

January 2010

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	0	4	26	50	75	124	114	96	76	40	16	0	0	0	0	0	0	0	619
2	0	0	0	0	0	0	0	31	153	314	435	514	396	272	346	212	50	0	0	0	0	0	0	0	2723
3	0	0	0	0	0	0	0	33	162	328	453	525	535	484	372	209	54	0	0	0	0	0	0	0	3155
4	0	0	0	0	0	0	0	32	155	319	445	521	532	480	368	206	51	0	0	0	0	0	0	0	3108
5	0	0	0	0	0	0	0	30	152	313	435	438	425	470	315	204	49	0	0	0	0	0	0	0	2831
6	0	0	0	0	0	0	0	30	154	316	442	516	529	478	369	209	56	0	0	0	0	0	0	0	3099
7	0	0	0	0	0	0	0	31	156	319	445	518	529	491	368	211	56	0	0	0	0	0	0	0	3123
8	0	0	0	0	0	0	0	6	71	231	423	487	545	473	345	151	52	1	0	0	0	0	0	0	2784
9	0	0	0	0	0	0	0	20	85	159	267	432	488	451	378	215	59	1	0	0	0	0	0	0	2554
10	0	0	0	0	0	0	0	31	158	325	455	533	548	498	391	230	67	4	0	0	0	0	0	0	3239
11	0	0	0	0	0	0	0	32	160	330	456	537	540	452	374	229	60	1	0	0	0	0	0	0	3171
12	0	0	0	0	0	0	0	15	79	153	188	256	315	338	266	139	37	5	0	0	0	0	0	0	1792
13	0	0	0	0	0	0	0	32	157	321	449	528	546	500	393	231	66	1	0	0	0	0	0	0	3225
14	0	0	0	0	0	0	0	33	158	324	454	521	506	429	366	159	49	2	0	0	0	0	0	0	3001
15	0	0	0	0	0	0	0	33	157	322	451	520	527	509	391	219	72	2	0	0	0	0	0	0	3204
16	0	0	0	0	0	0	0	30	112	242	358	444	357	293	172	83	34	1	0	0	0	0	0	0	2126
17	0	0	0	0	0	0	0	2	6 ?	31 ?	60 ?	149	487	474	300	154	49	11	0	0	0	0	0	0	1723 ?
18	0	0	0	0	0	0	0	34	160	303	300	459	565	511	410	249	81	3	0	0	0	0	0	0	3074
19	0	0	0	0	0	0	0	54	195	126	457	534	552	507	407	246	80	4	0	0	0	0	0	0	3162
20	0	0	0	0	0	0	0	46	144	249	365	422	388	487	259	105	28	4	0	0	0	0	0	0	2496
21	0	0	0	0	0	0	0	7	44	95	180	212	202	120	61	26 ?	5 ?	1	0	0	0	0	0	0	952
22	0	0	0	0	0	0	0	7	32	56	60	63	110	77	61	58	23	11	0	0	0	0	0	0	558
23	0	0	0	0	0	0	0	34	168	342	408	429	321	183	131	96	35	8	0	0	0	0	0	0	2156
24	0	0	0	0	0	0	0	15	88	261	458	497	502	356	203	140	52	8	0	0	0	0	0	0	2578
25	0	0	0	0	0	0	0	2	19 ?	44 ?	74	119	200	367	427	277	102	11	0	0	0	0	0	0	1641
26	0	0	0	0	0	0	0	39	183	364	499	583	606	552	386	194	81	10	0	0	0	0	0	0	3496
27	0	0	0	0	0	0	0	41	186	365	485	588	605	450	438	290	111	13	0	0	0	0	0	0	3574
28	0	0	0	0	0	0	0	42	182	371	490	581	601	557	452	290	87	15	0	0	0	0	0	0	3669
29	0	0	0	0	0	0	0	31	158	341	511	594	533	283	199	103	30	9	0	0	0	0	0	0	2791
30	0	0	0	0	0	0	0	6	23 ?	69	85	95	94	82	54	39	23	6	0	0	0	0	0	0	576
31	0	0	0	0	0	0	0	20	129	391	543	629	651	609	493	323	129	16	0	0	0	0	0	0	3931
Avg	0	0	0	0	0	0	0	26	123	251	361	431	447	398	309	179	56	5	0	0	0	0	0	0	2585
S D	0	0	0	0	0	0	0	14	58	115	154	167	158	150	127	80	28	5	0	0	0	0	0	0	927
S/A	0	0	0	0	0	0	0	0.54	0.47	0.46	0.43	0.39	0.35	0.38	0.41	0.45	0.49	1.03	0	0	0	0	0	0	0.36
Min	0	0	0	0	0	0	0	2	6	31	60	63	94	77	54	26	5	0	0	0	0	0	0	0	558
Max	0	0	0	0	0	0	0	54	195	391	543	629	651	609	493	323	129	16	0	0	0	0	0	0	3931
n	0	0	0	0	0	0	0	292	354	361	369	372	372	372	372	365	367	70	0	0	0	0	0	0	3666

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.2% exceed the 15% QC threshold -- 3710 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.

January 2010

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	0	0	0	*	
2	0	0	0	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	0	0	0	*	
4	0	0	0	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	0	0	0	*	
6	0	0	0	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	0	0	0	*	
8	0	0	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	0	0	*	
10	0	0	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	0	0	*	
12	0	0	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	0	0	*	
14	0	0	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	0	0	*	
16	0	0	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	0	0	*	
18	0	0	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	0	0	*	
20	0	0	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	0	0	*	
22	0	0	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	0	0	*	
24	0	0	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	0	0	*	
26	0	0	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	0	0	*	
28	0	0	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	0	0	*	
30	0	0	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	0	0	*	
Avg	0	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	0	0	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	0
S/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	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	0	0	N/A	
Max	0	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	0	0	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	0

Daylight Data Recovery: 100.0% missing; 0.0% untested; 0.0% exceed the 15% QC threshold -- 3710 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

January 2010

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	0	4	26	50	75	124	114	96	76	40	16	0	0	0	0	0	0	0	619
2	0	0	0	0	0	0	0	16	43	63	80	85	155	215	156	73	22	0	0	0	0	0	0	0	908
3	0	0	0	0	0	0	0	16	38	53	63	69	68	63	55	43	20	0	0	0	0	0	0	0	490
4	0	0	0	0	0	0	0	16	38	53	59	62	61	59	53	42	18	0	0	0	0	0	0	0	461
5	0	0	0	0	0	0	0	16	41	59	72	114	126	92	103	50	20	0	0	0	0	0	0	0	693
6	0	0	0	0	0	0	0	15	36	50	56	58	57	55	49	39	18	0	0	0	0	0	0	0	434
7	0	0	0	0	0	0	0	14	34	44	51	52	52	176	91	51	20	0	0	0	0	0	0	0	586
8	0	0	0	0	0	0	0	6	69	152	159	155	80	86	101	77	32	0	0	0	0	0	0	0	918
9	0	0	0	0	0	0	0	22	83	156	221	208	129	88	62	45	19	1	0	0	0	0	0	0	1034
10	0	0	0	0	0	0	0	16	40	56	64	67	65	59	51	39	19	3	0	0	0	0	0	0	479
11	0	0	0	0	0	0	0	14	33	44	50	56	80	115	85	42	18	1	0	0	0	0	0	0	538
12	0	0	0	0	0	0	0	17	79	153	188	256	308	291	222	126	32	5	0	0	0	0	0	0	1677
13	0	0	0	0	0	0	0	15	37	51	58	60	60	57	48	36	16	1	0	0	0	0	0	0	439
14	0	0	0	0	0	0	0	16	36	48	58	67	105	199	147	72	40	2	0	0	0	0	0	0	790
15	0	0	0	0	0	0	0	18	41	56	84	87	92	92	96	72	20	1	0	0	0	0	0	0	660
16	0	0	0	0	0	0	0	30	99	150	181	224	228	223	172	83	34	1	0	0	0	0	0	0	1425
17	0	0	0	0	0	0	0	2	10 ?	28	52	149	227	86	161	134	48	11	0	0	0	0	0	0	907
18	0	0	0	0	0	0	0	17	36	86	191	154	56	49	42	34	18	1	0	0	0	0	0	0	684
19	0	0	0	0	0	0	0	37	124	117	71	64	68	66	57	44	23	2	0	0	0	0	0	0	673
20	0	0	0	0	0	0	0	24	89	138	194	243	210	180	208	105	28	4	0	0	0	0	0	0	1422
21	0	0	0	0	0	0	0	7	44	95	180	212	202	120	61	21	7	1	0	0	0	0	0	0	948
22	0	0	0	0	0	0	0	7	32	56	60	63	110	77	61	58	23	11	0	0	0	0	0	0	559
23	0	0	0	0	0	0	0	18	47	69	201	300	307	183	131	96	35	8	0	0	0	0	0	0	1394
24	0	0	0	0	0	0	0	17	85	207	185	195	223	261	175	132	52	8	0	0	0	0	0	0	1538
25	0	0	0	0	0	0	0	2	18	34 ?	74	119	184	208	111	54	29	7	0	0	0	0	0	0	840
26	0	0	0	0	0	0	0	14	38	52	61	63	66	69	86	79	47	9	0	0	0	0	0	0	582
27	0	0	0	0	0	0	0	15	38	50	75	77	109	208	75	70	31	8	0	0	0	0	0	0	756
28	0	0	0	0	0	0	0	19	62	74	81	64	67	65	57	48	36	12	0	0	0	0	0	0	586
29	0	0	0	0	0	0	0	23	81	80	64	65	180	271	186	103	30	9	0	0	0	0	0	0	1093
30	0	0	0	0	0	0	0	7	20	69	85	95	94	82	54	39	23	6	0	0	0	0	0	0	574
31	0	0	0	0	0	0	0	21	77	68	74	76	73	67	59	46	26	5	0	0	0	0	0	0	592
Avg	0	0	0	0	0	0	0	16	51	79	102	119	128	128	100	64	26	4	0	0	0	0	0	0	816
S D	0	0	0	0	0	0	0	8	27	44	58	71	75	74	53	30	11	4	0	0	0	0	0	0	350
S/A	0	0	0	0	0	0	0	0.49	0.53	0.56	0.57	0.6	0.59	0.58	0.53	0.47	0.4	1.05	0	0	0	0	0	0	0.43
Min	0	0	0	0	0	0	0	2	10	28	50	52	52	49	42	21	7	0	0	0	0	0	0	0	434
Max	0	0	0	0	0	0	0	37	124	207	221	300	308	291	222	134	52	12	0	0	0	0	0	0	1677
n	0	0	0	0	0	0	0	271	367	368	372	372	372	372	372	372	371	70	0	0	0	0	0	0	3679

Daylight Data Recovery: 0.0% missing; 0.0% untested; 0.8% exceed the 15% QC threshold -- 3710 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

January 2010

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	7.9	7.7	7.7	7.6	7.2	6.8	6.5	6	5.8	6.1	6.2	6.3	6.5	6.5	6.6	6.3	6.2	5.9	5.6	5.3	5	4.6	4.2	4	6.2
2	2.7	0.8	-0.2	-1.2	-1.7	-2.2	-2.5	-2.6	-2.2	-1.2	-0.4	-0.1	-0.2	-0.2	0.2	0.2	-0.7	-1.5	-1.8	-2.2	-2.7	-3.3	-3.7	-4.2	-1.3
3	-4.7	-5.1	-5.6	-5.9	-6.2	-6.5	-6.6	-6.5	-5.8	-4.7	-3.6	-2.9	-1.9	-1.1	-0.3	0.1	-0.2	-1.1	-1.5	-1.7	-2	-2.4	-2.8	-3.3	-3.4
4	-3.8	-4.3	-4.5	-4.9	-5.4	-5.7	-5.9	-5.9	-5	-3.3	-1.8	-0.5	0.6	1.4	2.2	2.4	2	0.5	-0.3	-0.9	-1.4	-2	-2.4	-3.1	-2.2
5	-3.7	-4	-4.6	-5.1	-5.2	-5.4	-5.6	-5.6	-4.4	-2.6	-0.8	0.4	0.8	1.4	1.6	1.6	1.1	0	-0.8	-1.2	-1.5	-1.4	-1.6	-2.1	-2
6	-2.5	-3	-3.4	-3.9	-4.4	-4.7	-4.3	-4.5	-3.6	-1.4	0.7	2.1	3.2	4	4.8	4.9	4.3	3.1	2	1.5	1	0.6	0	-0.7	-0.2
7	-1.3	-2.1	-2.5	-2.9	-3.3	-3.8	-4.3	-4.5	-2.8	-0.8	0.3	1.9	3.2	3.8	4.2	4.5	4.2	2.8	2	1.3	1.2	1.3	1.4	1.8	0.2
8	2.6	2.8	2.9	2.7	3.2	3.2	2.8	2.2	2.2	3	4.1	3.9	3.5	2.7	1.9	1.3	0.6	-0.8	-1.4	-2	-2.3	-2.7	-3	-3.2	1.3
9	-3.4	-3.3	-3.6	-3.9	-4.1	-4.9	-5.4	-5.6	-4.9	-3.4	-2.5	-1.2	-0.6	0.3	1.3	1.9	1.4	0.4	-0.4	-1.1	-1.9	-2.2	-2.5	-2.6	-2.2
10	-3	-3.3	-3.9	-4.1	-4.5	-5.3	-5.9	-5.7	-3.8	-2.8	-2.1	-1.3	-0.7	0	0.5	0.5	0	-1.1	-1.8	-2.3	-2.7	-3.4	-4	-4.6	-2.7
11	-5.3	-5.6	-5.8	-6.1	-6.5	-6.8	-6.9	-6.7	-5	-2.4	-0.1	1.5	3.2	3.9	4.3	4.9	4.2	2.9	2.7	1.9	1.9	1.7	1.9	2.4	-0.8
12	2.8	2.6	2.2	2	1.8	1.8	2.1	1.9	1.6	1.6	1.7	1.7	2.2	2.7	3.3	3.1	2.4	1.5	0.5	-0.1	-0.6	-1.1	-1.7	-2.4	1.4
13	-2.5	-2.4	-2.3	-2.4	-3.1	-4.2	-4.5	-4.7	-3.3	-0.4	1.2	2.9	4	5.2	6.6	7	6.9	4.8	2.9	1.9	1.3	1	0.7	0.5	0.7
14	0.3	0.4	0.1	0	-0.4	-0.5	-0.8	-1.1	0.6	3.2	5.6	8.2	9.5	10.1	10.5	10.4	9.7	8.3	6.1	4.8	4.2	3.6	3.4	3.1	4.2
15	2.6	2.8	2.3	1.9	1.9	1.8	1.6	1.7	3.4	5.6	7.9	10.1	11.8	13.4	14.7	15	14.5	12.5	11.1	10.9	10.1	9.7	8.6	8.3	7.7
16	7.4	6.6	6	5.6	5.3	4.2	3.6	3.2	4.1	6.7	9.8	12.9	14.5	14.9	13.9	13.3	11.8	9	7.8	7.6	7.3	7.8	7	5.6	8.2
17	6.9	7.5	7.5	7.5	7.9	8.1	8.9	9.9	10.6	11.6	14.4	16.2	17.8	19.7	20.4	18.9	17.8	16.4	15.6	14.5	14	13.3	12.9	12.5	13
18	11.4	10.5	9.5	8.5	7.6	7.3	7.4	7	7.5	8.3	8.7	9.8	11.3	12.3	13.1	13.4	13.3	11.9	10.4	8.7	7.7	7.2	6.7	6.6	9.4
19	6.4	6	6.2	6	5.6	5.6	6	6.1	7.9	9.6	11.6	14.1	15.2	16.4	17.2	17.4	17.2	15.6	14.3	13.8	12.9	10.9	10.3	10.5	11
20	10.5	10.1	10	9.5	9	8.2	6.8	6.8	9	10.4	10	8.9	8.3	9.3	8.6	7.2	6.5	5.4	4.8	4.6	4.6	4.5	4.2	3.7	7.5
21	3.5	3.5	3.3	3.1	2.9	2.9	3.3	3.5	3.8	4.4	5.2	6	7	6.8	7.2	7.1	6.6	6.4	6.2	6.4	6.7	7.5	8.3	9	5.4
22	9.6	9.9	8.7	8.3	8.4	9	8.7	8.1	7.5	7.4	7.5	7.1	6.4	6.1	6	5.5	5.2	5.2	4.9	4.7	4.1	3.4	3	2.8	6.6
23	2.3	2.1	1.9	1.6	1.5	1.2	1.7	2	3.2	4.6	6.4	7.3	7.4	7.6	7.2	6.9	6.1	5.2	4.6	4.3	4.1	4	4.1	4.4	4.3
24	5.1	5.5	6	7.4	8.2	8.6	8.8	9.9	10.9	13.6	15.7	16.8	17.3	17.7	17.5	17.1	16.6	15.9	15.7	15.3	15	15.1	15.1	15.8	12.9
25	16.1	16.8	17.4	17.7	18	17.4	17.2	17.2	18	17.7	15.5	14.7	14.7	15.9	16.9	16.8	16.3	14.9	13.6	12.7	12.2	12.1	12.2	12.2	15.6
26	10.6	9.3	8.7	8.2	7	5.8	5.1	4.8	5.7	7	8	9	9.4	10.1	10.3	10.3	10.1	8.9	8.1	7.8	7.6	7.3	6.5	5.7	8
27	4.9	3.6	2.8	2	1.7	1.3	0.6	0.4	1.8	3.3	4.9	5.9	7	7.1	7.8	8.3	8.3	7.4	6.4	5.6	4.7	4	3.6	2.8	4.4
28	3	2.5	2.3	2.3	1.9	1.9	1.9	2.4	4.5	7	8.9	10.7	12.4	13.4	14.3	14.9	14.2	12.7	11.6	11.3	11	10.3	9.4	8.8	8.1
29	5.9	3.6	2.1	1.1	0	-0.8	-1.1	-1.3	-1.4	-1	-0.3	0.6	0.9	0.7	0.4	0.4	0	-0.3	-0.6	-1	-1.1	-0.8	-0.7	-1.2	0.2
30	-3.4	-3.8	-3.9	-3.8	-3.7	-3.4	-3.3	-2.8	-2.1	-1.1	-0.5	0	0.5	0.9	0.8	-1.2	-2.9	-3.7	-4	-3.8	-3.6	-4	-3.7	-4.1	-2.5
31	-5	-5.6	-5.6	-5.5	-5.3	-5.4	-5.5	-5.7	-5.8	-4.5	-3.4	-2.3	-1.2	-0.3	0.9	1.4	1.5	0.2	-1.2	-2.2	-3.1	-3.1	-3.3	-3.1	-3
Avg	2.7	2.3	2	1.7	1.5	1.2	1	1	1.9	3.3	4.5	5.5	6.3	6.9	7.3	7.2	6.6	5.5	4.6	4.1	3.7	3.3	3	2.8	3.7
SD	5.7	5.7	5.8	5.8	5.9	6	6	6	6	5.8	5.7	5.8	5.9	6.1	6.1	6.1	5.9	5.7	5.7	5.7	5.6	5.6	5.5	5.7	5.4
S/A	2.1	2.46	2.9	3.39	4.04	5.17	6.16	6.23	3.2	1.77	1.27	1.05	0.94	0.89	0.84	0.85	0.92	1.08	1.24	1.39	1.52	1.66	1.81	2.04	1.46
Min	-5.3	-5.6	-5.8	-6.1	-6.5	-6.8	-6.9	-6.7	-5.8	-4.7	-3.6	-2.9	-1.9	-1.1	-0.3	-1.2	-2.9	-3.7	-4	-3.8	-3.6	-4	-4	-4.6	-3.4
Max	16.1	16.8	17.4	17.7	18	17.4	17.2	17.2	18	17.7	15.7	16.8	17.8	19.7	20.4	18.9	17.8	16.4	15.7	15.3	15	15.1	15.1	15.8	15.6
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.

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

January 2010

Relative Humidity (Roof)
Hourly and Daily Averages
Instrument: CSI HMP-35C
Percent

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily	
1	?	?	?	?	?	?	?	?	?	?	?	103.8	101.3	98.1	96.9	94	94.8	97.1	97	96.6	97.9	100.8	103.4	103.1	98.8 ?	
2	95.4	86.6	74.4	74.9	78.1	81.2	80.8	80.9	79.3	68.4	57	53.7	52.2	50.8	46.5	45.2	46.5	47.1	47.4	51.2	52.2	57.4	59.3	63	63.7	
3	64.8	64.4	66.3	66.9	69.1	68.5	68.4	67.5	62.5	54.9	50.1	47.9	46.8	45	43.7	43	44.9	49.8	53.3	54.6	55.9	58.9	62.1	65.2	57.3	
4	68.4	72.2	73.9	74.7	77.6	80.4	81.8	81.3	77.1	68.4	60.9	57.3	55.3	54.3	52.6	52.5	54.8	63.6	67.1	68.9	73.7	77.4	78.3	80.3	68.9	
5	82.7	83	85.5	87.9	89.5	88.8	88.9	88.8	82.4	77.5	69.5	58.6	56.2	54.3	53.9	53.8	55.7	61.1	66.3	69.3	71.6	73	73.9	76.3	72.9	
6	77.8	80.2	81.8	83	84.5	87.3	84.8	86	81.6	73.4	63	57.9	55.5	54.1	51.9	52	55.6	61.9	68.1	70.5	72.8	74.3	76.1	78.9	71.4	
7	81	84	85.1	87.2	89.6	92.1	94.7	96.1	88.3	79.7	77	68.4	63.1	60.7	63	60.1	62.8	68.6	72.6	77.9	82	92.4	92.2	90.3	79.5	
8	89.6	96.9	94.8	98.8	97.1	100.9	104.8 ?	?	?	99.5 ?	86.2	79	57.4	53.3	50	47.1	48.2	51.6	53.7	56.4	56.8	62.4	64	64.4	73.3 ?	
9	66.5	65.3	66	68.5	71.1	75	77.9	80	79.3	72.9	71.3	67.9	66	64.3	62.1	60.8	62.4	67.2	72.5	77.2	81.1	84.2	87.2	87.4	72.3	
10	89.3	90.4	88.6	84.9	84.4	90	96.9	94.5	79	76.2	73.5	68.9	64.2	58	50	43.4	41.9	45.3	49.2	51.2	53	58.8	62.5	63.9	69.1	
11	65.8	68.2	69.8	71.8	73.5	77.4	80.8	80.6	74.5	64.3	55.8	47.6	45.1	42.3	41.4	39.6	40.9	44.8	47.7	58.2	63.9	69.8	69.5	60.2	60.6	
12	55.6	56.8	60.5	60.3	72.6	85.9	86.2	84.4	86.4	86.5	79.5	72.2	67.8	64.1	61	60.1	61.6	65.5	70.3	72.4	73.8	75.9	78.6	81.1	71.6	
13	80.8	79.5	79.5	82.4	87.1	93	93.5	92.9	87.6	79.2	74.5	64.1	59.8	52.5	48.5	45.7	46.9	53.7	64.1	68.4	70.7	69	68.4	69	71.3	
14	72	73.2	76.1	77	80.4	82.6	84.6	87.2	81.7	73.5	64.1	57.7	56.6	50.7	49.2	50.2	53.5	60.2	69.4	74.7	76.7	80	81.3	83.1	70.7	
15	85.4	84.2	86.3	88.4	88	88.6	91	91.4	85	78.9	71.5	61.9	54.4	43.5	40.3	38.5	39	45.5	49.6	48.9	51.4	53	57.3	58.5	65.9	
16	62.2	65.5	68.3	70.4	71.7	77.1	79.4	80.5	77.3	74	67.8	60.8	58.8	59.1	63.6	67.5	76.7	86.1	90.4	87.9	88.9	87.7	93.7	100.5	75.7	
17	94.3	91.7	93.7	97.9	102.6 ?	?	?	?	?	?	?	?	104.2	100.6	97.5	101.8	104.1	?	104.9 ?	?	?	?	?	?	99.4 ?	
18	?	104	104.9 ?	104.4	?	?	104.3	102.7	100	92.6	87.3	84.1	78.4	75.4	72.4	71.7	72.7	79.7	88.4	96.8	101.2	102.3	101.6	100.9	91.7 ?	
19	102.3	104.2	103.9	104.3	?	?	?	?	102.8	98.3	91.3	83.9	80.1	75.3	67.2	65.5	65.7	70.1	74.6	76.4	81.5	92.1	97.8	98.6	86.8 ?	
20	99.3	100.4	100.6	101.2	102.5	102.7 ?	?	?	100.9	91.9	94	89	81.9	77	78.3	77.7	84.9	91.6	96	97	95.5	97.1	99.7	103.9 ?	93.8 ?	
21	?	?	?	?	?	?	?	?	104 ?	100.9	98.6	98	96.7	98.5	96.7	98.6	103.1	?	?	?	?	?	?	?	99.5 ?	
22	?	?	?	?	?	?	?	?	?	?	?	?	?	104.3 ?	103.3	103.6	102.1	101	100.9	100.3	98.7	100.7	99.8	98	101.2 ?	
23	97.4	94.9	95.3	97	98.9	102.4	102.7	101.5	98.2	97.3	95.1	90.4	88.7	88.3	89.5	91	92.6	95	97.6	100.2	103	104.1 ?	?	?	96.4	
24	?	105 ?	104.9 ?	104	104	104.8 ?	104.6 ?	102.6	101	95.3	92.4	90.6	91.1	91.1	91.3	93.8	96	98.4	99.9	102	103.4 ?	?	103.7 ?	102.6	99.2 ?	
25	102.2	100.4	99.4	99.5	99.7	103.6	104.9 ?	105 ?	104.6 ?	105 ?	?	?	?	?	91.5 ?	72.6	75.3	78.3	82.3	93	95	91.1	82.4	55.6	92.1 ?	
26	73.2	75.2	69.8	56.8	62.2	63	65.6	68.6	71.3	62.6	58.3	57.8	56.6	54.9	53.8	54.9	55.1	59.5	60.6	62.3	64.3	65.7	63.7	64.9	62.5	
27	68.6	75.8	80	84.4	85.2	86.8	89.6	93	85.4	77.8	71.1	61.2	57.8	59	57.2	57.2	59.3	65.7	72.3	76.7	83	86.9	88.7	93	75.7	
28	91	94.7	97.5	98.7	99.3	99.1	99.8	98.4	91.7	77.9	69.8	61.1	53.5	52.6	51.5	51.8	54.7	61.6	65.6	66.8	67.4	70.9	72.4	67	75.6	
29	65.9	70.1	67.9	69.4	71.5	71.4	76.7	77.4	71.4	64.1	61.1	59.3	55.6	56.9	56.6	56.6	59.3	61.4	62.7	67.7	69.1	67.6	66.6	72.3	65.8	
30	101.2 ?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	104.5 ?	?
31	104.5 ?	104.6 ?	104.1	103.3	102.6	101.8	101.5	101.6	98.8	87.1	77.4	72.1	59.7	52.4	49.5	46.1	48.9	55.7	66.6	73.8	73.9	68.7	74.1	72.2	79.2	
Avg	82.2	84.1	84.4	85.1	85.7	87.7	89.3	88.8	86.6	80.7	73.8	69.4	66.6	65.2	64.4	63.2	65.3	67.4	72.8	74.9	77.1	78.6	79.9	80.7	78.7 ?	
S D	14.8	14.4	14	14.6	12.6	12	11.7	10.8	11.7	13.3	13.5	15.3	16.7	18.6	19.3	19.8	20.2	17.2	17.5	16.4	16.2	15.3	14.9	16.3	13.5	
S/A	0.18	0.17	0.17	0.17	0.15	0.14	0.13	0.12	0.13	0.16	0.18	0.22	0.25	0.28	0.3	0.31	0.31	0.26	0.24	0.22	0.21	0.19	0.19	0.2	0.17	
Min	55.6	56.8	60.5	56.8	62.2	63	65.6	67.5	62.5	54.9	50.1	47.6	45.1	42.3	40.3	38.5	39	44.8	47.4	48.9	51.4	53	57.3	55.6	57.3	
Max	104.5	105	104.9	104.4	104	104.8	104.9	105	104.6	105	98.6	103.8	104.2	104.3	103.3	103.6	104.1	101	104.9	102	103.4	104.1	103.7	104.5	101.2	
n	302	309	308	321	295	280	259	269	299	312	312	324	334	341	352	360	357	336	340	336	327	320	317	324	7621	

Data Recovery: 0.0% missing; 0.0% untested; 14.5% 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.

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

January 2010

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	8.5	8.4	8.3	8.2	8	7.7	7.4	7	6.6	6.6	6.9	7.3	7.8	7.9	7.8	7.5	7	6.6	6.1	5.7	5.4	4.9	4.5	4.3	6.9
2	4.1	2.9	1.6	-0.2	-1.7	-2.7	-3.2	-3.6	-2.2	0.6	3	4.5	4.9	3.8	2.9	3.2	2.5	0.2	-1.6	-2.6	-3.2	-3.8	-4.4	-4.9	0
3	-5.4	-5.8	-6.4	-6.8	-7.1	-7.4	-7.6	-7.6	-6.1	-3.3	-0.9	1	2	2.4	2.6	2.7	2.3	0.6	-1.3	-2.1	-2.6	-3	-3.5	-4	-2.8
4	-4.5	-5	-5.4	-5.8	-6.2	-6.6	-6.8	-6.9	-5.2	-1.9	1.4	3.9	5.4	6	6	5.9	5.2	2.8	0.1	-1.5	-2.6	-3.3	-3.9	-4.3	-1.4
5	-4.9	-5.3	-5.7	-6.2	-6.6	-6.8	-7	-7.1	-5.1	-1.1	2.9	5.6	6	5.8	6	5.2	4.3	1.9	-0.6	-2.1	-2.8	-2.9	-2.8	-2.9	-1.4
6	-3.3	-3.8	-4.3	-4.7	-5.2	-5.7	-5.7	-5.6	-3.8	-0.2	3.5	6.4	8.3	8.7	8.7	8.4	7.6	5.3	2.8	1.3	0.5	0	-0.5	-1.3	0.7
7	-2.1	-2.8	-3.6	-4.2	-4.6	-5	-5.6	-6	-3.7	1.4	5.7	8.3	10.6	11	9.9	9.1	8	5.4	2.3	0.8	0.6	1	1.3	1.6	1.6
8	1.9	2.4	2.8	2.8	2.8	3	2.9	2.7	2.4	2.9	5.6	8.1	8.8	8.2	6.7	5.3	3.5	1.1	-1.1	-2.3	-3	-3.3	-3.5	-3.8	2.4
9	-4	-4.2	-4.2	-4.4	-4.6	-5	-5.6	-6	-5.9	-4.5	-2.5	0.2	2.8	4.3	5.2	5.6	5.2	2.7	-0.3	-2.3	-3.6	-4.6	-5.2	-5.3	-1.9
10	-5.2	-5.4	-5.7	-6.2	-6.4	-6.7	-7.4	-7.8	-5.5	-1.5	1.3	3.1	4.2	4.9	5	4.7	3.7	1.3	-1.5	-3.4	-4.5	-5.4	-6.3	-6.9	-2.4
11	-7.2	-7.4	-7.7	-8	-8.2	-8.5	-8.7	-8.8	-6	-0.7	4	7.3	8.8	9.7	9.1	9	8.2	5.2	2.8	2	1.5	1.5	1.5	1.8	0
12	2.1	2.4	2.3	2.1	2	1.8	1.6	1.8	2	2.5	3.1	3.6	4.4	5.6	6.3	6.3	4.8	2.5	0.3	-1	-1.7	-2.4	-3	-3.7	1.9
13	-4.3	-4.3	-4.3	-4.1	-4.3	-5	-5.6	-5.9	-3.8	0.8	5.5	8.7	10.5	11	11.1	11.1	10.8	8.2	4.2	1.7	0.3	-1.1	-1.4	-1.3	1.6
14	-1.4	-1.5	-1.6	-1.7	-1.8	-2	-2.3	-2.6	-0.4	5	9.9	14	15.8	16	15.3	14.8	12.7	9.9	7.4	5.1	3.5	2.5	1.8	1.6	5
15	1.1	1.1	1	0.4	0.2	0.2	0.1	0.1	2.3	7	11.1	14.1	16.1	17.2	17.9	18.2	17.8	15.4	12	10.2	9.2	8.3	7.7	7.1	8.1
16	6.5	5.8	5.1	4.5	4.3	3.7	2.7	2.2	2.9	5.7	11.3	16.5	19.8	20.3	19.3	17	15.1	12.5	9.9	8.3	7.7	7.7	7.5	6.7	9.3
17	6.5	6.9	7.4	7.3	7.4	7.7	8.2	9	10	10.7	12.1	14.5	17	21.3	23.5	23.1	21.1	19	17.1	16	15	14.1	13.4	13.1	13.4
18	12.5	11.7	11	10.2	8.9	7.8	7.7	7.7	8.4	10.8	12.1	12.6	14.7	16.4	17	17.3	16.9	15	10.9	8.3	6.5	5.7	5.3	5	10.8
19	4.8	4.7	4.5	4.6	4.4	4.1	4.2	4.7	6.5	9.7	11.9	16.4	19	20.1	20.5	20.6	20.3	18.2	14.8	13.2	12.4	11.2	9.8	9.4	11.2
20	9.4	9.3	9	8.6	8	7.6	6.7	5.6	7.6	11.5	13.8	14.8	13.9	13.9	14.2	12.2	9.8	7.9	6.4	5.7	5.4	5.2	5	4.6	9
21	4.1	3.9	3.7	3.5	3.3	3.2	3.2	3.5	3.8	4.3	5.4	6.8	8	8.7	8.6	8.3	7.5	6.9	6.6	6.5	6.6	7	7.6	8.3	5.8
22	9	9.6	9.8	9.2	8.9	8.9	9.1	9	8.6	8.3	8.2	8.2	7.9	7.4	7	6.6	6.1	5.7	5.5	5.3	4.9	3.7	2.7	2.3	7.2
23	1.9	1.4	1	0.7	0.5	0.4	0.3	0.6	2.8	6.6	9.8	11.2	12.2	11.7	10.8	9.8	8.7	7.1	5.6	4.8	4.1	3.9	3.9	4	5.2
24	4.2	4.5	4.6	5.2	6.5	7.5	8	8.7	9.7	11.9	15.5	18.9	20.6	21.1	20.9	19.9	18.7	17.4	16.4	16	15.6	15.3	15.2	15.5	13.2
25	15.8	16.2	16.7	17.2	17.7	17.7	17.2	17.1	17.3	17.7	17.3	16	15.6	16.6	18.5	19.5	19.4	17.8	14.8	13	12	11.5	11.3	11.4	16.1
26	11.3	10.1	8.9	8.3	7.5	6.2	4.9	4.1	5.8	9.1	11.3	13.1	14.1	14.2	14	13.3	12.5	10.7	8.9	8	7.6	7.3	7	6.3	9.3
27	5.7	4.2	2.6	1.5	0.7	0.2	-0.4	-0.9	1.5	5.5	9.4	12.3	13.5	13.2	12.3	12.1	11.7	10	6.9	5	3.4	2	1.2	0.7	5.6
28	0.6	0.6	0.4	0.2	0.2	0.3	0.7	0.8	3.3	7.8	11.4	13.9	15.6	16.8	17.3	17.7	17.4	15	12.3	10.7	10.1	9.5	8.7	8	8.3
29	6.9	5.4	3.8	2.5	1.2	0.1	-0.9	-1.4	-0.9	0.7	3	5.5	7.1	6.7	5.1	3.6	2.5	1.3	0.5	-0.1	-0.5	-0.6	-0.5	-0.4	2.1
30	-1.1	-2.3	-2.8	-3.1	-3.1	-3.1	-2.9	-2.7	-2.3	-1.4	-0.3	0.5	1.1	1.5	1.7	1.4	-0.2	-1.7	-2.7	-3.2	-3.3	-3.3	-3.3	-3.3	-1.7
31	-3.7	-4.4	-4.8	-5	-5	-5	-5.1	-5.2	-5.2	-3.3	0.2	3	4.8	5.4	5.7	6.1	6.4	4.7	-0.2	-3.1	-4.4	-5	-5.3	-5.4	-1.4
Avg	2.2	1.9	1.5	1.2	0.9	0.6	0.3	0.2	1.5	4.2	6.9	9	10.4	10.9	10.9	10.5	9.6	7.6	5.3	4	3.2	2.7	2.3	2.1	4.6
SD	6	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6	5.5	5.2	5.3	5.5	5.9	6.1	6.1	6.1	6.1	5.9	5.9	6	5.9	5.9	6	5.3
S/A	2.68	3.18	3.95	5.2	6.96	10.65	19.46	31.23	4.09	1.31	0.75	0.59	0.53	0.54	0.56	0.58	0.63	0.79	1.11	1.49	1.85	2.21	2.56	2.89	1.17
Min	-7.2	-7.4	-7.7	-8	-8.2	-8.5	-8.7	-8.8	-6.1	-4.5	-2.5	0.2	1.1	1.5	1.7	1.4	-0.2	-1.7	-2.7	-3.4	-4.5	-5.4	-6.3	-6.9	-2.8
Max	15.8	16.2	16.7	17.2	17.7	17.7	17.2	17.1	17.3	17.7	17.3	18.9	20.6	21.3	23.5	23.1	21.1	19	17.1	16	15.6	15.3	15.2	15.5	16.1
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

January 2010

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	0.3	0.4	0	0.4	1.3	1.4	1.9	2.2	2	1.9	1.9	2.4	1.8	2.3	2	2.1	2	1.5	1.2	1.5	1.2	0.7	1.4	2.2	1.5
2	4.6	4.3	3.9	3.4	2.9	3.2	3.2	3	3	4.4	5	5.4	5.6	5.3	5.8	5.5	4.8	5	4.2	4.2	3.6	3.2	3.4	3.3	4.2
3	3.5	3.4	3.2	3.4	3.6	4.2	4	3.8	4.9	5.8	5.6	6	5.9	6.2	5.6	5.3	5.3	4	4.4	4.8	3.9	3.2	3.3	2.9	4.4
4	2.9	2.9	2.6	2.6	2.5	2.8	3.2	2.8	2.9	3.4	3.7	3.7	3.7	3.9	3.4	3.1	2.5	2	1.7	1	1.2	1.2	1.5	1.3	2.6
5	1.5	1.5	1.3	1.8	1.8	1.8	1.9	1.8	1.8	2.1	2.3	3.4	3.7	4	3.7	3.4	2.7	1.8	1.3	1.3	1.8	3	3.8	2.9	2.4
6	2.8	2.6	2.6	2.2	2.2	2.7	3.1	2.2	2.6	3.1	3.4	3.1	3.6	4	3.6	3.8	3.7	2.9	2.8	2.8	3.1	3.3	2.7	2.1	3
7	1.9	1.6	1.4	1.6	1.3	1	1	1.5	1.3	1.1	2	1.1	1.4	2.8	2.5	2.4	1.9	1.2	0.3	0.3	1.1	1.3	1.4	1.7	1.5
8	2.6	1.7	2.3	2.1	2.5	3.3	2.8	2.2	2.4	3.8	4.2	5	5.7	6	4.5	4.2	3.2	2.8	2.8	2.4	2.3	2.8	2.3	2.3	3.2
9	2.3	2.8	2.6	2.3	2.2	2.1	1.7	1.7	1.4	2.9	2.6	3.8	3.9	2.6	2.7	1.9	2.1	1.3	0.6	0.4	0.3	0.3	0.7	0.9	1.9
10	1	0.8	1	1.2	1.1	0.8	0.9	1.2	2.9	4	4.7	4.9	4.3	3.3	3.4	3.9	3.5	2.5	1.4	1.1	0.8	0.6	0.5	0.8	2.1
11	1.2	1	1	1.2	1.1	0.9	1	0.7	0.8	1.3	1.6	2.5	2.3	2.5	2.2	2.6	2	0.8	1.2	0.7	1.3	1.7	2.2	1.8	1.5
12	2.1	1.4	0.5	1.3	1.1	0.9	0.7	2.2	3.2	3.8	3.6	3.8	3	3.3	3	3	2.3	1.3	1.2	1.8	1.4	1.3	1	1	2
13	1.5	1.5	1.8	1.6	1	1.4	1.2	1.8	1.4	1.4	1.6	2.2	2.2	2.7	1.9	1.9	1.2	1	0.6	1.3	0.2	0.7	1.5	1.2	1.4
14	1.2	1.2	1.1	1.6	1.1	1	0.8	0.6	0.6	1.1	1	1.6	2	2.3	2	2.2	1	0.7	0.5	0.3	0.4	0.4	1.2	0.3	1.1
15	0.9	1.3	1	1.7	1.5	1.3	1.4	1.6	1.1	1.7	2.7	2.7	3	3.2	2.7	2.1	1.7	1.3	1.2	1	1.1	0.7	1.3	1.1	1.6
16	1	0.9	1	1.2	1.3	0.5	0.5	0.3	0.3	0.2	0.3	0.3	0.3	0.5	1.1	0.9	0.3	0.5	0.4	1	1.3	0.3	0.3	1	0.7
17	1.3	1.5	2.1	2.2	2.2	3.3	4.6	4.4	4.7	4	2.7	5.3	3.6	3.2	3.3	3.3	2.9	3.3	3.7	3.3	1.6	2.8	1.7	3.3	3.1
18	4.3	4.9	4.1	4	2.9	2.3	3	2.9	3	5	4.9	4	3.8	3.4	3.1	2.8	1.6	0.3	0	0	0.3	0.8	1.1	1	2.6
19	1.1	1.1	1.7	1.5	1.2	1.2	1.9	1.6	2.2	2.8	3.1	3.2	3.9	4	4	3.4	2.5	0.5	0.9	1	0.7	0.5	0.9	0.9	1.9
20	1.2	0.7	1.3	0.8	1.1	1.2	0.1	0.2	0.2	1.1	2.5	3.4	3.7	3.6	3.3	3.2	2.7	3	3.1	3.4	3.5	3.9	4.1	3.2	2.3
21	3.3	3.6	4	3.1	2.7	3.2	3	3.1	3.4	3.8	4.4	4.5	3.9	3.7	3.8	4.3	4.2	4.7	4.1	4.2	4.5	5.3	5.6	5.8	4
22	5.2	4.7	5	5.7	4.4	2.6	3.4	3.1	3.3	3.7	3	3.3	4.1	4	4.3	3.7	2.8	2.4	3	3	2	1.6	2.4	2.4	3.5
23	2	2	2.1	2	2.3	2.6	2.1	1.3	1.4	2.7	3.5	3.1	2.9	1.8	2.5	2.4	2.8	2.8	3	2.4	1.4	1.4	1.8	1.4	2.2
24	1.3	0.9	1.7	2.5	2.4	2.3	2.1	1.8	3.1	4.9	5	5.4	5.7	4.9	4.2	3.5	3.8	3.9	4.4	4.5	4.3	4.5	4.2	4.9	3.6
25	5.1	5.6	6.1	6.9	7.3	7.8	8	8.8	9.1	6.7	5.7	4.2	4.5	4.6	5.4	5.1	3.9	2.3	2.1	3.4	4.1	4.5	4.4	5.4	5.5
26	3.3	3.3	4.5	6	4.6	3.6	2.6	1.2	2	4.1	4.8	4.2	5.1	4.6	4.8	4.4	3.5	2.2	2.1	1.8	1.7	2.1	3	2.5	3.4
27	2.9	2	2.2	1.8	1.8	1.7	1.5	0.9	1.7	2.1	1.6	2.2	2.6	2.9	2.9	2.9	3	1.2	0.4	0.3	0.2	0.3	0.4	0.9	1.7
28	0.9	0.8	0.8	1	1	1.1	0.8	1.4	1.9	3.3	3.8	4.8	4.7	4.4	4.1	3.9	3.2	1.7	1.2	1.8	1.3	1.2	1.4	1.7	2.2
29	3.8	5.3	5.1	4.7	4.9	4.3	3.3	4.1	5	4.7	4.1	3.1	3	2.8	3	1.8	1.9	2.3	2.3	2.9	2.4	2.3	2	4.1	3.5
30	3	3	4.3	3.3	3.9	4.4	3.7	4.2	4.8	5.1	5.9	5.5	5.4	5.2	5.5	5.7	6.5	6.9	6.3	6	5.6	5.6	5.2	5.2	5
31	4.3	4.4	4.4	4.5	3.9	4.9	4.1	4.9	3.9	3.3	3	2.8	2.8	2.9	1.9	1.4	0.7	0.1	0.1	0.1	0.5	0.6	0.7	0.9	2.5
Avg	2.4	2.4	2.5	2.6	2.4	2.4	2.4	2.4	2.7	3.2	3.4	3.6	3.6	3.6	3.4	3.2	2.8	2.2	2	2.1	1.9	2	2.2	2.3	2.6
SD	1.4	1.5	1.6	1.6	1.5	1.6	1.6	1.7	1.8	1.5	1.5	1.4	1.4	1.2	1.2	1.3	1.5	1.6	1.6	1.5	1.6	1.4	1.5	1.5	1.2
S/A	0.57	0.65	0.63	0.63	0.6	0.64	0.67	0.72	0.67	0.48	0.43	0.38	0.38	0.34	0.35	0.37	0.48	0.7	0.78	0.76	0.77	0.78	0.66	0.66	0.44
Min	0.3	0.4	0	0.4	1	0.5	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.5	1.1	0.9	0.3	0.1	0	0	0.2	0.3	0.3	0.3	0.7
Max	5.2	5.6	6.1	6.9	7.3	7.8	8	8.8	9.1	6.7	5.9	6	5.9	6.2	5.8	5.7	6.5	6.9	6.3	6	5.6	5.6	5.6	5.8	5.5
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

January 2010

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	309	309	272	310	317	320	312	317	322	331	334	342	339	330	318	326	316	306	302	297	292	285	277	275	315
2	310	323	311	303	297	297	299	289	282	289	296	290	289	286	289	294	289	292	297	288	283	274	277	274	293
3	276	274	278	276	270	273	275	276	278	286	284	269	272	268	275	274	270	273	264	266	270	267	275	273	274
4	272	272	274	273	274	267	270	271	270	281	282	264	265	263	265	259	267	256	256	264	260	252	270	276	269
5	279	282	279	272	270	272	269	272	278	274	282	288	290	290	295	284	276	276	259	236	243	262	266	270	276
6	271	269	267	273	271	262	268	269	272	275	285	291	270	273	279	276	269	263	261	262	260	266	268	273	271
7	275	277	285	285	286	274	266	265	278	273	242	249	217	217	212	226	216	224	212	191	137	152	161	175	236
8	192	158	182	208	207	225	237	264	252	266	281	277	265	270	284	285	284	282	290	281	283	274	279	284	263
9	288	294	294	295	294	290	281	286	293	309	320	321	324	305	313	328	327	315	302	342	275	330	315	308	306
10	312	310	303	299	299	284	280	299	325	338	346	343	346	335	329	330	321	316	307	293	293	295	280	270	325
11	265	268	269	271	265	266	261	255	255	239	209	208	191	220	220	191	184	179	189	163	187	187	196	203	215
12	233	220	245	288	280	290	305	345	355	357	352	351	337	322	307	305	293	294	285	292	291	290	275	278	315
13	285	295	311	307	269	267	275	271	292	309	284	303	282	303	290	283	261	242	191	203	198	203	200	210	277
14	204	209	207	200	213	218	207	194	218	225	224	178	179	174	172	178	189	122	119	129	159	163	191	189	189
15	196	206	198	202	207	209	213	224	217	213	239	245	229	246	252	259	229	204	219	224	212	217	212	210	225
16	211	210	214	237	296	292	262	206	216	248	231	272	23	57	110	121	136	93	92	107	110	131	75	85	161
17	98	106	89	78	90	79	76	81	82	89	154	157	160	164	151	139	127	161	218	221	243	233	239	264	135
18	264	262	267	271	271	289	291	295	295	308	318	316	310	323	322	321	313	300	286	162	139	153	157	155	293
19	157	173	179	177	172	183	188	185	193	192	196	218	225	232	231	236	237	214	204	205	205	156	184	188	207
20	199	220	230	232	240	237	352	19	328	7	19	44	44	48	50	54	46	43	45	45	40	43	35	40	41
21	34	40	33	15	13	27	25	31	29	40	37	43	44	36	45	49	49	52	55	51	54	57	58	56	43
22	51	47	26	36	10	332	341	345	339	354	352	343	359	356	352	340	336	347	353	341	353	330	319	316	359
23	317	326	333	336	352	21	27	337	340	6	28	29	33	28	33	45	40	30	36	34	20	33	42	43	18
24	48	54	64	76	79	80	96	100	116	120	131	143	146	153	148	136	137	136	135	133	138	120	129	137	127
25	145	147	150	146	144	146	145	146	157	182	225	199	206	202	209	205	191	181	179	177	185	193	224	244	175
26	277	269	263	261	269	266	256	222	227	248	261	252	244	259	248	252	265	274	286	276	268	272	286	283	261
27	279	274	272	264	269	274	271	274	282	285	266	263	269	248	250	253	254	243	230	237	162	225	196	212	262
28	211	214	201	213	196	211	201	190	192	218	227	233	224	215	220	228	225	219	210	229	248	266	289	313	224
29	2	31	24	23	19	10	8	19	20	22	26	5	5	358	2	22	36	38	35	33	29	20	24	3	18
30	14	44	24	16	36	34	41	39	39	45	50	45	42	27	19	345	353	356	351	353	348	346	336	329	14
31	316	315	318	319	320	322	322	325	326	333	311	318	322	330	328	332	321	326	272	202	219	208	210	227	319
Avg	290	297	302	295	298	295	294	305	305	306	301	293	284	280	283	283	285	302	298	291	284	276	276	283	290
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

January 2010

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0.9	1.3	0	1.4	3.4	3.4	4.2	5	4.1	3.7	3.7	4.6	3.8	4.4	4.2	4.3	4.3	3.7	3.1	3.9	3.2	2	3.5	4.4	3.4
2	8.8	8.1	8.5	7	6.2	6.2	6.7	6.2	6.7	8.7	10.6	10.9	11.4	11	12.3	11.1	9.6	10.6	8.7	8.4	7.3	6.5	7.2	6.6	8.6
3	6.9	6.7	6.7	7.1	7	8	7.5	7.7	9.6	11.5	11.2	11.2	10.5	11.5	11.2	11	10	7.1	7.1	7.7	6.8	6.1	6.2	5.7	8.4
4	5.6	5.3	5.1	5.4	5.1	4.9	5.8	5.3	5.6	6.5	6.9	6.7	7.1	6.8	6.6	5.6	4.8	3.5	2.8	1.8	1.9	1.8	2.6	2.6	4.8
5	2.8	3.1	2.7	3	3.1	3.1	3.3	3.4	3.7	4.1	4.7	6.7	7.6	8.6	7.4	7	5.4	3.4	2.2	2.1	3	5.3	6.6	5.2	4.5
6	5	4.3	4.6	4.3	4	4.4	5.3	4	5.1	6	6.7	6.7	7	7.7	7.4	7.4	6.6	4.8	4.4	4.3	4.8	5.3	4.3	3.8	5.3
7	3.6	3.1	2.7	3.2	2.6	1.8	1.7	2.3	2.7	2.5	3.5	2.6	2.8	4.8	4.6	4.4	3.5	2.1	0.7	0.9	1.8	2.4	2.5	2.9	2.7
8	4.2	3	4.1	3.8	4.5	5.8	4.6	4	4.6	6.8	8.2	9.4	10.1	11.1	8.8	8.2	6.4	5.4	5.8	4.5	4.3	5.4	5	4.9	6
9	4.7	5.9	5.4	5	4.6	4.4	3.8	3.5	3.6	5.6	5.4	6.9	7.2	5.8	5.5	4.2	4.1	2.5	1.5	1.1	0.7	0.8	1.4	1.8	4
10	2	1.7	1.7	2.2	2.6	2.1	1.9	2.6	5.5	7	7.6	8.1	7.1	6.1	6.7	7.2	6.8	4.8	2.9	2.1	1.8	1.6	1.2	1.4	3.9
11	1.9	1.6	1.7	1.9	1.7	1.5	1.6	1.1	1.7	2.4	2.9	4	4.1	4.3	4	4.3	3.6	1.5	2.3	1.6	2.4	2.8	3.5	2.9	2.6
12	3.6	2.3	1.3	2.9	2.7	1.9	1.9	3.9	5.5	6.6	6.1	6.4	5.3	5.7	6.1	6.4	4.8	2.7	2.4	3.4	2.6	2.5	1.9	1.9	3.8
13	3.1	3.2	3.6	3.1	1.9	2.1	2.2	3.1	3.3	3.4	3.5	4.8	4.7	5.5	4.5	4.3	2.3	1.6	1.3	2	0.8	1.4	2.2	2.1	2.9
14	2.1	2.4	2.1	2.5	2	1.8	1.4	1.3	1.6	2	2.2	2.9	3.7	4.3	3.6	3.6	2.1	1.3	1	0.8	1.3	1.3	2.1	1.1	2.1
15	1.7	2.2	1.9	2.4	2.4	2.2	2.4	2.7	2.3	3.2	4.6	4.3	5.2	5.2	4.4	3.9	3	2.2	2	1.5	1.6	1.2	1.9	1.6	2.7
16	1.5	1.3	1.5	1.9	1.8	1	0.7	0.7	0.6	0.6	1	1.2	1.1	1.3	1.9	1.7	0.8	0.8	0.9	1.6	1.8	0.9	0.8	1.6	1.2
17	2	2.5	3.3	3.4	3.5	5.5	7.7	7.3	7.8	6.8	5.3	9.7	6.6	5.7	5.6	5.5	4.8	5.8	6.6	6	3.1	4.4	3	6	5.3
18	7.4	8.6	7.6	7.4	5.6	5.1	6.6	6.3	6.3	9.4	9.2	7.9	7.6	6.7	5.9	5.4	3.5	0.8	0	0.2	0.8	1.4	1.8	1.6	5.1
19	1.8	2	3	2.7	2.2	2.1	2.9	2.7	3.6	4.4	5.2	6.1	7.1	6.8	6.8	5.3	4.4	1.3	1.4	1.5	1	1	1.8	1.6	3.3
20	1.9	1.2	2.1	1.5	1.7	2.1	0.5	0.6	0.6	2.3	4.3	5.7	6.1	5.7	5.5	5.3	4.6	5.3	5.4	5.8	5.8	6.4	6.8	5.7	3.9
21	5.5	6	7	5.9	5	5.7	5.3	5.1	6.1	6.4	7	7.1	6.6	6.1	6.3	7.2	7.4	7.7	7.6	7.5	8.1	9.3	9.4	9.7	6.9
22	9.4	8.6	8.7	9.8	7.7	5.1	5.9	5.9	6.2	6.6	5.8	5.7	7.3	7.2	7.3	6.3	4.8	4.5	5.1	5.4	4	3.1	4.7	5.2	6.2
23	3.9	3.8	3.8	3.6	4.1	4.6	3.6	2.5	3	4.6	6	5.2	4.5	3.5	4.1	4.1	4.7	5.1	5	4.1	2.3	2.3	2.8	2.2	3.9
24	2.1	1.6	2.7	4	4	3.6	3.6	3.2	5	8	8.7	8.9	9.5	8.4	7.1	5.9	6.3	6.3	7.5	8	7.3	7.2	6.8	8	6
25	8.6	9.4	10	11.4	12.3	13	13.2	14.6	15.8	12.1	10.2	7.8	8.8	8.6	9.5	9.3	6.2	4.1	4.1	6	7	7.4	7.9	8.8	9.4
26	5.9	5.9	7.3	10.4	8.5	6.1	4.4	2.3	3.6	7	8.1	7.4	8.6	8	8	7.8	6.3	4.3	4	3.7	3.1	4.1	5.9	5.3	6.1
27	5.5	4	4	3.2	3.2	3	2.5	1.8	3.6	4.1	3	4.2	5.4	5.2	5.5	5.2	5.1	2.2	0.9	0.8	0.6	0.7	0.9	1.5	3.2
28	1.4	1.4	1.4	1.6	1.7	1.9	1.5	2.3	3.3	6.2	6.9	7.8	7.9	7.8	7.5	7.3	5.6	3.4	2.3	3	2.4	2	2.5	3.5	3.9
29	6.8	8.4	8.9	8.1	8.3	7.3	5.6	7	8.7	7.6	6.7	5.7	5.4	4.7	5.2	3.6	3.4	3.7	3.8	5	4.1	4	3.6	7.3	5.9
30	5.1	4.9	7.2	5.9	6.6	7.1	6.5	6.7	7.9	8.8	9.6	8.9	8.7	9	9.5	10	10.9	12	10.6	10.2	9.1	9.4	9	9.1	8.4
31	8.5	9.1	8.6	8.4	7.5	8.6	8.6	8.6	7.7	6.3	5.7	5.4	5.5	5.4	3.8	3	1.7	0.4	0.3	0.4	1	1.2	1.4	1.6	4.9
Avg	4.3	4.3	4.5	4.7	4.4	4.4	4.3	4.3	5	5.8	6.1	6.5	6.6	6.5	6.3	6	5.1	4	3.7	3.7	3.4	3.6	3.9	4.1	4.8
S D	2.5	2.7	2.8	2.8	2.6	2.6	2.8	2.9	3	2.7	2.5	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7	2.7	2.5	2.6	2.5	2.6	2
S/A	0.58	0.62	0.62	0.6	0.58	0.61	0.64	0.67	0.61	0.46	0.42	0.36	0.35	0.35	0.36	0.38	0.45	0.67	0.74	0.73	0.72	0.72	0.64	0.63	0.42
Min	0.9	1.2	0	1.4	1.7	1	0.5	0.6	0.6	0.6	1	1.2	1.1	1.3	1.9	1.7	0.8	0.4	0	0.2	0.6	0.7	0.8	1.1	1.2
Max	9.4	9.4	10	11.4	12.3	13	13.2	14.6	15.8	12.1	11.2	11.2	11.4	11.5	12.3	11.1	10.9	12	10.6	10.2	9.1	9.4	9.4	9.7	9.4
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

January 2010

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	1013	1013	1012	1012	1011	1011	1012	1012	1012	1012	1012	1012	1010	1010	1010	1010	1010	1010	1010	1010	1010	1009	1009	1009	1011
2	1009	1009	1010	1011	1011	1011	1011	1011	1012	1012	1012	1011	1010	1010	1010	1010	1011	1012	1012	1013	1013	1013	1014	1013	1011
3	1013	1013	1013	1012	1012	1012	1012	1012	1012	1012	1011	1010	1009	1008	1008	1008	1008	1009	1009	1009	1010	1010	1011	1011	1011
4	1011	1011	1011	1011	1011	1011	1012	1012	1012	1012	1012	1011	1010	1009	1009	1009	1010	1010	1010	1011	1011	1011	1011	1011	1011
5	1011	1011	1011	1011	1011	1011	1012	1012	1012	1012	1012	1011	1010	1009	1009	1009	1010	1010	1010	1011	1011	1011	1011	1011	1011
6	1011	1011	1011	1011	1011	1012	1012	1012	1013	1013	1013	1012	1011	1010	1010	1010	1011	1011	1012	1012	1013	1014	1014	1014	1012
7	1014	1015	1015	1015	1015	1015	1016	1017	1017	1018	1018	1017	1016	1014	1014	1014	1014	1014	1014	1014	1013	1013	1013	1012	1015
8	1011	1010	1010	1009	1008	1008	1008	1009	1009	1009	1010	1009	1009	1009	1010	1011	1011	1012	1013	1014	1015	1015	1016	1016	1011
9	1016	1016	1017	1017	1017	1018	1019	1019	1019	1020	1020	1019	1018	1018	1018	1018	1018	1019	1019	1020	1020	1021	1021	1021	1019
10	1021	1021	1021	1021	1021	1022	1022	1023	1023	1024	1025	1024	1023	1023	1022	1022	1023	1023	1024	1025	1025	1025	1025	1024	1023
11	1024	1024	1024	1024	1024	1024	1025	1025	1025	1025	1025	1023	1022	1021	1020	1019	1019	1019	1019	1019	1019	1019	1019	1019	1018
12	1018	1017	1017	1017	1017	1017	1017	1018	1018	1019	1020	1020	1019	1018	1018	1018	1018	1019	1020	1021	1021	1022	1022	1022	1019
13	1022	1023	1023	1023	1023	1024	1024	1025	1026	1027	1026	1026	1025	1024	1023	1023	1022	1022	1022	1023	1023	1023	1023	1023	1024
14	1023	1023	1024	1023	1023	1023	1023	1023	1024	1024	1024	1024	1023	1022	1022	1022	1023	1023	1023	1023	1023	1023	1023	1023	1023
15	1023	1022	1022	1022	1022	1022	1023	1023	1023	1024	1023	1022	1022	1021	1021	1021	1021	1021	1022	1022	1022	1022	1023	1023	1022
16	1022	1022	1022	1022	1022	1023	1023	1023	1024	1024	1024	1023	1023	1022	1021	1021	1021	1021	1021	1021	1020	1020	1020	1019	1022
17	1018	1017	1017	1015	1015	1013	1012	1010	1009	1007	1006	1005	1003	1001	1000	999	998	997	998	999	998	999	1000	1000	1006
18	1000	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1009	1009	1009	1010	1011	1011	1012	1012	1013	1013	1014	1014	1014	1008
19	1013	1013	1013	1013	1013	1013	1013	1013	1014	1014	1014	1014	1012	1011	1011	1011	1011	1011	1011	1011	1011	1011	1011	1011	1012
20	1011	1010	1010	1010	1010	1010	1011	1011	1012	1012	1012	1013	1012	1012	1012	1012	1012	1013	1013	1013	1014	1015	1016	1015	1012
21	1015	1015	1015	1016	1017	1017	1017	1017	1018	1019	1018	1017	1016	1016	1015	1014	1014	1013	1013	1012	1011	1009	1008	1006	1014
22	1005	1004	1003	1002	1002	1004	1004	1004	1005	1006	1006	1006	1006	1006	1007	1008	1010	1010	1011	1012	1012	1013	1015	1015	1007
23	1016	1016	1016	1016	1017	1016	1017	1018	1020	1021	1021	1021	1020	1021	1021	1021	1021	1021	1021	1021	1022	1021	1021	1020	1019
24	1020	1019	1019	1019	1018	1017	1017	1017	1016	1016	1016	1015	1014	1013	1012	1011	1011	1011	1010	1010	1009	1008	1007	1006	1014
25	1004	1003	1002	1000	999	998	997	996	995	995	996	996	995	994	995	996	996	997	997	998	998	999	1000	1000	998
26	1001	1002	1003	1004	1005	1007	1007	1008	1008	1009	1010	1008	1007	1007	1007	1007	1008	1009	1010	1011	1012	1012	1013	1014	1008
27	1014	1015	1016	1016	1017	1017	1018	1019	1020	1021	1022	1022	1021	1020	1020	1020	1021	1022	1022	1022	1022	1023	1023	1022	1020
28	1023	1022	1022	1022	1022	1021	1021	1021	1021	1021	1020	1019	1017	1015	1014	1014	1014	1015	1015	1016	1016	1017	1017	1018	1019
29	1019	1021	1022	1023	1023	1024	1024	1025	1026	1027	1027	1026	1025	1024	1024	1024	1024	1024	1024	1025	1025	1025	1024	1024	1024
30	1024	1023	1022	1022	1020	1020	1019	1018	1017	1016	1015	1013	1010	1009	1008	1008	1008	1008	1008	1008	1008	1009	1009	1009	1014
31	1010	1011	1012	1012	1013	1014	1016	1017	1019	1020	1020	1021	1021	1021	1021	1021	1021	1021	1022	1022	1023	1023	1023	1023	1019
Avg	1015	1015	1015	1015	1015	1015	1015	1015	1016	1016	1016	1015	1015	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015	1015
SD	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Min	1000	1000	1001	1000	999	998	997	996	995	995	996	996	995	994	995	996	996	997	997	998	998	999	1000	1000	998
Max	1024	1024	1024	1024	1024	1024	1025	1025	1026	1027	1027	1026	1025	1024	1024	1024	1024	1024	1024	1025	1025	1025	1025	1024	1024
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

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

January 2010

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	12.6	12.6	12.6	12.6	12.8	13.1	13.3	13.2	13.1	12.8	12.7	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.7	
2	12.5	12.5	12.5	12.5	12.5	12.4	12.4	13.3	14	13.9	13.9	13.8	13.8	13.9	13.9	13.9	13.7	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1	
3	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13.4	14.1	14	14	13.9	13.9	13.9	13.9	13.9	13.7	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13.2	
4	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.4	14.1	14	13.9	13.8	13.8	13.8	13.8	13.8	13.7	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.2	
5	12.7	12.7	12.7	12.6	12.6	12.6	12.6	13.4	14.1	14	13.8	13.8	13.8	13.8	13.8	13.8	13.7	12.9	12.8	12.8	12.8	12.8	12.7	12.7	13.2	
6	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.4	14	13.9	13.8	13.8	13.7	13.7	13.7	13.8	13.7	13	12.9	12.8	12.8	12.8	12.8	12.8	13.2	
7	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.4	14	13.9	13.8	13.7	13.6	13.7	13.7	13.7	13.7	13	12.9	12.8	12.8	12.8	12.8	12.8	13.1	
8	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.9	13.8	13.8	13.7	13.7	13.7	13.8	13.9	13.5	12.9	12.8	12.8	12.8	12.7	12.7	12.7	13.1	
9	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	13.4	14.1	14	13.9	13.9	13.8	13.8	13.8	13.7	13	12.9	12.8	12.8	12.8	12.7	12.7	13.1	
10	12.7	12.7	12.6	12.6	12.6	12.6	12.5	13.5	14.1	13.9	13.8	13.7	13.7	13.7	13.7	13.7	13.6	13	12.9	12.8	12.8	12.8	12.8	12.8	13.2	
11	12.7	12.7	12.6	12.6	12.6	12.6	12.5	13.5	14.1	13.9	13.8	13.7	13.7	13.7	13.7	13.7	13.6	13	12.9	12.8	12.8	12.8	12.8	12.8	13.2	
12	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.6	12.9	13.8	13.9	13.9	13.9	13.8	13.8	13.8	13.8	13.2	12.9	12.9	12.8	12.8	12.8	12.7	12.7	13.1
13	12.7	12.7	12.7	12.6	12.6	12.6	12.5	13.4	14	13.9	13.8	13.7	13.6	13.6	13.6	13.7	13.6	13	12.9	12.8	12.8	12.8	12.8	12.8	13.1	
14	12.7	12.7	12.7	12.7	12.7	12.7	12.6	13.4	13.9	13.8	13.6	13.5	13.5	13.5	13.5	13.6	13.4	12.9	12.9	12.9	12.8	12.8	12.8	12.8	13.1	
15	12.8	12.7	12.7	12.7	12.7	12.7	12.6	13.2	13.9	13.7	13.6	13.5	13.5	13.5	13.4	13.5	13.5	13	12.9	12.9	12.9	12.8	12.8	12.8	13.1	
16	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.8	13.8	13.8	13.6	13.4	13.4	13.4	13.5	13.2	13	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13	
17	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13.1	13.4	13.3	13.3	13.3	13	12.9	12.9	12.9	12.8	12.8	12.8	12.7	12.9	
18	12.7	12.7	12.7	12.7	12.7	12.6	12.6	13.1	13.7	13.6	13.6	13.6	13.5	13.5	13.5	13.5	13.5	13	12.9	12.9	12.8	12.8	12.8	12.8	13.1	
19	12.8	12.8	12.8	12.8	12.7	12.7	12.7	13.2	13.8	13.6	13.6	13.5	13.4	13.4	13.4	13.4	13.4	13	12.9	12.9	12.9	12.8	12.8	12.8	13.1	
20	12.8	12.8	12.8	12.8	12.7	12.7	12.7	13.2	13.7	13.6	13.6	13.5	13.6	13.6	13.6	13.5	13	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13.1	
21	12.8	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.7	12.9	13.7	13.8	13.7	13.5	13.2	13	12.9	12.9	12.9	12.8	12.8	12.7	12.7	12.7	12.9	
22	12.7	12.7	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.7	12.7	12.7	13	13.1	12.9	12.8	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.7	
23	12.5	12.5	12.5	12.5	12.5	12.5	12.5	13.2	13.8	13.7	13.6	13.6	13.6	13.4	13.3	13	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13	
24	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.7	13	13.6	13.5	13.4	13.4	13.4	13.4	13.4	13.1	12.9	12.9	12.9	12.9	12.8	12.8	12.8	13	
25	12.8	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.7	12.8	13	13.3	13.5	13.4	13.4	13.4	13	12.9	12.9	12.8	12.8	12.8	12.8	12.9	
26	12.8	12.7	12.7	12.7	12.7	12.6	12.6	13.4	13.8	13.7	13.6	13.6	13.5	13.5	13.6	13.6	13.3	13	12.9	12.9	12.8	12.8	12.8	12.8	13.1	
27	12.8	12.8	12.7	12.7	12.7	12.7	12.6	13.5	13.9	13.8	13.7	13.6	13.6	13.6	13.6	13.6	13.7	13.1	12.9	12.9	12.8	12.8	12.8	12.8	13.1	
28	12.8	12.7	12.7	12.7	12.7	12.7	12.7	13.4	13.8	13.7	13.6	13.5	13.5	13.5	13.5	13.5	13.4	13	12.9	12.9	12.9	12.9	12.8	12.8	13.1	
29	12.8	12.8	12.7	12.7	12.7	12.6	12.6	13.1	14	13.9	13.9	13.8	13.8	13.8	13.9	13.7	13	12.9	12.9	12.8	12.8	12.8	12.8	12.8	13.1	
30	12.7	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.9	13.4	13.6	13.5	13.4	13.2	13	12.8	12.7	12.6	12.6	12.5	12.5	12.5	12.5	12.8	
31	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	13.3	14	13.9	13.8	13.8	13.8	13.8	13.8	13.8	13.2	12.9	12.9	12.8	12.8	12.8	12.8	13.1	
Avg	12.7	12.7	12.7	12.7	12.6	12.6	12.6	13.1	13.5	13.6	13.6	13.6	13.6	13.6	13.6	13.5	13.4	12.9	12.8	12.8	12.8	12.8	12.8	12.7	13.1	
S D	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.6	0.5	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
S/A	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Min	12.5	12.5	12.5	12.5	12.5	12.4	12.4	12.5	12.6	12.6	12.7	12.7	13	13.1	12.9	12.8	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.5	12.7	
Max	12.8	12.8	12.8	12.8	12.8	12.8	12.7	13.5	14.1	14.1	14	13.9	13.9	13.9	13.9	13.9	13.8	13.2	12.9	12.9	12.9	12.9	12.8	12.8	13.2	
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 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.

Prepared by: Afshin M. Andreas, NREL