.5	1.6	1.3	1	1	1.3	2.8
29	2.3	2.3	2.2	2.1	1.7	1.8	2.3	1.9	4	2.7	3.1	3.1	3.4	2.9	2.9	2.9	2.6	2.6	2.7	3.3	3.4	3.1	3.3	2.4	2.7
30	2	1.8	2.1	2.3	1.8	1.7	2.3	2.3	2.5	2.8	3.1	2.4	2.9	2.8	2.5	2.2	1.9	1.5	1.2	0.9	0.5	1.4	1	1	2
31	2.2	2.6	2	2	2	2	2	2.9	3.5	3.8	4	4.5	3.8	3.5	3.6	3.1	2.2	2.1	2	1.7	2	2.1	1.8	1.8	2.6
Avg	1.6	1.5	1.6	1.6	1.6	1.5	1.7	1.9	2.3	2.6	3	3	3.2	3	3	2.8	2.3	1.8	1.6	1.5	1.4	1.4	1.5	1.6	2
S D	1.1	1.1	1.2	1.2	1	1	1.1	1.2	1.3	1.3	1.2	1.2	1.3	1.3	1.1	1	0.9	0.9	1	1	1	0.9	1.2	1.2	0.8
S/A	0.68	0.76	0.74	0.78	0.64	0.65	0.66	0.6	0.54	0.49	0.42	0.4	0.4	0.41	0.38	0.37	0.4	0.51	0.62	0.66	0.71	0.67	0.76	0.75	0.38
Min	0	0	0	0	0	0	0	0	0.4	0.1	0.3	1	1.1	0.8	0.4	0.9	0.7	0.3	0.1	0	0	0.1	0	0	0.7
Max	4.2	4.1	4.1	4.1	3.4	3.1	3.5	4.7	5	5.3	5.1	5.9	6.1	6.2	5.6	5.5	4.7	3.8	4.2	3.7	4.2	4.1	4	4.3	3.5
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.

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

**October 2009**

**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	336	276	351	4	10	348	29	19	35	79	50	263	253	250	243	250	278	39	43	49	54	71	99	109	333
2	106	105	121	127	143	201	150	118	137	157	156	145	171	124	125	155	163	185	189	193	138	120	129	147	150
3	142	122	123	120	160	183	137	154	131	154	183	227	188	164	184	161	155	126	128	161	193	198	197	207	166
4	241	242	238	252	257	272	274	288	293	296	283	261	267	244	238	242	254	269	273	278	282	280	275	245	262
5	218	244	238	288	298	267	220	241	271	315	229	242	228	229	220	214	225	208	204	219	217	221	211	224	236
6	235	19	64	31	34	1	1	14	32	58	75	71	65	66	62	56	66	44	7	310	271	202	172	213	61
7	209	211	209	213	222	224	218	225	230	250	262	260	262	276	276	274	281	288	297	294	296	313	355	352	256
8	339	315	297	291	307	307	283	326	338	339	346	344	20	4	204	161	148	162	126	126	150	155	153	151	335
9	155	160	163	166	169	175	148	185	195	197	192	207	201	208	213	205	191	188	186	188	189	198	198	193	195
10	194	197	204	203	200	197	208	226	247	243	246	295	312	302	335	11	17	30	22	4	12	10	8	357	255
11	346	349	349	350	344	353	353	350	355	5	24	45	49	34	64	31	39	48	53	51	49	44	36	36	18
12	16	355	355	350	17	19	7	40	58	53	47	49	47	33	29	29	50	64	49	317	335	313	314	307	28
13	300	299	292	295	290	291	288	291	273	279	279	287	288	302	301	310	306	274	287	273	27	43	30	21	312
14	21	16	7	9	356	348	358	351	2	21	39	42	30	30	0	355	12	357	28	41	31	29	266	62	13
15	13	355	8	347	359	19	37	41	35	295	279	288	309	315	310	314	298	299	304	298	277	276	269	268	310
16	267	277	288	292	300	311	312	314	310	311	316	328	326	325	322	312	305	309	311	312	314	317	308	304	310
17	310	306	314	314	303	307	299	296	305	296	302	291	295	287	292	297	297	304	303	293	301	301	304	299	301
18	303	302	297	280	273	280	284	295	291	303	304	312	313	303	307	303	304	309	308	305	313	302	284	296	300
19	294	296	304	314	312	302	303	310	323	323	324	321	327	334	311	314	301	307	319	0	274	254	234	357	316
20	209	0	0	223	220	235	243	231	221	223	239	250	231	151	83	160	162	175	186	152	166	197	199	203	200
21	220	219	228	218	215	213	211	220	228	237	242	213	230	232	160	176	159	139	133	140	158	177	180	178	196
22	183	198	220	216	207	217	204	209	226	223	232	233	223	218	218	213	211	204	155	168	196	195	198	190	217
23	199	196	185	144	121	114	116	112	140	151	162	163	139	138	139	139	155	156	140	143	140	131	134	136	147
24	139	154	155	159	160	157	155	157	168	166	188	175	167	170	168	162	166	159	163	166	176	192	214	241	169
25	266	275	286	339	358	359	354	6	20	19	9	8	13	16	355	357	359	1	10	32	11	5	358	354	0
26	2	11	357	9	353	6	19	50	51	53	45	43	39	42	42	37	39	39	28	32	20	3	5	54	35
27	55	63	77	96	255	265	267	268	268	265	259	261	256	269	267	283	278	261	295	337	76	95	91	100	268
28	118	120	133	131	158	183	199	199	210	221	237	262	262	267	264	274	282	289	294	284	281	286	274	234	
29	332	352	347	348	337	356	356	19	35	23	33	37	21	14	24	17	23	28	40	40	36	36	36	23	20
30	352	352	349	342	348	351	351	358	13	41	53	47	63	61	61	62	53	44	30	53	54	75	99	130	32
31	135	136	138	133	134	140	152	154	155	167	179	183	185	188	192	196	183	160	170	177	156	159	163	162	166
Avg	314	293	291	306	303	301	297	290	300	294	281	282	277	279	264	267	287	336	338	343	337	305	317	308	291
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**

**October 2009**

**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	1.3	0.4	1.6	2.8	2.6	2	2.1	1.7	1.5	2.9	2.5	2.6	5.8	5.9	4.7	3.8	2.9	2.9	2	1.9	2.4	1.7	0.3	0.6	2.5
2	0.8	0.5	0	0.1	0.7	0.4	0.2	1	2.9	5.3	5.8	5.1	4.6	5.5	5.2	4.6	4.9	3.7	3.9	1.3	1.4	1.3	2.7	2.8	2.7
3	2.1	1.5	1.5	1.2	2.4	1	1.3	1.7	2.3	2.6	2.5	2.9	4.2	4.9	5.3	4.6	3.5	2.8	1.9	1.6	2.6	2.2	2.3	1.9	2.5
4	1.1	0.6	2.7	1.8	2.8	3.4	2.6	3.3	3.1	3.4	3.8	4.3	4.2	5.2	6.8	6.6	5.3	4	3.9	3.4	2.5	2.5	1.6	1.3	3.3
5	1.3	2.7	4.4	5.1	4.3	2.1	1.8	1.9	1.5	1.3	1.2	2.7	3.6	4.5	5.2	4.5	2.7	2.9	2.6	1.8	1.6	0.6	1.3	1	2.6
6	0.3	0.1	0.1	0.3	1	1.1	1.7	1.8	2.2	3.7	4.7	4.7	4.7	4.8	4.9	4.4	3.5	2	1.3	0.9	1.2	1.3	2.1	2.9	2.3
7	3.6	6	6.5	7.3	5.9	4.8	6.1	7.9	8.1	7.9	8.9	8.6	11.1	10.6	9.4	7.5	6.1	4.2	3.2	3.2	4.2	3.8	5.8	5.9	6.5
8	4.6	2.5	2	1.2	1.7	1.6	1.3	3.4	4.5	4.7	4.1	3.7	3.2	2.8	2.7	2.9	4	1.9	1.7	1.4	1.2	2.1	2.4	2	2.7
9	1.9	2.2	1.8	2.2	2.5	1.5	0.9	2.5	5.3	6.6	8.5	8.1	8.4	9.3	8.9	9.2	6.2	6.5	7.3	7.2	7.4	7.1	6.4	7.2	5.6
10	7.6	6.8	6.8	6.5	5.2	5	5	7.3	7.6	9.5	8.2	6.9	4.4	4.7	1.4	5.4	4.9	4	4	5.9	5.1	3.3	3.6	3.5	5.5
11	3.6	4.1	5	4.9	5.2	4.6	4.7	4.1	3.9	4.7	6	5.2	5	4.1	4.8	4.3	4.6	3.4	3	3	2.5	2.1	1.9	1.7	4
12	2	1.9	2.1	1.6	2	1.5	1.6	2.6	5.9	6.7	6.5	6.2	6.2	6.3	5.1	4.6	2.5	2.3	1.7	3.7	3.6	2.9	3.5	2.7	3.6
13	2.8	3.9	3.3	3.3	2.9	3.4	2.9	3.4	3	3	3.4	4.1	3.9	3.2	2.7	3.2	2.4	1.1	0.8	1	0.6	2.1	6.1	7.8	3.1
14	6.8	7.9	7.4	7.2	6.1	5	5.4	5.3	5	5	5.8	6.1	5.6	6.3	6.4	5.4	4.8	4.3	2.8	1.9	1.7	1.2	0.8	1.1	4.8
15	2.3	1.9	2	1.5	2.1	2.6	2.8	2.7	1.3	0.6	3	6.5	6.3	5	5.8	5.9	5.7	5.3	5.2	3	2.9	3.3	4	4.3	3.6
16	4.1	4.1	5.4	4.3	3.8	5.1	5.2	4.9	4.4	5.7	6.1	5.7	5.8	5.6	5.8	5.5	5	5	5.5	6	6.7	6	6.4	6.1	5.3
17	5.8	6.1	6.9	6	5.5	5.2	5.6	4.8	5.1	5.2	5.6	5.1	4.2	4	4.8	6	5.9	5.4	4.9	4.9	4.3	5	7.9	8.7	5.5
18	7.1	4.7	4.2	3.8	5.1	5.6	5.8	6.8	7.2	8.4	7.4	7.5	7.5	6.4	6.5	6.4	6.2	6.6	7	4.8	2.8	1.8	0.7	2.2	5.5
19	3	2.9	3.9	3.8	4.1	4.4	4.2	5.1	5.6	6.3	7.1	7	6.7	6.6	5.8	5.3	4.2	1	0.3	0	0	0.3	0.1	0	3.7
20	0.1	0	0	0.2	0.3	0.6	1.3	1.5	2.8	3.8	3.6	2.8	3.1	2.3	4.1	3.4	2.3	1.8	0.9	1.6	1.4	1.6	1.1	2.4	1.8
21	1.3	1.5	1.1	1.1	1	0.7	1	2.1	2.1	2.2	2.5	2.6	2.8	2.2	2.8	2.4	2.2	2.1	2.1	2.4	1.8	1.6	1.5	1	1.8
22	0.4	0.2	0.9	0.7	1.1	0.9	1.1	1	2	2.7	5	6.3	8.1	6.2	5.5	5	2.7	1	1.2	2	1.8	2.8	2.3	2	2.6
23	2.6	1.5	1.1	0.2	0	0.3	0.1	0.3	1.2	3	5.4	6.7	7.3	8	6.6	7.7	5.8	3.5	3.6	4.2	4.7	2.8	2.7	3.2	3.4
24	3.8	4.4	4.2	4	3.4	4	4	5.9	6.1	6.8	9.6	10.3	11.4	11.3	10.6	10	9	6.6	6.3	6	4.7	5	5	2.2	6.4
25	3.9	3.7	3.2	5.2	5.7	5.2	5.6	5.4	7.4	7.9	6.9	6.8	6.2	5.6	6.1	5	4.6	4	3.4	2.8	2.7	3.3	3	2.9	4.9
26	3.5	2	2.1	2.2	2.7	2.7	2.2	4.1	6.6	7.9	7.8	7.4	7.3	8	8.4	6.7	6.8	5.9	5.2	5.8	4.4	2.4	2.3	2.7	4.9
27	3.5	2.3	1.8	0.2	1.3	3.4	6	5.9	5.1	4	4.5	4.8	4.7	4.7	5.1	3.3	2	1.3	0.5	1.1	1.4	2.8	3.9	4.5	3.3
28	4.8	4.6	5.2	5	4.6	5.2	5.9	5.6	6.2	7.3	7.7	9	9	8	7.7	7.2	5	3.9	2.9	3.2	2.5	1.9	1.9	2.5	5.3
29	4	3.9	3.8	3.5	3	3.2	4.2	3.5	7	4.7	5.4	5.5	6.1	5.2	5.3	5.5	5.1	4.6	4.9	5.9	6.2	5.6	5.8	4.2	4.8
30	3.3	3	3.5	3.6	2.9	2.8	3.6	3.8	4.3	5	5.2	4.3	4.6	4.8	4	3.7	3.3	2.7	2.3	1.8	1	2.2	1.7	2.1	3.3
31	3.6	4.3	3.4	3.4	3.3	3.5	3.7	5.2	6.5	7	7.3	7.9	7.7	6.5	6.4	5.4	4	3.9	4	3.4	3.4	4	3.5	3.7	4.8
Avg	3.1	3	3.2	3	3.1	3	3.2	3.8	4.4	5	5.5	5.7	5.9	5.7	5.6	5.3	4.5	3.6	3.2	3.1	2.9	2.8	3	3.1	4
S D	2	2.1	2.1	2.2	1.8	1.7	1.9	2	2.1	2.2	2.1	2	2.2	2.1	2	1.8	1.6	1.7	1.9	1.9	1.8	1.6	2	2.1	1.4
S/A	0.63	0.69	0.66	0.71	0.57	0.58	0.6	0.53	0.48	0.44	0.38	0.35	0.36	0.37	0.35	0.33	0.36	0.47	0.58	0.6	0.62	0.57	0.66	0.67	0.35
Min	0.1	0	0	0.1	0	0.3	0.1	0.3	1.2	0.6	1.2	2.6	2.8	2.2	1.4	2.4	2	1	0.3	0	0	0.3	0.1	0	1.8
Max	7.6	7.9	7.4	7.3	6.1	5.6	6.1	7.9	8.1	9.5	9.6	10.3	11.4	11.3	10.6	10	9	6.6	7.3	7.2	7.4	7.1	7.9	8.7	6.5
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**

**October 2009**

**Station Pressure**  
**Hourly and Daily Averages**  
**Instrument: Viasala PTA-427**  
**Millibars**

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily	
1	1014	1014	1014	1014	1014	1015	1015	1016	1016	1016	1016	1015	1015	1014	1013	1013	1013	1014	1014	1014	1015	1015	1015	1014	1014	
2	1014	1013	1013	1013	1013	1014	1014	1014	1014	1014	1014	1013	1013	1012	1011	1011	1011	1011	1011	1011	1011	1011	1011	1011	1010	1012
3	1010	1010	1010	1009	1009	1010	1010	1011	1011	1011	1011	1010	1009	1009	1008	1008	1008	1008	1009	1009	1010	1010	1010	1010	1010	
4	1010	1010	1010	1010	1011	1011	1012	1013	1013	1014	1014	1014	1013	1012	1012	1012	1013	1013	1014	1014	1014	1015	1015	1015	1015	1013
5	1015	1015	1015	1015	1015	1016	1017	1017	1017	1017	1017	1016	1015	1014	1014	1014	1014	1014	1014	1014	1014	1015	1015	1015	1014	1015
6	1014	1014	1013	1013	1013	1013	1013	1013	1013	1013	1013	1012	1012	1011	1011	1011	1010	1010	1010	1010	1010	1009	1008	1008	1012	1012
7	1008	1006	1005	1005	1005	1006	1005	1006	1007	1007	1007	1006	1006	1006	1006	1006	1007	1008	1009	1010	1011	1012	1013	1014	1008	1008
8	1015	1016	1016	1016	1017	1018	1019	1020	1020	1021	1021	1020	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019
9	1018	1017	1016	1016	1015	1016	1016	1016	1016	1016	1015	1014	1013	1011	1011	1011	1010	1010	1010	1010	1010	1010	1010	1009	1013	1013
10	1009	1009	1008	1008	1009	1009	1009	1009	1010	1010	1010	1010	1011	1011	1012	1013	1014	1015	1015	1017	1017	1017	1017	1017	1018	1012
11	1018	1018	1018	1018	1018	1019	1019	1020	1021	1021	1021	1021	1021	1021	1020	1020	1021	1021	1021	1021	1022	1022	1022	1022	1022	1020
12	1022	1022	1022	1022	1022	1022	1022	1022	1023	1023	1023	1023	1023	1022	1021	1021	1021	1020	1019	1018	1018	1018	1018	1018	1018	1021
13	1017	1017	1017	1017	1017	1017	1017	1018	1018	1018	1018	1017	1017	1016	1015	1015	1015	1015	1016	1016	1016	1017	1017	1017	1018	1017
14	1018	1019	1019	1019	1019	1020	1019	1020	1021	1020	1020	1019	1019	1018	1018	1018	1017	1016	1016	1016	1016	1015	1015	1014	1018	1018
15	1013	1012	1011	1010	1010	1009	1008	1008	1007	1006	1005	1005	1003	1002	1002	1002	1002	1002	1003	1003	1003	1003	1003	1003	1003	1006
16	1003	1003	1003	1003	1003	1004	1005	1006	1007	1007	1007	1007	1007	1007	1006	1006	1007	1008	1008	1008	1008	1008	1008	1008	1009	1006
17	1009	1009	1008	1008	1009	1009	1009	1010	1011	1011	1011	1011	1011	1012	1011	1011	1011	1011	1012	1012	1012	1012	1012	1011	1010	1011
18	1010	1010	1010	1011	1010	1011	1011	1012	1013	1013	1014	1014	1014	1014	1015	1015	1016	1016	1016	1017	1018	1018	1018	1018	1018	1014
19	1018	1018	1018	1018	1019	1020	1020	1021	1022	1022	1022	1022	1021	1021	1020	1020	1020	1021	1021	1021	1022	1022	1022	1022	1022	1020
20	1022	1022	1021	1022	1022	1022	1023	1023	1024	1024	1023	1023	1022	1022	1021	1021	1021	1021	1021	1021	1021	1022	1022	1022	1022	1022
21	1022	1022	1022	1022	1022	1022	1022	1022	1023	1023	1023	1022	1021	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1021
22	1020	1019	1019	1019	1019	1019	1019	1019	1020	1019	1019	1019	1018	1017	1016	1016	1015	1015	1015	1015	1016	1016	1016	1016	1016	1018
23	1016	1016	1015	1015	1015	1015	1016	1016	1016	1016	1016	1015	1014	1013	1013	1012	1013	1013	1013	1013	1013	1013	1013	1012	1014	1014
24	1012	1011	1011	1010	1010	1010	1010	1010	1010	1010	1009	1008	1007	1006	1005	1005	1005	1005	1006	1006	1006	1006	1006	1007	1008	1008
25	1008	1008	1009	1010	1011	1012	1013	1015	1016	1017	1017	1017	1017	1017	1017	1017	1017	1018	1018	1018	1019	1020	1020	1020	1020	1016
26	1019	1019	1019	1019	1019	1020	1020	1021	1021	1021	1021	1021	1021	1020	1020	1019	1019	1019	1019	1019	1018	1018	1017	1017	1016	1019
27	1015	1014	1014	1013	1013	1013	1014	1014	1015	1015	1015	1015	1014	1013	1014	1014	1014	1014	1014	1014	1014	1014	1013	1012	1011	1014
28	1011	1009	1009	1008	1008	1008	1008	1008	1008	1009	1008	1008	1008	1008	1008	1009	1010	1011	1012	1012	1013	1014	1014	1014	1014	1010
29	1015	1015	1016	1016	1017	1018	1019	1019	1020	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1022	1022	1022	1022	1022	1020
30	1021	1021	1020	1020	1021	1021	1021	1022	1022	1022	1022	1021	1020	1019	1019	1019	1018	1018	1019	1018	1018	1018	1017	1017	1020	1020
31	1017	1016	1015	1015	1015	1015	1015	1015	1015	1015	1014	1013	1012	1012	1012	1011	1011	1011	1012	1012	1012	1011	1011	1011	1013	1013
Avg	1015	1014	1014	1014	1014	1015	1015	1015	1016	1016	1016	1016	1015	1015	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015	1015
SD	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	5
S/A	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	0	0	0	0	0	0	0	0	0
Min	1003	1003	1003	1003	1003	1004	1005	1006	1007	1006	1005	1005	1003	1002	1002	1002	1002	1002	1003	1003	1003	1003	1003	1003	1006	1006
Max	1022	1022	1022	1022	1022	1022	1023	1023	1024	1024	1023	1023	1022	1022	1021	1021	1021	1021	1021	1022	1022	1022	1022	1022	1022	1022
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.

Prepared by: Afshin M. Andreas, NREL

**October 2009**

**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	13.1	13.5	13.4	13.2	13.2	13.2	13.2	13.2	13.2	13.2	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	13	
2	12.7	12.7	12.7	12.7	12.7	12.6	13.1	13.5	13.4	13.2	13.2	13.1	13.1	13.1	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9
3	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.7	12.9	13.2	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	12.7	12.8	
4	12.6	12.6	12.6	12.6	12.6	12.6	13.1	13.4	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.2	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9	
5	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.1	13.3	13.2	13.1	13.1	13.1	13.2	13.2	13.1	12.9	12.8	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	13	13.4	13.3	13.2	13.2	13.2	13.2	13.3	13	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.7	12.9	
7	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.7	12.7	12.8	13.3	13.2	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.8	
8	12.6	12.6	12.6	12.5	12.5	12.5	13.2	13.6	13.4	13.3	13.2	13.2	13.1	13.1	13.1	13.2	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9	
9	12.7	12.7	12.7	12.7	12.7	12.6	13.1	13.4	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	12.8	12.8	12.7	12.9	
10	12.7	12.7	12.7	12.7	12.7	12.7	12.8	13.2	13.2	13.1	13.1	13.1	13.2	13.1	12.9	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.6	12.9	
11	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.1	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9	
12	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.3	13.4	13.3	13.3	13.4	13.4	13.4	13	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9	
13	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.5	13.4	13.3	13.2	13.2	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9	
14	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.1	13.5	13.5	13.5	13.5	13.5	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.9	
15	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.9	13	12.9	13.1	13.4	13.4	13.3	13.3	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.9	
16	12.7	12.6	12.6	12.6	12.5	12.5	12.5	12.6	13	13.3	13.5	13.5	13.4	13.4	13.3	13	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9	
17	12.7	12.6	12.6	12.6	12.5	12.5	12.5	12.6	13.5	13.6	13.5	13.6	13.4	13.2	13.3	13.2	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9	
18	12.7	12.7	12.6	12.6	12.5	12.5	12.5	12.5	12.5	12.9	13.3	13.6	13.2	13	12.8	12.8	12.7	12.6	12.5	12.5	12.5	12.5	12.5	12.4	12.7	
19	12.5	12.4	12.4	12.4	12.4	12.4	12.9	13.8	13.6	13.5	13.4	13.4	13.3	13.4	13.4	13.4	13.3	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13	
20	12.7	12.7	12.6	12.6	12.6	12.6	13.2	13.7	13.6	13.4	13.3	13.3	13.2	13.2	13.2	13.3	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13	
21	12.7	12.7	12.7	12.7	12.7	12.6	13.1	13.6	13.5	13.3	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	13	
22	12.7	12.7	12.6	12.6	12.6	12.6	12.9	13.5	13.6	13.4	13.3	13.2	13.2	13.3	13.3	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	13	
23	12.7	12.7	12.7	12.7	12.7	12.7	12.8	13.5	13.4	13.2	13.1	13.1	13.1	13.1	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.9	
24	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.9	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9	
25	12.7	12.7	12.7	12.7	12.6	12.6	12.7	13.3	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13	12.8	12.8	12.8	12.8	12.8	12.7	12.7	13	
26	12.7	12.7	12.7	12.7	12.7	12.6	12.7	13.2	13.4	13.5	13.4	13.4	13.2	13.1	13	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9	
27	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.4	13.4	13.3	13.2	13	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9	
28	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.8	13	13.2	13.2	13.1	13.1	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9	
29	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13.1	13.1	13.2	13.3	13.2	13.3	13.2	13	12.9	12.8	12.8	12.7	12.7	12.7	12.6	12.6	12.6	12.8	
30	12.6	12.6	12.6	12.6	12.5	12.5	12.6	13.5	13.4	13.3	13.3	13.2	13.2	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9	
31	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13.3	13.3	13.2	13.2	13.1	13.1	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9	
Avg	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.1	13.2	13.3	13.3	13.2	13.2	13.2	13.1	13	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9	
S D	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
S/A	0	0	0	0	0	0	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0	0	0	0	0	0	
Min	12.5	12.4	12.4	12.4	12.4	12.4	12.5	12.5	12.5	12.8	12.9	13.1	13.1	13	12.8	12.8	12.7	12.6	12.5	12.5	12.5	12.5	12.5	12.4	12.7	
Max	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.8	13.6	13.6	13.5	13.6	13.5	13.5	13.4	13.4	13.3	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13	
n	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	372	8928	

Data Recovery: 0.0% missing; 0.0% 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.