

September 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	8	35	83	191	439	509	574	455	602	544	422	286	130	19	0	0	0	0	0	4297
2	0	0	0	0	0	10	72	306	418	492	572	487	400	378	336	262	170	60	10	0	0	0	0	0	3973
3	0	0	0	0	0	8	21	130	249	190	187	340	293	323	228	141	36 ?	18	5	0	0	0	0	0	2169
4	0	0	0	0	0	13	113	344	314	652	703	709	463	381	355	350	201	83	8	0	0	0	0	0	4689
5	0	0	0	0	0	8	78	320	494	559	769	876	880	760	627	405	251	90	10	0	0	0	0	0	6127
6	0	0	0	0	0	10	81	132	327	521	824	795	868	638	397	259	210	75	11	0	0	0	0	0	5150
7	0	0	0	0	0	1	4 ?	?	48 ?	97	140	190	186	230	139	98	62	41	9	0	0	0	0	0	1246 ?
8	0	0	0	0	0	1	13	84	305	276	401	560	361	393	241	110	58	26	6	0	0	0	0	0	2836
9	0	0	0	0	0	9	86	167	428	576	689	804	755	690	589	247	207	104	12	0	0	0	0	0	5364
10	0	0	0	0	0	1	15	31 ?	85	97	96	180	195	177	104	244	85	51	4	0	0	0	0	0	1366
11	0	0	0	0	0	4	28	97	258	386	750	852	861	573	295	338	219	49	7	0	0	0	0	0	4716
12	0	0	0	0	0	9	70	278 ?	451	634	770	827	853	788	606	256	106	35	8	0	0	0	0	0	5693
13	0	0	0	0	0	8	87	244	499	524	624	441	474	627	458	404	279	82	3	0	0	0	0	0	4755
14	0	0	0	0	0	9	74	246	466	648	775	845	832	728	571	308	324	77	2	0	0	0	0	0	5905
15	0	0	0	0	0	7	92	280	454	633	755	828	847	503	515	394	200	36	2	0	0	0	0	0	5546
16	0	0	0	0	0	5	64	205	496	561	561	794	737	513	453	349	91	32	1	0	0	0	0	0	4862
17	0	0	0	0	0	5	30	133	165	343	330	254	312	334	356	269	155	58	3	0	0	0	0	0	2748
18	0	0	0	0	0	9	98	182	268	285	366	312	289	307	281	166	106	65	5	0	0	0	0	0	2736
19	0	0	0	0	0	10	83	282 ?	383	398	512	714	595	352	538	306	213	55	0	0	0	0	0	0	4441
20	0	0	0	0	0	3	70	256	457	634	771	859	828	486	575	475	252	46	0	0	0	0	0	0	5710
21	0	0	0	0	0	3	59	189 ?	447	639	782	870	674	561	305	157	69	19	0	0	0	0	0	0	4773
22	0	0	0	0	0	8	73	229	458	424	688	799	797	898	571	182	77	23	0	0	0	0	0	0	5227
23	0	0	0	0	0	3	52	202 ?	229	451	579	655	833	563	491	430	194	17	0	0	0	0	0	0	4701
24	0	0	0	0	0	5	51 ?	210	420	592	576	587	527	544	338	351	186	31	0	0	0	0	0	0	4417
25	0	0	0	0	0	0	12	34	104	89	198	210	162	126	93	58 ?	?	4	0	0	0	0	0	0	1092 ?
26	0	0	0	0	0	4	35	129	286	258	197	257	146	166	142	103	52	10	0	0	0	0	0	0	1786
27	0	0	0	0	0	0	18	68	138	138	158	173	357	527	440	357	196	42	0	0	0	0	0	0	2613
28	0	0	0	0	0	2	59	221	437	598	726	798	800	706	560	378	183	32	0	0	0	0	0	0	5500
29	0	0	0	0	0	0	60	250	455	630	756	820	811	743	450	202	127	23	0	0	0	0	0	0	5326
30	0	0	0	0	0	0	55	233	436	607	734	763	826	709	633	440	192	35	0	0	0	0	0	0	5664
Avg	0	0	0	0	0	6	56	192	339	446	550	606	581	511	408	282	165	48	4	0	0	0	0	0	4181
S D	0	0	0	0	0	4	29	86	137	188	235	252	259	202	165	117	78	30	5	0	0	0	0	0	1535
S/A	0	0	0	0	0	0.67	0.52	0.45	0.4	0.42	0.43	0.42	0.45	0.4	0.41	0.47	0.61	1.18	0	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	4	31	48	89	96	173	146	126	93	58	36	4	0	0	0	0	0	0	1092
Max	0	0	0	0	0	13	113	344	499	652	824	876	880	898	633	475	324	130	19	0	0	0	0	0	6127
n	0	0	0	0	0	80	348	315	352	359	360	359	360	360	360	357	343	344	58	0	0	0	0	0	4356

Daylight Data Recovery: 0.0% missing; 0.0% untested; 2.0% exceed the 15% QC threshold -- 4443 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.

September 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	*	
2	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
3	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
4	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
5	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
6	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
7	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
8	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
9	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
10	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
12	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
14	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
16	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
24	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
25	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
26	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
30	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 -- 4443 total daylight measurements.

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

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

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

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

September 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	9	35	83	177	345	420	464	430	430	349	247	130	45	14	0	0	0	0	0	3178
2	0	0	0	0	0	10	48	135	244	385	411	410	363	356	316	253	167	60	10	0	0	0	0	0	3169
3	0	0	0	0	0	10	21	126	245	190	187	340	293	323	228	141	31	18	5	0	0	0	0	0	2159
4	0	0	0	0	0	12	68	236	275	202	207	308	363	361	338	264	159	75	7	0	0	0	0	0	2876
5	0	0	0	0	0	8	40	94	116	179	126	103	115	170	194	199	146	76	10	0	0	0	0	0	1576
6	0	0	0	0	0	12 ?	62	96	249	351	362	333	335	327	327	248	189	74	11	0	0	0	0	0	2976
7	0	0	0	0	0	1	4 ?	19 ?	40	97	140	190	186	230	139	98	62	41	9	0	0	0	0	0	1257
8	0	0	0	0	0	2 ?	13	84	266	253	349	514	361	393	241	110	58	26	6	0	0	0	0	0	2675
9	0	0	0	0	0	10 ?	43	100	169	236	237	221	240	238	206	178	142	79	11	0	0	0	0	0	2113
10	0	0	0	0	0	1 ?	15	28	85	97	96	180	195	177	104	243	85	51	3	0	0	0	0	0	1361
11	0	0	0	0	0	4	28	97	256	363	254	162	166	318	257	242	100	30	6	0	0	0	0	0	2284
12	0	0	0	0	0	9 ?	41	83	117	147	142	140	126	158	226	179	105	35	7	0	0	0	0	0	1515
13	0	0	0	0	0	9 ?	34	58	106	191	281	303	328	252	169	118	57	32	2	0	0	0	0	0	1940
14	0	0	0	0	0	8 ?	33	58	67	80	91	103	170	220	184	139	146	41	2	0	0	0	0	0	1341
15	0	0	0	0	0	8 ?	41	86	110	139	161	176	212	285	269	163	117	36	2	0	0	0	0	0	1804
16	0	0	0	0	0	7 ?	58	129	296	361	456	437	303	308	237	180	91	32	0	0	0	0	0	0	2894
17	0	0	0	0	0	5	30	133	165	324	320	254	312	330	333	227	115	54	3	0	0	0	0	0	2605
18	0	0	0	0	0	11 ?	68	171	266	283	365	307	287	307	280	165	106	59	5	0	0	0	0	0	2680
19	0	0	0	0	0	?	67	120	218	297	332	394	327	312	320	219	129	43	0	0	0	0	0	0	2777
20	0	0	0	0	0	3	35	73	108	130	122	157	302	247	248	97	65	28	0	0	0	0	0	0	1615
21	0	0	0	0	0	5 ?	47	92	82	101	119	200	201	260	303	157	69	19	0	0	0	0	0	0	1654
22	0	0	0	0	0	?	44	116	236	286	194	235	226	311	284	143	77	23	0	0	0	0	0	0	2177
23	0	0	0	0	0	3	33	162	211	297	183	206	209	260	139	176	77	16	0	0	0	0	0	0	1971
24	0	0	0	0	0	?	27	61	80	159	198	175	189	222	209	178	80	26	0	0	0	0	0	0	1604
25	0	0	0	0	0	0	12	34	104	89	198	210	162	126	93	50	16	5	0	0	0	0	0	0	1100
26	0	0	0	0	0	?	35	129	276	258	197	257	146	166	142	103	52	10	0	0	0	0	0	0	1772
27	0	0	0	0	0	0	18	68	138	138	158	162	325	312	161	92	50	20	0	0	0	0	0	0	1644
28	0	0	0	0	0	?	26	57	79	92	103	105	97	122	124	104	69	20	0	0	0	0	0	0	997
29	0	0	0	0	0	?	23	47	59	67	74	79	78	86	169	194	106	23	0	0	0	0	0	0	1004
30	0	0	0	0	0	0	23	51	61	65	67	107	155	172	115	101	53	13	0	0	0	0	0	0	984
Avg	0	0	0	0	0	6	36	94	163	207	218	241	240	259	223	167	95	37	4	0	0	0	0	0	1990
S D	0	0	0	0	0	4	17	46	82	103	112	117	93	85	77	58	42	21	4	0	0	0	0	0	685
S/A	0	0	0	0	0	0.67	0.48	0.49	0.5	0.5	0.51	0.48	0.39	0.33	0.35	0.35	0.45	0.56	1.13	0	0	0	0	0	0.34
Min	0	0	0	0	0	0	4	19	40	65	67	79	78	86	93	50	16	5	0	0	0	0	0	0	984
Max	0	0	0	0	0	12	68	236	296	385	456	514	430	430	349	264	189	79	14	0	0	0	0	0	3178
n	0	0	0	0	0	58	351	343	359	359	360	360	360	360	360	360	357	345	58	0	0	0	0	0	4390

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.2% exceed the 15% QC threshold -- 4443 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

September 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	18.2	18.5	18.4	18.6	18.7	18.7	19	19.3	19.8	21.3	22.3	22.8	23.2	23.5	23.9	23.5	23.3	22.8	21.4	20.3	20	19.9	19.8	19.4	20.7
2	18.9	18.9	18.4	18.2	17.9	17.7	18.1	20.4	21.9	23.1	23.7	23.9	23.7	23.8	23.5	23.3	23.1	22.7	22.1	21.4	20.7	20.3	20.1	20.1	21.1
3	20	20.3	20.1	20	19.9	19.8	20.3	21	22.1	23	22.9	23.3	22.9	23.3	23.3	23	22.6	21.9	21.2	20.7	20.6	20.5	20.5	20.4	21.4
4	20.4	20.2	20	19.9	19.2	18.1	18.8	21.1	22.1	23.1	24.5	26.1	26.8	27	27	27.2	26.8	25.6	24.2	23.4	22.5	21.5	20.6	19.6	22.7
5	18.8	18.3	18.3	18.2	18.1	18	18.4	20.7	23.1	24.4	26.2	27.7	28.5	29	28.7	27.8	26.9	25.8	24.4	23.3	22.7	22.2	21.1	20.6	23
6	20.4	20.1	20	19.9	19.6	19.6	20.2	21.1	22.8	25	26.3	27.1	27.7	27.2	26.4	25.5	25.1	24.6	23.8	23.1	22.6	22.2	22.1	22.3	23.1
7	22.1	22.5	22.7	23.1	23.2	22.9	22.4	22.1	21.9	21.8	22.4	23.1	23.4	23.7	23.5	23.4	23.3	23	22.9	22.3	22.4	22.6	22.3	22.1	22.7
8	22.2	21.6	21.1	20.8	20.9	21.3	21.6	21.7	22.5	23.2	23.8	23.6	22.9	23	22.8	22.2	21.2	20.8	20.3	20	19.8	19.6	19.6	19.7	21.5
9	19.8	19.8	19.6	18.9	18.6	18.4	18.2	19.2	21.1	22.7	24	24.6	25.4	25.7	24.5	23.2	22.4	21.8	20.7	20	19.8	19.6	19.6	19.5	21.1
10	19.5	19.7	19.8	19.5	19.8	20.1	20.2	20.4	20.4	20.6	20.3	20.1	20.4	20.1	20.2	20.8	20.4	19.9	19.1	19.1	19.2	18.6	18.5	17.8	19.8
11	17.3	16.9	16.8	16.6	16.1	16	15.9	16	16.5	17.8	19.6	21.6	22.9	23.9	23.7	24.3	24.3	23.4	22.2	20.8	20.2	19.7	19.3	19.2	19.6
12	19	18.7	18.5	18	18.1	18.1	18.5	20.2	21.7	22.8	24.1	25.1	26.3	27.4	27.4	25.2	23.9	22.7	21.6	20.7	20.2	19.5	19.1	18.2	21.5
13	18.2	18.4	18.2	17.8	17.2	16.8	17	18.9	21	22.5	23.7	24	24.4	25.2	25.6	25.8	26	25.5	23.5	22	20.8	19.9	19.6	19.2	21.3
14	18.9	18.3	18	18.2	17.9	17.6	17.8	19.6	22.4	25.3	26.9	27.8	28	28.4	28.3	28.4	28.2	27.2	24.3	22.6	22.1	21.9	21.2	20.5	22.9
15	20.2	20.3	20	19.7	19.2	19	19.2	20.5	22.9	25.3	27.2	28.2	29.2	29.1	29	29	28.1	26.9	25	24.1	23.6	23	22.8	22.4	23.9
16	21.8	21.2	21.1	21.2	21	20.8	21.1	22.3	25.4	26.7	28.4	29.2	29.6	27.6	26	25.9	25.1	24.4	23.6	23	22.7	22.3	21.8	21.6	23.9
17	21.6	21.6	22.1	22	21.9	21.8	21.7	22.5	23.1	23.8	24.1	23.8	23.5	23.9	23.7	23.1	22.6	21.8	20.9	20.6	20.4	19.9	19.6	19.4	22.1
18	19.3	19.4	19.7	19.9	19.6	18.6	18.8	20.1	21.5	22.3	22.9	23.5	23.6	23.8	24.1	23.9	23.9	23.7	22.9	21.9	21.2	20.5	20.1	19.4	21.4
19	19	18.9	18.9	18.5	18.4	18.1	18.7	20.6	22.3	23.4	24.1	25.1	24.9	23.7	23.4	22.4	22	21.1	20.1	19.2	18.7	18.1	17.6	17.6	20.6
20	16.6	16.3	16.7	16.8	16.6	16.6	17.1	18.8	20.7	22	22.9	23.8	24.3	23.8	23.9	23.7	22.6	21	19.6	18.9	18.6	18.1	17.8	17.7	19.8
21	17.2	17.2	16.9	17.4	17.9	18.1	19	21.3	23.9	25.3	25.9	26.5	26.6	26.2	25.4	24.6	24	23.4	23	22.8	22.9	23	22.9	22.8	22.3
22	22.5	22	21.7	21.7	21.2	21.3	21.9	23.4	25	26.1	26.8	27.4	27.8	28.1	28.1	27.4	25.7	24.8	23.7	23	22.7	22.6	22.6	22.9	24.2
23	23.2	23.3	23	22.9	22.7	22.7	23	24.4	25.4	26.5	27.2	28.2	29.2	28.9	28.4	28.5	27.9	26.2	25.2	24.6	24.4	23.8	23.4	23	25.3
24	22.8	22.6	22.3	22.2	22.2	22.1	22.1	23.2	24.9	26.4	27.6	28.2	29	29.8	29.8	30.1	29.7	28.6	27.2	26.3	25.7	25.2	24.5	24.5	25.7
25	24.3	23.7	22.4	22.2	21.5	21.5	21.6	22	22.6	22.9	22.7	22.6	21.8	20.6	19.6	19.4	19.2	19.1	19.4	19.5	19.3	20.9	21	20.8	21.3
26	20.5	20.3	20.2	20.2	20.1	20.1	20.1	20.5	21.3	21.6	21.8	22.3	22.4	22.3	22.2	22.4	22.5	22.4	22.6	22.6	22.1	20.9	20.2	20.3	21.3
27	20.1	20.3	21.3	21.8	21.9	21.4	20.9	21.2	21.8	22.5	23.1	23.6	23.5	24.5	25.3	26	26.1	24.7	22.7	21.9	21	20.6	20.6	20.1	22.4
28	19.1	18.1	17.4	17.2	16.8	16.6	16.9	18.9	21.8	23.6	25	26.1	26.6	26.9	27.3	27.3	26.9	25.6	24.3	24	21.1	19.5	19.5	19.3	21.9
29	18.7	17.8	16.8	15.8	15	14.1	13.9	15	16.7	18.5	19.7	20.4	20.8	21.1	21	19.8	18.9	18	17.1	15.8	14.9	14.7	14.6	13.5	17.2
30	12.6	11.9	11.3	10.7	10.8	10.8	11	12.3	14.5	16.7	19.1	20.4	21.2	21.7	22.2	22.1	21.9	20.6	17.7	16.6	15.5	14.9	14.3	14	16
Avg	19.8	19.6	19.4	19.3	19.1	18.9	19.1	20.3	21.8	23	24	24.7	25	25.1	24.9	24.6	24.2	23.3	22.2	21.5	20.9	20.5	20.2	19.9	21.7
S D	2.3	2.4	2.4	2.5	2.6	2.6	2.6	2.5	2.4	2.4	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.5	2.3	2.3	2.3	2.3	2.3	2.4	2
S/A	0.12	0.12	0.12	0.13	0.13	0.14	0.14	0.12	0.11	0.11	0.1	0.1	0.11	0.11	0.11	0.11	0.11	0.11	0.1	0.11	0.11	0.11	0.12	0.09	
Min	12.6	11.9	11.3	10.7	10.8	10.8	11	12.3	14.5	16.7	19.1	20.1	20.4	20.1	19.6	19.4	18.9	18	17.1	15.8	14.9	14.7	14.3	13.5	16
Max	24.3	23.7	23	23.1	23.2	22.9	23	24.4	25.4	26.7	28.4	29.2	29.6	29.8	29.8	30.1	29.7	28.6	27.2	26.3	25.7	25.2	24.5	24.5	25.7
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.

Prepared by: Afshin M. Andreas, NREL

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

September 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	105 ?	103.6	102.7	100.7	99.7	97.5	92.7	91.2	89.3	82.9	82.6	88.8	89.5	87.2	82.2	82.5	79.7	81	92.4	97.9	98.9	99.5	99.3	100.1	92.8	
2	101.3	99.6	98.7	101.5	103.5	104.4	103	94.7	90	85	85.2	86.5	87.8	87.6	88.9	90	91.7	92.7	94.8	97.1	99.1	100.1	101.5	101.7	95.3	
3	102.5	101.3	101.8	103	103.6	103.7	102.5	100.6	98.5	96.8	96.8	96.2	98.7	97.9	98.2	99.3	99.9	102.6	104.1 ?	?	?	?	?	?	100.4 ?	
4	104.7 ?	104.4	103.5	102.8	104	105	103.5	96.9	91.9	89.2	86.3	83.6	82.9	82.2	83.3	83.1	84.5	90.4	91.8	93.5	91.2	102.6	?	?	93.7 ?	
5	?	?	?	?	?	?	?	98.9	88	82.1	74.1	65.4	68.2	68.6	68.9	71.7	76.7	80.1	83.1	94.8	100.5	104.2	?	?	81.7 ?	
6	?	?	?	?	?	?	?	104 ?	99.6	86.7	74.2	69.5	66	67.3	77.5	89.1	93.1	96	99.7	101.6	103.7	104.8 ?	?	104.8	89.8 ?	
7	?	?	?	104.4 ?	104.7 ?	?	?	?	?	?	103.9 ?	101.8	101.3	100.6	100.6	101	101.8	102.1	101.6	104.6	104.5	104.8 ?	?	?	102.7 ?	
8	?	?	104.1	104.7 ?	?	?	?	?	103.1 ?	101.9	99.6	99.9	103.2	101.5	102.5	103.3	104.1 ?	?	?	?	?	105 ?	104	102.6	102.8 ?	
9	102.3	101.7	101.3	103	104.9 ?	?	104.7 ?	102.5	95.9	90	81.2	77.5	73.2	73	84.8	87.6	92.1	94.6	99.1	103	103.9	104.7	104.9	?	94.8 ?	
10	?	?	?	?	?	?	?	104.3	103.9	102.3	102.8	104.1	102	101.8	100.4	98.8	100.1	101.6	103.9	103.1	104.8 ?	?	?	?	102.5 ?	
11	?	?	?	?	?	104.4	103.5	102	100.1	97.6	94.4	90.5	88.3	86.1	86.4	84.2	85.3	90.7	96	101.9	103.5	104.5 ?	?	?	95.3 ?	
12	?	?	?	?	?	?	?	103.6 ?	97	94.4	92	87.8	78	74.6	74.4	88.4	90.8	93.3	96.6	100	101.8	103.7 ?	?	?	91.8 ?	
13	?	?	?	?	?	?	?	102.7 ?	98.3	93.7	87.5	85.1	82.8	79.7	76.9	76.5	74.9	78.1	90.5	99.3	103.2	?	?	?	87.8 ?	
14	?	?	?	?	?	?	?	101.7 ?	89.7	72.8	61.4	61.2	62.2	61.9	63.9	65.3	70.9	75	89.6	100.8	103.2	102.8	103.1	104.6 ?	81.8 ?	
15	?	?	?	?	?	?	?	103.6 ?	97.2	86.5	75.1	67	61.7	62.2	63.3	57.6	61.2	70.1	86.1	91.8	91.3	97.4	99.7	100.4	80.7 ?	
16	102.6	104.7 ?	?	?	?	?	?	103 ?	86	76.9	74.7	69.1	67.2	83.3	85.6	83.7	84.8	87	96	101.2	103.3	104.2 ?	?	?	89 ?	
17	?	?	?	?	?	105 ?	?	103.1	100.3	98.3	97	97.5	98.2	95.7	95.3	96	95.6	97	98.7	100.5	102.1	103.9	104.9 ?	?	99.3 ?	
18	?	103.5	101.9	101.3	102.6	104.8 ?	104.2 ?	102.7	98.3	94.7	93	91.7	91.9	91.4	90.7	91.5	92.2	94	98	101.7	104.5 ?	?	?	?	97.7 ?	
19	?	?	?	?	?	?	?	103.6 ?	99.6	95.7	92.3	87.1	89.7	93	92.8	92.9	92.7	95.7	98.6	97	96.8	100.3	102.2	101.1	95.9 ?	
20	104 ?	?	?	?	?	104.6 ?	102	95.7	88.6	82.2	78.2	73.7	71.8	73.1	74.5	74.6	77.8	83.1	95.5	100.4	103	104.7 ?	?	?	88.2 ?	
21	?	?	?	?	?	?	?	102.8 ?	92.9	82.6	75.3	73.8	73.6	76.3	82.9	87.8	92	95.6	98.3	99.8	101	101.9	102.6	102.8	90.7 ?	
22	102.6	103.5	104.4	104.4	104.6 ?	?	103 ?	98.1	93	88.7	83.3	83.6	83.1	83.9	85.4	88.8	98.3	100.9	103.6	?	?	?	?	?	95.2 ?	
23	?	?	?	?	?	?	?	104.2 ?	101.3	93.9	90.4	87.1	82.7	85.3	83.9	83.5	85.4	96.6	101.1	102.2	103.5	104.8 ?	?	?	93.7 ?	
24	?	?	?	?	?	?	?	?	102.3	97.8	93.1	88.7	86.1	82.8	82.2	81.3	84.2	89.2	95.4	98.5	101.4	102.6	104.4 ?	?	104.3 ?	93.4 ?
25	102.2	103.9 ?	?	?	?	?	?	?	?	103.9 ?	101.4	94.6	94.4	96.6	101.9	103.6 ?	?	?	101.6	95.5	100.7	97.1	92.5	91.6	98.8 ?	
26	92.6	91.1	89.2	89.1	91.5	92.3	91.9	89.8	89.1	88.6	88.4	84.8	78.3	85.1	87.7	82.4	80.9	85.1	82.5	82.9	91	100.8	104.5 ?	?	88.7	
27	?	?	?	?	?	?	?	?	?	?	103.9	101.4	100.5	95.1	89.4	84.3	80	85.5	94.8	97.5	99.8	99.2	98.8	99.4	95 ?	
28	101.4	104.2	?	?	?	?	?	?	97.8	87.4	81.6	72.4	67.7	68	67.3	67.2	71.1	80.9	89.8	94.1	100.1 ?	103.3 ?	103	104	86.7 ?	
29	100.5	92.7	97.2	96.9	97	96	94.7	89	82.1	72.7	61.1	56.5	57	57.4	59.4	66.2	69.8	73.9	80.2	86.7	91.7	92.3	90.3	94	81.5	
30	97.6	100.2	102.4	104.6 ?	104.4 ?	104.4	104	100.1	94	86.3	74.3	67.8	65.3	63.3	62.6	62.5	64.3	71.1	86.5	96.6	100.1	101.9	103.6	103.9	88.4	

Avg	101.5	101.1	100.7	101.4	101.9	102	100.8	99.9	95.1	89.7	86.2	83.2	81.8	82.1	83.1	84.2	85.4	88.7	94.8	98	100.3	102.1	101.2	101.1	92.5 ?
SD	3.3	4.4	4.4	4.5	4.2	4.5	4.7	4.7	5.8	8.4	11.7	13	13.7	12.9	12.3	12.2	11.4	9.6	6.6	5	4.2	3.1	4.3	4	6.3
S/A	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.09	0.14	0.16	0.17	0.16	0.15	0.15	0.13	0.11	0.07	0.05	0.04	0.03	0.04	0.04	0.07
Min	92.6	91.1	89.2	89.1	91.5	92.3	91.9	89	82.1	72.7	61.1	56.5	57	57.4	59.4	57.6	61.2	70.1	80.2	82.9	91	92.3	90.3	91.6	80.7
Max	105	104.7	104.4	104.7	104.9	105	104.7	104.3	103.9	103.9	103.9	104.1	103.2	101.8	102.5	103.6	104.1	102.6	104.1	104.6	104.5	105	104.9	104.8	102.8
n	130	140	131	123	101	108	121	236	321	327	356	360	360	360	360	357	340	336	340	322	312	238	171	152	6106

Data Recovery: 0.0% missing; 0.0% untested; 29.3% 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

September 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	18.7	18.4	18.3	18.3	18.5	18.6	18.9	19.3	20.1	22.1	24.8	26.1	27.4	27.5	28.2	28.4	27.7	27.2	25.4	22.4	20.7	20.1	20	19.6	22.4
2	18.9	18.5	18.1	17.7	17.5	17.2	17.3	19.9	24.2	26.3	27.6	28.2	28.1	27.8	27.3	26.8	26.2	25.2	23.9	22.6	21.5	20.8	20.3	20.1	22.6
3	19.9	20	20.1	20.1	20.1	20.1	20.3	20.9	22.4	24.4	24.9	25.4	26.1	26.1	26.5	26	25	23.7	22.7	21.8	21.2	21	20.9	20.8	22.5
4	20.7	20.7	20.6	20.4	20	19	19	22.3	25.5	26.9	29.9	32.1	33.2	32.8	32.5	32	31.7	30.4	27.4	24.9	23.2	21.7	20.5	19.5	25.3
5	18.8	18.3	17.9	17.8	17.7	17.6	18	20.9	25.5	28.8	31.4	34	35.3	35.7	35.7	35.3	33.4	31	27.8	24.7	23	22	21.1	20.2	25.5
6	19.9	19.6	19.4	19.2	19	18.8	19.1	20.4	22.4	26	29.6	32.8	33.8	33.5	32.4	30.7	29	27.9	25.9	24.1	23	22.3	22	22	24.7
7	22.2	22.2	22.4	22.6	22.9	22.9	22.7	22.5	22.4	22.2	22.4	23.3	24.3	25.1	25.7	25.4	25	24.4	23.8	23.1	22.3	22.1	22.3	22.3	23.2
8	22.3	22.3	21.6	21.1	21	21.2	21.4	21.6	22.8	25.2	26.5	27.4	28.2	26.9	26.4	25.3	23.7	22.1	21.2	20.6	20.2	19.9	19.7	19.7	22.8
9	19.9	20	19.9	19.2	18.6	18.4	18.4	20.1	22.5	25.7	28.5	30.3	30.8	31.1	30.8	29.3	26.9	25.5	23.7	21.3	20.4	20	19.9	19.7	23.4
10	19.6	19.6	19.8	19.8	19.8	19.9	20.1	20.2	20.4	20.7	21	20.9	21	21.1	21	21.7	22.3	21.7	20.8	20	19.8	19.5	19	18.7	20.4
11	18.2	17.6	17.3	17.1	16.9	16.7	16.5	16.7	17.5	19.5	22.4	26.1	28.2	29.2	29	28.7	28.7	28.2	25.4	22.6	20.6	19.6	19	18.7	21.7
12	18.5	18.3	18.1	17.9	17.7	17.7	18	20.7	24.6	28.3	30.8	33.1	33.7	33.9	34.4	34	30	26.5	23.8	21.7	20.2	19.2	18.4	17.9	24.1
13	17.8	18	17.9	17.5	17.1	16.6	16.7	19.8	24.3	27.5	29.1	30	29.6	29.8	30.6	30.5	31.2	30.7	28.1	24.1	21.5	19.9	19.1	18.7	23.6
14	18.2	17.9	17.6	17.5	17.5	17.3	17.6	20.6	25.3	29.8	33.8	36.7	37.3	36.3	36	35.7	35	34.5	30.4	25.5	23	22	21.1	20.3	26.1
15	19.6	19.3	19.4	19.3	19.1	18.9	18.9	21.1	25.4	30.3	33.8	36.4	37.7	37.5	35.8	35.6	34.8	32	28.2	25.5	24.1	23.3	22.6	22	26.7
16	21.5	20.8	20.3	20.2	20.2	20	20.2	21.7	27.1	32	35.8	37.7	39.1	38.1	33.7	31.9	29.8	27.3	25.5	24.2	23.4	22.8	22.3	21.8	26.5
17	21.6	21.6	21.6	21.9	21.9	21.9	21.9	22.4	23.9	25.1	26.9	27.3	26.8	27.1	27.5	27.5	26.8	25	23	21.4	20.9	20.3	19.6	19.1	23.5
18	18.8	18.8	19.1	19.4	19.6	18.9	18.7	21.1	22.9	24.6	25.9	27.4	27.9	28.3	28.7	28.8	27.6	26.7	25.4	23.3	21.7	20.5	19.8	19.3	23.1
19	18.8	18.4	18.1	18	17.9	17.8	18.1	20.7	24.4	27.1	28.6	30.6	31.8	30.3	29	28.1	27	25.4	22.7	20.3	18.8	17.8	16.9	16.5	22.6
20	16.1	15.6	15.5	15.7	15.8	15.6	15.6	18.3	22.8	26.3	29.1	31.5	32.8	32	31	30.6	30	27.4	22.7	19.8	18.4	17.6	17.2	17	22.3
21	16.9	16.7	16.6	16.6	17.1	17.6	17.9	19.9	24.8	29.4	32.3	33.6	34.3	32.7	31.3	29.4	27.6	25.9	24.6	23.8	23.4	23.3	23.3	23.1	24.2
22	22.7	22.1	21.5	21.3	21	20.8	21.2	23.9	27.2	30.2	31.7	34.3	35.1	35.3	35.8	34.9	31.3	28.1	25.9	24.4	23.5	23	22.9	22.7	26.7
23	22.8	23	23	22.8	22.6	22.5	22.7	24.5	26.9	28.8	31.7	34.3	36	36.8	35.1	34.2	33.7	31.1	27.9	25.8	24.8	24	23.4	23	27.6
24	22.7	22.5	22.4	22.2	22	22.1	22.1	24.1	27.7	30.8	33.6	35.3	35.3	35.3	35.6	35.2	34.9	33	29.9	27.7	26.6	25.7	25.1	24.6	28.2
25	24.5	24.3	23.6	22.8	22.2	21.8	21.8	22	22.3	23.2	23.7	24.4	24	22.8	22.1	21.2	20.5	19.7	19.2	18.9	19.1	19.6	20.4	20.8	21.9
26	20.8	20.7	20.5	20.4	20.3	20.2	20.2	20.6	21.8	23.6	24	23.9	24.2	24.3	24.1	24.1	23.7	23.3	22.9	22.8	22.7	22	20.6	20.1	22.2
27	20	20	20.3	21.1	21.6	21.7	21.5	21.4	21.9	23	24	24.8	25.5	27.1	28.6	29.6	30.2	29.2	25.8	22.9	21.4	20.5	20	19.6	23.4
28	18.8	17.6	16.7	16.2	15.9	15.7	16	18.9	23.3	27.2	30	31	31.3	31.2	31.4	31.5	31.2	29.7	26.6	24.7	23.7	21.5	19.8	19.2	23.7
29	18.8	18	17	15.8	14.6	13.7	13.2	15.9	19.5	22.6	24.7	25.8	26	25.6	25.5	24.3	22.6	20.5	18.6	16.4	14.7	13.8	13.5	13.2	18.9
30	12.4	11.5	10.7	10.2	9.8	9.7	10	12.9	17.4	21.6	25.2	27.5	28.5	29.1	29	29.3	28.7	26.5	21.7	17.3	15	13.6	12.8	12.2	18.4
Avg	19.7	19.4	19.2	19	18.9	18.7	18.8	20.5	23.3	26	28.1	29.7	30.4	30.3	30	29.5	28.5	27	24.7	22.6	21.4	20.6	20.1	19.7	23.6
S D	2.4	2.5	2.6	2.7	2.8	2.8	2.8	2.4	2.6	3.3	3.9	4.5	4.7	4.6	4.2	4.1	3.9	3.6	2.9	2.6	2.6	2.6	2.6	2.7	2.3
S/A	0.12	0.13	0.14	0.14	0.15	0.15	0.15	0.12	0.11	0.13	0.14	0.15	0.15	0.15	0.14	0.14	0.14	0.13	0.12	0.11	0.12	0.13	0.13	0.13	0.1
Min	12.4	11.5	10.7	10.2	9.8	9.7	10	12.9	17.4	19.5	21	20.9	21	21.1	21	21.2	20.5	19.7	18.6	16.4	14.7	13.6	12.8	12.2	18.4
Max	24.5	24.3	23.6	22.8	22.9	22.9	22.7	24.5	27.7	32	35.8	37.7	39.1	38.1	36	35.7	35	34.5	30.4	27.7	26.6	25.7	25.1	24.6	28.2
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

September 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	2.8	2.2	2.6	2.8	3	2.9	3.2	3.2	3.4	3.6	4.1	4.1	4.3	4.8	4.2	4.8	4	3.4	3	2.9	3.1	3	2.7	2.5	3.4
2	2.5	2.4	2.4	2.5	2.6	2	1.4	2.1	2.9	4.3	4.8	4.3	4.5	4.2	4.4	4.2	3.9	3.4	3.1	2.2	2.1	2.2	1.7	1.8	3
3	2	2.3	2.1	2.6	3.1	3.1	3	3.6	3.7	4.1	4	4.3	4.6	4.2	4.3	4.1	3.6	3.2	2.9	2.9	2.7	2.2	1.6	1.5	3.2
4	1.3	1.5	1.6	1.4	1.4	1.4	1.2	2	2.1	2.4	2.6	2.5	1.9	1.9	2	2	1.7	2.1	1.2	0.9	1.3	0.9	0.1	0.2	1.6
5	0.1	0.4	0.5	0.5	0.5	0.4	0.9	1.2	1.3	1.7	2.2	2.5	2.1	2.3	2.3	2.7	2.7	2.1	1.2	1.1	1	0.6	0.2	0.4	1.3
6	0.6	0.4	0.5	0.7	0.8	1	0.6	0.5	1.9	3	3.8	3.5	3.7	3.8	3.9	3.5	3.5	2.7	1.7	1.4	1.4	1.6	1.6	1.5	2
7	1.3	1.3	1.2	1.5	1.4	1.6	2.4	2.8	2.6	3.9	3.8	3.9	3.2	3.2	2.9	2.4	3	2.7	2.5	1.2	1.1	1.7	1.5	1.1	2.3
8	1.6	1.7	0.6	0.3	0.9	0.7	0.7	1	1.8	2.6	3.6	4.3	4.5	4.3	4.6	4.9	4.4	4	3.5	3.4	3.1	2.6	2.8	2.6	2.7
9	2.2	2.2	1.5	1	1.3	1.5	1.4	1.7	2.7	3.2	3.2	3.8	3.3	3.8	4	4.1	3.8	3.3	2.7	2.8	3.1	2.8	2.7	2.1	2.7
10	2.2	2.1	2	2.1	2.4	3.6	3.8	3.3	3.6	4	4.1	4.3	4.4	4.4	4.3	4.7	5.2	4.5	3.9	3.5	3.3	2.4	2.2	2.3	3.4
11	2.6	2.4	2	2.5	2.6	2.6	2.2	2.4	2.7	2.7	3.5	2.9	3.1	2.1	1.7	1.6	1.5	1.3	1.3	0.5	0.7	0.8	0.9	1.4	2
12	1.4	1.3	1.2	0.8	1.4	1.1	0.4	1.5	2.2	2	1.8	2.1	2	1.6	2.1	2.5	2.4	2.2	1.7	1.2	0.5	0.1	0.3	0.3	1.4
13	0.6	1.2	0.9	1	1.1	0.9	1	1.3	2	2.9	2.7	2.5	2.9	2.7	2.6	2.4	2.3	1.4	1	0.2	0	0.4	0.3	0.4	1.4
14	0	0.1	0.2	0.1	0.2	0.1	0.2	0.6	1.1	1.2	1	1.4	1.7	1.5	1.3	1	1.5	0.4	1.8	1.5	1.9	1.3	0.3	0.1	0.9
15	0.2	1.5	1.2	1.3	0.9	0.4	0.9	1.4	0.9	1.3	1.3	1.4	1.4	1.5	1.5	1.5	1.3	1	1.6	1.4	1.3	0.9	0.5	0.2	1.1
16	0	0	0.1	0.4	0	0	0	0.1	0.8	0.6	0.7	1	1.1	3.9	3.9	3.5	2.5	2.1	1.4	0.8	1.1	1.4	1.2	0.7	1.1
17	1	1	1.6	1.7	1.6	2	1.6	1.7	2.8	3.3	3.5	3.4	3.3	3.3	3.4	3.8	3.8	3.7	2.3	2.6	2.6	1.7	1.5	1	2.4
18	0.9	1.1	1.3	1.4	0.8	0.9	0.8	1.3	2.1	2.2	2.1	1.4	0.9	1	0.8	0.6	0.2	0.5	0.3	0.2	0.3	0	0.1	0	0.9
19	0	0	0	0	0.1	0	0.1	0.8	2.1	2.3	2.6	3	3.3	3.8	4.3	3.6	3.7	2.8	1.8	1	0.8	0.5	0.8	0.5	1.6
20	0.5	0.5	0.7	0.5	0.7	0.9	0.9	1.5	2.3	2.8	2.1	2.1	2.1	1.7	2.6	2.4	2.8	2.3	1.5	1.1	0.7	0.6	0.4	0.8	1.4
21	0.3	0.2	0	0.7	1	0.8	0.7	1.1	2.1	2.5	3.4	3.6	3.6	3.9	3.8	3.1	2.9	2.4	1.4	1.7	2.3	2.2	1.9	1.1	1.9
22	1.2	1	1.2	0.9	0.8	1.6	1.9	2	2.5	2.7	2.6	3	3	3.3	2.1	1.8	2.1	1.6	1.7	2.2	1.1	0.5	0.4	0.2	1.7
23	0.1	0.2	0.2	0	0	0.1	0	1.3	1.3	2.1	2.3	1.8	1.9	2.6	3.9	3.5	2.7	0.9	0.7	0	0	0.3	0.5	0.2	1.1
24	0.2	0.5	0.4	0.2	0.6	0.4	0.3	1.6	3	2.7	1.7	2.4	1.8	2.1	1.9	2.3	2.4	0.9	0.4	0.6	0.9	1	1	0.8	1.3
25	0.5	1.3	1.9	1.5	1.1	0.1	0.6	1	1.3	2.7	3.1	4.3	4.8	4	3.6	2.7	1.6	1.4	2.1	1.8	1.1	2.9	3.4	3.5	2.2
26	3.5	3.1	3	3	2.7	2.7	3.2	3.2	4.3	4.6	3.8	4.3	3.6	3.7	3.7	3.9	3.6	2.8	4.6	4.5	5	3.6	3.2	3.9	3.7
27	3.6	2.6	5.3	3.9	1.2	2.3	2.7	2.4	1.7	2	2.8	2.9	2.2	3.3	3.4	3	2.9	1.7	0.9	0.7	0.6	0.9	1.2	1.4	2.3
28	0.7	0.2	0.5	0.3	0.2	0.1	0.2	0.9	2.5	2.6	4.4	5.3	5	4.9	4.6	4.4	3.6	2.2	1.9	3.4	3.3	0.9	1.8	2.1	2.3
29	1.4	1.5	1.4	1.5	1.6	1.6	1.8	2.3	2.4	3.5	4.3	4.4	4.4	4.7	4.3	3.4	3.1	2	1.2	1	1.2	1.6	1.6	2	2.4
30	1.4	1	1.4	1.4	1.8	1.9	1.7	1.6	1.6	1.8	2	2.3	2.2	2.4	2	2	1	0.5	0	0	0	0	0	0	1.3
Avg	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.7	2.3	2.7	2.9	3.1	3	3.2	3.1	3	2.8	2.2	1.8	1.6	1.6	1.4	1.3	1.2	2
S D	1	0.9	1.1	1	0.9	1	1.1	0.9	0.8	1	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1	1	1	0.8
S/A	0.85	0.71	0.83	0.77	0.71	0.78	0.8	0.51	0.37	0.35	0.36	0.37	0.39	0.36	0.36	0.38	0.39	0.49	0.58	0.72	0.77	0.71	0.78	0.86	0.4
Min	0	0	0	0	0	0	0	0.1	0.8	0.6	0.7	1	0.9	1	0.8	0.6	0.2	0.4	0	0	0	0	0	0	0.9
Max	3.6	3.1	5.3	3.9	3.1	3.6	3.8	3.6	4.3	4.6	4.8	5.3	5	4.9	4.6	4.9	5.2	4.5	4.6	4.5	5	3.6	3.4	3.9	3.7
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

Prepared by: Afshin M. Andreas, NREL

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

September 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	347	342	337	343	352	350	349	350	347	346	357	357	10	11	22	24	24	17	360	352	351	348	355	351	359
2	356	357	345	349	348	341	338	347	346	25	35	37	30	30	33	32	36	26	14	1	356	358	344	353	13
3	341	2	345	351	341	351	340	350	351	356	357	357	358	0	9	349	359	341	320	325	329	317	314	300	347
4	296	281	291	293	276	291	291	312	323	326	326	350	352	345	23	21	36	55	49	38	46	54	59	263	341
5	259	268	283	285	300	320	326	329	339	358	19	39	38	56	55	63	75	66	55	90	74	59	340	354	37
6	358	357	2	8	347	356	358	9	29	57	54	50	57	50	63	58	50	44	28	34	6	358	3	2	40
7	352	26	22	37	41	61	76	87	73	75	81	79	83	91	79	71	74	68	73	43	56	67	64	47	69
8	37	91	65	344	1	85	2	6	12	355	16	351	354	7	12	21	352	342	354	350	339	326	326	333	359
9	330	329	320	292	297	301	310	318	342	7	4	7	5	9	35	36	33	28	15	6	6	348	341	340	360
10	328	323	325	312	327	355	351	355	1	351	350	348	351	345	343	337	335	326	323	326	312	305	307	294	336
11	295	297	283	286	290	286	290	283	276	270	269	266	264	261	264	258	236	223	202	214	220	214	205	210	268
12	209	202	206	205	205	208	202	216	243	256	255	259	264	274	306	60	66	58	52	56	61	357	336	263	248
13	256	271	281	269	273	277	283	307	325	346	348	334	337	347	343	351	340	342	49	66	202	209	204	220	328
14	252	252	254	269	297	282	280	295	329	6	0	23	285	271	279	340	54	64	75	86	99	113	151	172	15
15	186	206	210	210	216	224	223	224	221	226	244	220	168	158	176	167	149	135	123	131	138	162	177	167	185
16	151	0	206	172	199	220	5	230	231	226	65	39	32	79	84	90	70	55	32	23	28	360	11	353	61
17	347	6	26	25	25	19	13	25	43	47	46	51	46	47	40	38	45	42	41	36	32	35	31	37	37
18	52	45	67	71	23	343	17	34	47	47	63	73	77	79	82	65	84	115	135	131	151	56	340	0	57
19	292	0	340	307	329	331	347	3	11	22	49	51	48	52	53	54	47	50	38	38	23	13	37	35	43
20	332	356	359	19	8	17	23	42	44	61	38	46	55	38	55	44	51	48	47	52	40	36	5	10	41
21	359	3	331	0	13	14	26	52	59	72	85	84	79	84	84	71	69	72	50	57	63	65	60	54	68
22	56	59	66	58	43	45	48	44	61	64	81	84	81	94	68	58	55	54	47	60	46	31	74	80	64
23	93	104	95	101	142	132	140	115	132	152	171	187	151	95	97	112	135	157	214	175	173	166	163	206	133
24	205	219	210	221	228	218	251	244	258	261	248	239	250	242	234	236	225	224	169	148	189	199	209	319	237
25	45	352	51	357	351	329	351	357	8	32	51	43	38	31	30	26	26	21	33	41	9	58	55	57	34
26	57	52	48	50	52	52	55	60	68	67	69	77	84	77	79	95	102	112	113	121	122	126	120	124	85
27	118	116	120	118	154	225	222	220	222	199	223	247	271	242	250	256	259	269	254	244	215	231	240	251	214
28	247	260	216	224	222	187	210	188	163	186	200	210	196	200	197	199	198	183	167	172	275	264	265	271	204
29	282	283	262	253	252	257	253	252	259	266	265	252	252	252	264	284	283	277	252	229	223	241	257	266	261
30	276	282	272	252	265	266	276	284	296	292	323	310	303	296	300	324	313	312	0	0	178	178	178	0	292
Avg	348	347	355	345	331	336	339	344	358	13	19	17	18	29	35	35	36	32	34	35	17	11	357	343	12
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

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

September 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	5	4	4.9	5.4	5.5	5	5.8	5.6	5.9	6.5	7	7	7.6	8.5	8.2	8.6	7.6	6.3	5.4	5.3	5.4	5	4.5	4.1	6
2	4.3	3.9	4.1	4.3	4.2	3.4	2.9	3.5	5	7.5	8.5	7.4	7.7	7.3	7.5	7.3	7	6.2	5.4	3.8	3.6	3.7	3	3.1	5.2
3	3.4	4.3	3.9	4.8	5.6	5.4	5.3	6.2	6.3	7.2	7	7.5	8.2	7.5	7.5	7.3	6.5	5.9	5.6	5.5	4.9	4.1	3.5	3.5	5.7
4	3.2	3.3	3.5	2.9	2.7	3.1	2.8	4.2	4.4	4.8	5.2	5	4	3.4	3.4	3.7	3.1	3.6	2.2	1.8	2.2	1.4	0.2	0.4	3.1
5	0.5	1	1.4	1.4	1.3	0.9	1.9	2.7	3.1	3.2	4	4.6	4	4.2	4.2	4.3	4.3	3.7	2.1	1.9	1.5	1	0.6	0.8	2.4
6	1.2	1	1	1.1	1.6	2	1.7	1.3	3.5	5.6	6.3	6	6.5	7.1	6.5	6.8	6.2	5.1	3.3	2.6	2.5	2.7	2.8	2.9	3.6
7	2.6	2.6	2.2	2.9	2.7	3.4	4.2	5.1	4.9	6.7	6.6	6.9	5.9	5.5	4.8	4.1	5.2	4.6	4.4	2.5	2.5	3.1	3.2	2.4	4.1
8	3.1	3.5	1.7	1	2.1	2	1.7	2.2	3.9	4.8	6.4	7.8	7.6	7.5	8.2	8.9	7.8	7.3	6.8	6.2	6.2	5.1	5.3	4.8	5.1
9	4.5	4.4	3.3	2.4	3	3.6	3.4	4	5	5.4	6.2	6.8	6	7	7.1	7.2	7	6.2	5	5.2	5.7	5.1	4.7	4	5.1
10	4	3.9	3.9	4.3	4.9	6.9	6.7	6.3	6.6	7.2	7.5	7.6	7.7	7.5	8.2	8.6	9	8.2	7.4	6.6	6.5	5.2	4.7	4.8	6.4
11	5.2	5.2	4.4	5.5	5.5	5.3	5	5	5.2	5.2	6.4	5.5	5.8	4.3	3.1	3.2	2.8	2.1	2.2	1.1	1.2	1.4	1.9	2.3	3.9
12	2.3	2.2	2	1.5	2.4	2	1.3	2.7	3.9	3.5	3.4	4.1	4	3.6	4.2	4.3	3.9	3.7	3	2.1	1	0.4	0.6	0.7	2.6
13	1.3	2.3	2.2	1.8	2.3	2	2.3	3.2	3.9	5.1	5.2	5	5.2	4.7	4.9	4.4	4.2	2.9	2	0.6	0.1	0.9	0.8	0.9	2.8
14	0.2	0.5	0.8	0.8	1.1	0.8	1.2	1.9	2.5	2.4	2.4	3.2	3.7	3.5	3.1	2.2	3	1.1	3	2.7	3	2.1	1	0.7	1.9
15	0.9	2.6	2.2	2.1	1.8	1.2	1.8	2.7	1.9	2.6	2.9	2.8	2.9	2.9	3.1	3.2	2.6	2	2.7	2.7	2.7	2.5	2.1	1.1	2.3
16	0.1	0	0.3	1.2	0.2	0.3	0	0.3	2	1.3	1.8	2.1	2.5	6.8	6.5	6.2	4.8	3.8	3.5	2.2	2.6	2.8	2.6	1.7	2.3
17	2.1	2.3	3.2	3.4	3.7	3.8	3.1	3.6	5.2	6.6	6.7	6.2	6	5.8	6.1	6.6	7	6.5	4.3	4.8	4.7	3.2	2.8	2.3	4.6
18	2.2	2.1	2.6	2.6	1.7	1.8	1.9	2.6	3.7	3.9	3.7	2.7	2.2	2.2	1.8	1.5	0.7	1.1	1	0.6	0.6	0.1	0.3	0	1.8
19	0.1	0	0.1	0.1	0.2	0.2	0.8	1.9	4	4.4	4.7	5.2	5.6	6.9	7.3	6.1	6	4.9	3.2	2.2	1.8	1.3	1.5	1.3	2.9
20	1.1	1.1	1.4	1.2	1.5	1.9	2.1	2.8	4.2	4.6	4.3	4.1	4	3.3	4.7	4.3	4.8	3.9	2.7	2.1	1.5	1.4	1	1.6	2.7
21	1	0.8	0.5	1.9	2.1	1.8	1.7	2.3	3.8	4.6	5.7	5.8	5.9	6.2	6.2	5.3	5	4.3	3	3.5	4.2	3.7	3.3	2.4	3.5
22	2.2	2.4	2.6	2.1	1.9	3	3.7	3.6	4.2	4.7	4.6	5	5	5.4	3.9	3.3	3.8	3.1	3.1	3.9	2.5	1.6	1.3	1.2	3.3
23	0.7	1.1	0.8	0.2	0.3	0.8	0.5	2.5	2.6	3.7	4.1	3.6	3.7	4.6	6.3	5.8	4.7	2.3	1.6	0.4	0.3	1.2	1.6	0.9	2.3
24	1.1	1.5	1.5	1.1	1.6	1.5	1.2	3.2	5.1	5	3.8	4.3	3.9	3.8	3.4	4.3	4	1.8	1.3	1.4	2.2	2.2	1.8	2.2	2.6
25	1.5	2.9	3.7	3.3	2.5	0.8	1.3	2.4	3.1	5.4	5.8	8.2	7.9	7.2	6.6	4.8	3.2	3	4	3.3	2.3	5.7	6.3	6.5	4.2
26	6.3	6.3	5.2	5	4.9	4.9	6	6	7.9	7.5	6.6	7.8	6.1	6	6.1	6.8	6	4.9	7.8	7.2	8.5	5.8	5.3	6.6	6.3
27	6.2	4.9	8.9	6.4	2.3	4.2	4.9	4.4	3.3	4.1	5	5.3	5	5.4	6	5.2	5.2	3.1	1.4	1.2	1	1.5	1.9	2.2	4.1
28	1.3	0.7	0.9	0.6	0.6	0.6	1	2	4.7	5.1	8.2	9.3	8.6	8.6	8	7.4	6	4	3.6	6.1	7	2.1	3.2	4	4.3
29	3.1	3.1	2.8	2.8	2.8	2.9	3.2	4.1	4.7	6.1	7.6	7.9	8	8.4	7.8	7.1	6	4	2.1	1.5	1.7	2.4	3	3.5	4.4
30	3	2.2	2.5	2.5	2.9	3.4	3.3	3.4	3.4	3.8	4.2	4.8	5.1	5	4.5	4	2.5	1.3	0	0	0.1	0	0	0	2.6
Avg	2.5	2.5	2.6	2.6	2.5	2.6	2.7	3.4	4.3	5	5.4	5.6	5.5	5.7	5.6	5.4	5	4	3.4	3	3	2.6	2.5	2.4	3.8
SD	1.8	1.6	1.8	1.7	1.6	1.7	1.8	1.5	1.3	1.5	1.7	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	2	2.2	1.7	1.7	1.8	1.3
S/A	0.73	0.64	0.7	0.66	0.62	0.65	0.64	0.43	0.32	0.31	0.32	0.33	0.33	0.32	0.33	0.36	0.37	0.46	0.55	0.66	0.74	0.65	0.68	0.73	0.36
Min	0.1	0	0.1	0.1	0.2	0.2	0	0.3	1.9	1.3	1.8	2.1	2.2	2.2	1.8	1.5	0.7	1.1	0	0	0.1	0	0	0	1.8
Max	6.3	6.3	8.9	6.4	5.6	6.9	6.7	6.3	7.9	7.5	8.5	9.3	8.6	8.6	8.2	8.9	9	8.2	7.8	7.2	8.5	5.8	6.3	6.6	6.4
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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

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

September 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	1018	1018	1018	1018	1018	1018	1019	1019	1020	1020	1020	1020	1020	1020	1019	1019	1019	1019	1020	1020	1020	1020	1020	1020	1019	
2	1019	1019	1019	1019	1019	1019	1020	1020	1020	1020	1020	1020	1020	1019	1019	1018	1018	1019	1018	1018	1018	1018	1018	1018	1017	1019
3	1017	1016	1015	1015	1015	1015	1016	1016	1015	1015	1016	1015	1015	1014	1013	1013	1013	1013	1013	1013	1014	1013	1013	1013	1014	
4	1013	1013	1013	1013	1012	1013	1014	1014	1014	1015	1015	1014	1014	1014	1014	1014	1014	1015	1015	1016	1016	1016	1017	1017	1014	
5	1017	1017	1016	1017	1017	1017	1018	1019	1019	1020	1020	1020	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1019	1020	1018	
6	1020	1019	1019	1019	1019	1020	1021	1021	1021	1022	1022	1021	1021	1021	1021	1020	1020	1020	1020	1019	1020	1020	1019	1019	1020	
7	1019	1018	1018	1017	1017	1017	1017	1017	1017	1017	1017	1017	1016	1016	1015	1015	1015	1014	1014	1014	1014	1014	1014	1013	1013	1016
8	1012	1012	1011	1011	1011	1011	1011	1011	1011	1011	1011	1011	1011	1011	1010	1011	1011	1012	1012	1013	1013	1013	1013	1013	1012	
9	1013	1013	1013	1013	1014	1014	1015	1016	1016	1017	1017	1016	1016	1016	1016	1016	1016	1017	1017	1017	1017	1017	1017	1017	1016	
10	1017	1017	1017	1016	1016	1016	1017	1018	1018	1019	1019	1019	1018	1018	1018	1018	1017	1017	1017	1017	1017	1017	1017	1017	1017	
11	1017	1017	1017	1017	1017	1017	1017	1017	1018	1018	1018	1017	1016	1016	1016	1015	1015	1015	1015	1015	1015	1015	1015	1015	1016	
12	1015	1015	1014	1014	1014	1014	1014	1014	1014	1014	1013	1013	1012	1012	1012	1011	1011	1011	1011	1012	1012	1012	1012	1012	1013	
13	1012	1012	1012	1012	1012	1012	1012	1013	1013	1013	1013	1013	1012	1012	1012	1011	1011	1011	1011	1012	1012	1013	1013	1013	1012	
14	1013	1012	1012	1012	1012	1013	1014	1014	1015	1015	1015	1015	1014	1014	1014	1013	1013	1013	1013	1013	1014	1014	1014	1014	1014	
15	1014	1014	1013	1013	1013	1013	1014	1014	1014	1014	1015	1015	1014	1014	1013	1013	1013	1012	1013	1013	1013	1014	1014	1014	1014	
16	1014	1013	1013	1013	1013	1013	1014	1014	1015	1015	1015	1015	1015	1014	1014	1014	1014	1015	1015	1016	1016	1016	1016	1016	1014	
17	1016	1015	1015	1015	1015	1016	1016	1017	1017	1018	1018	1018	1018	1017	1017	1017	1017	1017	1017	1018	1018	1019	1018	1018	1017	
18	1018	1018	1018	1017	1017	1017	1018	1018	1018	1019	1018	1018	1018	1018	1017	1016	1016	1016	1016	1017	1017	1017	1017	1017	1017	
19	1017	1017	1017	1017	1018	1018	1018	1019	1020	1020	1021	1021	1021	1020	1020	1021	1021	1021	1021	1021	1022	1022	1022	1023	1020	
20	1022	1022	1022	1022	1022	1022	1023	1023	1024	1024	1024	1024	1024	1023	1023	1022	1022	1022	1022	1022	1022	1022	1022	1022	1023	
21	1021	1021	1021	1021	1021	1021	1022	1022	1022	1023	1022	1022	1022	1021	1021	1021	1021	1021	1021	1021	1021	1022	1021	1021	1022	
22	1021	1021	1021	1021	1021	1021	1021	1021	1022	1022	1022	1021	1021	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	
23	1020	1020	1020	1019	1019	1020	1020	1021	1021	1021	1021	1020	1019	1019	1018	1018	1018	1018	1018	1018	1018	1018	1018	1018	1019	
24	1018	1018	1017	1017	1018	1017	1017	1018	1018	1018	1017	1017	1016	1015	1015	1014	1014	1014	1014	1015	1015	1015	1015	1015	1016	
25	1015	1015	1015	1014	1015	1015	1016	1016	1016	1017	1017	1018	1018	1018	1018	1018	1018	1019	1019	1020	1020	1020	1021	1021	1017	
26	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1020	1019	1018	1017	1016	1016	1015	1015	1014	1013	1013	1012	1011	1010	1017	
27	1009	1007	1006	1005	1005	1005	1005	1005	1005	1005	1004	1003	1003	1002	1002	1002	1002	1003	1003	1004	1004	1005	1005	1005	1004	
28	1005	1005	1005	1005	1005	1005	1006	1006	1006	1005	1004	1003	1002	1000	999	999	999	999	999	999	1001	1002	1003	1003	1003	
29	1003	1004	1004	1004	1005	1005	1006	1006	1007	1007	1007	1006	1006	1005	1005	1006	1007	1007	1007	1008	1008	1009	1009	1009	1006	
30	1009	1009	1009	1009	1009	1010	1010	1011	1012	1012	1012	1012	1012	1011	1011	1012	1012	1012	1013	1013	1014	1014	1014	1014	1012	
Avg	1015	1015	1015	1015	1015	1015	1016	1016	1016	1016	1016	1016	1016	1015	1015	1015	1015	1015	1015	1015	1016	1016	1016	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	
S/A	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0.01	0	0	0	0	
Min	1003	1004	1004	1004	1005	1005	1005	1005	1005	1005	1004	1003	1002	1000	999	999	999	999	999	999	1001	1002	1003	1003	1003	
Max	1022	1022	1022	1022	1022	1022	1023	1023	1024	1024	1024	1024	1024	1023	1023	1022	1022	1022	1022	1022	1022	1022	1023	1022	1023	
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

September 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	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6	13	13.3	13.2	13.2	13.2	13.2	13.1	13.2	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.8
2	12.7	12.7	12.7	12.6	12.6	12.6	12.9	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13	12.8	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	12.7	13	13.3	13.2	13.2	13.2	13.2	13.2	13.2	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9
4	12.7	12.7	12.7	12.7	12.6	12.6	13.1	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13	12.8	12.8	12.8	12.7	12.7	12.7	12.9
5	12.7	12.7	12.7	12.6	12.6	12.6	13.1	13.3	13.2	13.1	13.1	13	13	13	13	13	13.1	13	12.8	12.8	12.7	12.7	12.7	12.7	12.9
6	12.7	12.7	12.6	12.6	12.6	12.6	12.9	13.3	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.2	13	12.8	12.8	12.8	12.7	12.7	12.7	12.9
7	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.8	13.1	13.3	13.3	13.3	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.8
8	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.8	13.3	13.2	13.2	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
9	12.7	12.7	12.7	12.7	12.6	12.6	13	13.4	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.2	13.1	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
10	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.8	13	13	13.3	13.3	13.3	13.1	13.3	13.1	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.9
11	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.8	13.4	13.4	13.3	13.2	13.2	13.1	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.9
12	12.7	12.7	12.7	12.7	12.7	12.6	13.1	13.3	13.2	13.1	13.1	13	13.1	13	13	13.1	13.1	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
13	12.7	12.7	12.6	12.6	12.6	12.6	13.1	13.3	13.2	13.2	13.1	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
14	12.7	12.7	12.7	12.7	12.6	12.6	13.1	13.3	13.2	13.1	13	13	13	13	13	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9
15	12.7	12.6	12.6	12.6	12.6	12.6	13	13.3	13.2	13.1	13	13	13	13	13	13	13.1	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9
16	12.7	12.6	12.6	12.6	12.6	12.6	12.8	13.2	13.1	13.1	13	13	12.9	13	13.1	13.1	13	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.8
17	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.1	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.9
18	12.7	12.7	12.7	12.7	12.7	12.6	13.1	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	12.8	12.7	13
19	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.3	13.2	13.2	13.2	13.1	13.1	13.1	13.2	13.2	13.2	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	12.6	13.1	13.4	13.3	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.9
21	12.7	12.7	12.7	12.6	12.6	12.6	12.9	13.3	13.2	13.1	13.1	13	13	13.1	13.1	13.2	13	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.9
22	12.7	12.7	12.7	12.6	12.6	12.6	13	13.2	13.2	13.1	13.1	13	13	13	13	13	13	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
23	12.7	12.7	12.6	12.6	12.6	12.6	12.8	13.2	13.2	13.1	13.1	13	13	13	13	13	13	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
24	12.7	12.6	12.6	12.6	12.6	12.6	12.9	13.2	13.1	13.1	13	13	13	13	13	13	13	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.9
25	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.8	12.9	13.2	13.3	13.2	13.1	13.1	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.6	12.8
26	12.6	12.6	12.6	12.6	12.6	12.6	12.6	13	13.3	13.3	13.3	13.3	13.2	13.2	13.3	13.2	12.9	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.9
27	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.7	13	13.1	13.1	13.2	13.2	13.2	13.1	13.1	13.1	12.9	12.8	12.8	12.8	12.7	12.7	12.7	12.9
28	12.7	12.7	12.6	12.6	12.6	12.6	13.1	13.4	13.2	13.2	13.1	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
29	12.7	12.7	12.7	12.6	12.6	12.6	13.2	13.5	13.4	13.3	13.2	13.2	13.2	13.2	13.2	13.3	13.2	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13
30	12.7	12.7	12.7	12.7	12.6	12.6	13.2	13.5	13.4	13.3	13.2	13.2	13.1	13.1	13.1	13.1	13.2	12.9	12.8	12.8	12.7	12.7	12.7	12.7	13
Avg	12.7	12.7	12.7	12.6	12.6	12.6	12.9	13.1	13.2	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	12.9
SD	0	0	0	0	0	0	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
StA	0	0	0	0	0	0	0.02	0.02	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
Min	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.6	12.6	12.8	13	13	12.9	13	13	12.9	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.6	12.8
Max	12.7	12.7	12.7	12.7	12.7	12.7	13.2	13.5	13.4	13.4	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.2	13.1	12.8	12.8	12.8	12.8	12.7	13
n	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	8640

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

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

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

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