

Elizabeth City State University
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

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	2	28	55	167	95	82	147	149	68	46	18	0	0	0	0	0	0	856
2	0	0	0	0	0	0	0	41	210 ?	292	400	506	603	527	386	231	52	8	0	0	0	0	0	0	3255
3	0	0	0	0	0	0	0	49	219 ?	317 ?	498 ?	583	585	536	437	196	53	8	0	0	0	0	0	0	3481 ?
4	0	0	0	0	0	0	0	6	37	68	61 ?	94	182	229	440	275	129	20	0	0	0	0	0	0	1542
5	0	0	0	0	0	0	0	52	224	406	542	622	643	597	486	324	119	14	0	0	0	0	0	0	4028
6	0	0	0	0	0	0	0	14	40	94	146	255	360	302	268	174	40	11	0	0	0	0	0	0	1706
7	0	0	0	0	0	0	0	6	36	89	114	217	142	92	56 ?	122	61	14	0	0	0	0	0	0	949
8	0	0	0	0	0	0	0	51	199	308	414	621	705	602	431	277	137	24	0	0	0	0	0	0	3768
9	0	0	0	0	0	0	0	12	72	231	215	384	405	351	352	339	145	23	0	0	0	0	0	0	2528
10	0	0	0	0	0	0	0	5	30 ?	46	128	182	90	93	87	79	56	9	0	0	0	0	0	0	804
11	0	0	0	0	0	0	2	61	240	422	562	645	665	617	504	344	153	26	0	0	0	0	0	0	4240
12	0	0	0	0	0	0	0	61	255	423	569	654	674	632	447	383	161	29	0	0	0	0	0	0	4288
13	0	0	0	0	0	0	2	71	262	451	592	678	695	645	533	372	171	32	0	0	0	0	0	0	4504
14	0	0	0	0	0	0	3	53	180	336	387	356	354	299	198	94	84	18	0	0	0	0	0	0	2361
15	0	0	0	0	0	0	0	4	?	?	57 ?	65 ?	79	64 ?	?	?	4 ?	2	0	0	0	0	0	0	274 ?
16	0	0	0	0	0	0	1	4	?	35 ?	50 ?	57	75	68 ?	40 ?	37 ?	4 ?	2	0	0	0	0	0	0	371 ?
17	0	0	0	0	0	0	1	14	29	65	141	106	125	152	112	65	30	5	0	0	0	0	0	0	844
18	0	0	0	0	0	0	1	17	62	136	213	375	411	471	364	362	134	30	0	0	0	0	0	0	2577
19	0	0	0	0	0	0	7	61	269	394	422	576	617	560	465	347	157	29	0	0	0	0	0	0	3905
20	0	0	0	0	0	0	2	21	115	289	276	270	349	381	371	170	90	33	0	0	0	0	0	0	2368
21	0	0	0	0	0	0	19 ?	122	295	427	464	464	344	309	241	126	45	9	0	0	0	0	0	0	2864
22	0	0	0	0	0	0	8	38	84	110	244	330	586	580	422	154 ?	37	6	0	0	0	0	0	0	2598
23	0	0	0	0	0	0	2	62	290	344	183	230	254	320	295	341	206	45	0	0	0	0	0	0	2571
24	0	0	0	0	0	0	12	109	308	488	628	712	725	668	557	392	200	39	0	0	0	0	0	0	4839
25	0	0	0	0	0	0	6	72	268	383	576	659	596	418	378	259	151	18	0	0	0	0	0	0	3784
26	0	0	0	0	0	0	1	4 ?	?	46	129	98	103	84	75	49	28 ?	4	0	0	0	0	0	0	621 ?
27	0	0	0	0	0	0	1	3 ?	33 ?	61	61	64	97	78	54	52 ?	?	3	0	0	0	0	0	0	505 ?
28	0	0	0	0	0	0	2	21	67	82	99	149	204	198	193	112	40	9	0	0	0	0	0	0	1177

Avg	0	0	0	0	0	0	3	37	154	237	298	359	384	358	309	213	94	17	0	0	0	0	0	0	2415
S D	0	0	0	0	0	0	4	33	105	159	197	230	238	212	165	122	61	12	0	0	0	0	0	0	1438
S/A	0	0	0	0	0	0	1.67	0.89	0.68	0.67	0.66	0.64	0.62	0.59	0.53	0.58	0.65	0.69	0	0	0	0	0	0	0.6
Min	0	0	0	0	0	0	0	2	28	35	50	57	75	64	40	37	4	2	0	0	0	0	0	0	274
Max	0	0	0	0	0	0	19	122	308	488	628	712	725	668	557	392	206	45	0	0	0	0	0	0	4839
n	0	0	0	0	0	0	50	318	282	310	317	331	336	328	312	309	294	230	0	0	0	0	0	0	3419

Daylight Data Recovery: 0.0% missing; 6.0% exceed the 15% QC threshold -- 3638 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25823F3 Calibration Factor: 9.830 μV/W/m² Calibration Date: 05/1998

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
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

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	1	1	0	1	1	0	75	85	0	0	0	0	0	0	165
2	0	0	0	0	0	0	0	235	512 ?	344	293	469	785	756	485	352	42	11	0	0	0	0	0	0	4285
3	0	0	0	0	0	0	0	232	604 ?	660 ?	723 ?	828	786	760	728	226	1	0	0	0	0	0	0	0	5549 ?
4	0	0	0	0	0	0	0	0	0	0	0	0	4	56	668	643	597	228	0	0	0	0	0	0	2197
5	0	0	0	0	0	0	0	383	758	866	919	936	942	933	898	797	349	9	0	0	0	0	0	0	7789
6	0	0	0	0	0	0	0	0	0	0	0	6	50	28	35	13	0	0	0	0	0	0	0	0	133
7	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	7	1	0	0	0	0	0	0	0	13
8	0	0	0	0	0	0	0	55	194	267	467	834	884	680	524	445	428	179	0	0	0	0	0	0	4959
9	0	0	0	0	0	0	0	0	0	73	1	43	42	44	282	785	627	270	0	0	0	0	0	0	2167
10	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
11	0	0	0	0	0	0	0	393	718	827	881	905	916	905	857	756	580	226	0	0	0	0	0	0	7964
12	0	0	0	0	0	0	0	269	674	806	887	905	908	870	584	775	624	283	0	0	0	0	0	0	7586
13	0	0	0	0	0	0	8	502	803	894	939	960	961	946	919	846	685	310	0	0	0	0	0	0	8773
14	0	0	0	0	0	0	4	41	73	199	120	36	31	16	2	0	0	0	0	0	0	0	0	0	523
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16	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
17	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	3
18	0	0	0	0	0	0	0	0	0	1	1	124	81	350	232	607	347	130	0	0	0	0	0	0	1874
19	0	0	0	0	0	0	19	35	384	401	245	399	583	522	463	453	294	35	0	0	0	0	0	0	3834
20	0	0	0	0	0	0	0	0	2	77	11	3	14	58	122	5	7	30	0	0	0	0	0	0	330
21	0	0	0	0	0	0	53	329	491	551	273	184	32	57	15	0	0	0	0	0	0	0	0	0	1985
22	0	0	0	0	0	0	0	0	0	0	2	35	359	433	274	12	0	0	0	0	0	0	0	0	1115
23	0	0	0	0	0	0	0	213	466	290	59	66	46	55	116	556	686	362	0	0	0	0	0	0	2917
24	0	0	0	0	0	0	143	535	763	840	884	906	901	865	827	761	649	281	0	0	0	0	0	0	8355
25	0	0	0	0	0	0	0	142	406	381	450	593	350	56	106	85	63	0	0	0	0	0	0	0	2632
26	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	4
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	5

Avg	0	0	0	0	0	0	8	120	245	267	256	294	310	300	291	290	216	87	0	0	0	0	0	0	2684
S D	0	0	0	0	0	0	28	172	307	331	356	385	395	375	333	335	276	123	0	0	0	0	0	0	3038
S/A	0	0	0	0	0	0	3.51	1.43	1.25	1.24	1.39	1.31	1.28	1.25	1.15	1.16	1.27	1.41	0	0	0	0	0	0	1.13
Min	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
Max	0	0	0	0	0	0	143	535	803	894	939	960	961	946	919	846	686	362	0	0	0	0	0	0	8773
n	0	0	0	0	0	0	51	332	330	327	332	336	336	336	336	335	336	231	0	0	0	0	0	0	3618

Daylight Data Recovery: 0.0% missing; 0.5% exceed the 15% QC threshold -- 3638 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25519E6 Calibration Factor: 7.533 μV/W/m² Calibration Date: 05/1998

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
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

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	2	30	59	178	102	88	157	159	73	40	14	0	0	0	0	0	0	902
2	0	0	0	0	0	0	0	51	143 ?	171	244	226	120	88	149	98	42	7	0	0	0	0	0	0	1339 ?
3	0	0	0	0	0	0	0	64	?	?	147 ?	93	101	99	83	109	56	9	0	0	0	0	0	0	762 ?
4	0	0	0	0	0	0	0	7	40	74	51	101	192	199	120	60	32	9	0	0	0	0	0	0	886
5	0	0	0	0	0	0	0	19	37	45	48	48	50	50	45	42	49	14	0	0	0	0	0	0	448
6	0	0	0	0	0	0	0	16	43	100	156	263	328	287	252	172	43	11	0	0	0	0	0	0	1671
7	0	0	0	0	0	0	0	6	39	95	121	230	151	98	52	125	64	15	0	0	0	0	0	0	998
8	0	0	0	0	0	0	0	48	144	190	138	93	133	181	160	115	53	16	0	0	0	0	0	0	1271
9	0	0	0	0	0	0	0	14	77	203	226	355	380	308	208	50	31	10	0	0	0	0	0	0	1860
10	0	0	0	0	0	0	?	5	23	47	137	193	96	99	88	79	58	10	0	0	0	0	0	0	836
11	0	0	0	0	0	0	?	22	47	59	65	67	66	63	62	60	41	14	0	0	0	0	0	0	565
12	0	0	0	0	0	0	0	27	72	61	63	71	75	93	135	85	35	11	0	0	0	0	0	0	729
13	0	0	0	0	0	0	2	18	35	44	49	51	52	52	48	43	31	12	0	0	0	0	0	0	437
14	0	0	0	0	0	0	3	49	151	225	303	328	329	290	203	99	87	18	0	0	0	0	0	0	2084
15	0	0	0	0	0	0	0	5	16 ?	24	52	59	83	54	32	24 ?	12	2	0	0	0	0	0	0	362 ?
16	0	0	0	0	0	0	1 ?	4	18 ?	35	47	58	79	62	36	28	9 ?	2	0	0	0	0	0	0	378 ?
17	0	0	0	0	0	0	1	14	30	69	147	112	132	159	118	68	32	5	0	0	0	0	0	0	886
18	0	0	0	0	0	0	1	18	64	142	222	279	333	212	216	106	57	19	0	0	0	0	0	0	1669
19	0	0	0	0	0	0	10 ?	58	129	182	232	268	185	194	185	144	78	25	0	0	0	0	0	0	1688
20	0	0	0	0	0	0	2	22	119	238	269	273	337	326	292	171	91	29	0	0	0	0	0	0	2170
21	0	0	0	0	0	0	?	79	137	144	268	302	317	271	235	133	46	9	0	0	0	0	0	0	1941
22	0	0	0	0	0	0	9 ?	40	88	116	257	305	302	260	246	131	34	6	0	0	0	0	0	0	1794
23	0	0	0	0	0	0	3	31	131	186	148	186	217	277	224	107	39	17	0	0	0	0	0	0	1565
24	0	0	0	0	0	0	9 ?	31	48	58	62	65	68	72	74	59	39	16	0	0	0	0	0	0	602
25	0	0	0	0	0	0	6	42	113	159	250	204	293	359	281	215	127	19	0	0	0	0	0	0	2067
26	0	0	0	0	0	0	1	8	19	47	133	102	108	89	79	51	20	4	0	0	0	0	0	0	663
27	0	0	0	0	0	0	1	4 ?	30	64	60	68	102	82	56	47	16 ?	3	0	0	0	0	0	0	533
28	0	0	0	0	0	0	3	22	70	86	104	156	213	207	202	118	43	10	0	0	0	0	0	0	1234

Avg	0	0	0	0	0	0	2	26	70	108	149	166	176	167	144	93	47	12	0	0	0	0	0	0	1155
S D	0	0	0	0	0	0	3	21	46	65	83	100	108	98	81	47	25	7	0	0	0	0	0	0	593
S/A	0	0	0	0	0	0	1.48	0.79	0.66	0.6	0.55	0.6	0.61	0.58	0.56	0.51	0.54	0.54	0	0	0	0	0	0	0.51
Min	0	0	0	0	0	0	0	2	16	24	47	48	50	50	32	24	9	2	0	0	0	0	0	0	362
Max	0	0	0	0	0	0	10	79	151	238	303	355	380	359	292	215	127	29	0	0	0	0	0	0	2170
n	0	0	0	0	0	0	39	319	305	320	331	336	336	336	334	328	320	230	0	0	0	0	0	0	3534

Daylight Data Recovery: 0.0% missing; 2.9% exceed the 15% QC threshold -- 3638 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25819F3 Calibration Factor: 9.070 $\mu\text{V}/\text{W}/\text{m}^2$ Calibration Date: 05/1998

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
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

Dry Bulb Temperature (Tower)
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	3.4	3.4	3.4	3.3	3	2.8	2.5	2.3	2.3	2.3	2.5	2.6	3	3.8	5	5.8	6	5.7	5	5.4	5.3	5.4	5.5	4.5	3.9
2	3.8	3	2.5	1.9	1.3	0.9	0.5	0.4	2	3.2	5.3	7.1	8.3	9.4	10.6	11.3	10.8	9.6	8.3	7.1	7.9	7.7	6.6	5.3	5.6
3	5.3	4.7	3.4	2.9	3.4	3.7	3.8	4	5.4	6.7	8.4	10.4	11.9	12.7	13.5	13	11.5	10.4	11	12.9	13.1	12.2	11.7	11.8	8.7
4	11.6	11.7	12.3	12.3	12.7	12.9	13.8	14.8	15.1	15.5	14.7	14	13.6	15	17.7	18.1	17.4	15.2	13.1	10.9	9.4	8.4	8.4	6.7	13.1
5	6	6.2	6	5.1	3.5	2.7	1.9	1.9	3.3	4.6	6	6.9	7.6	8	8.9	7.8	5.7	3.8	3.1	2.7	2.8	2.4	2.1	2	4.6
6	1.6	1	0.5	0.4	0.7	0.9	1	1.5	2.3	3	3.5	4.5	5.6	6.2	6.3	6.1	5.7	5.5	5.5	5.6	5	4.3	4.2	4.4	3.6
7	5	5.3	5.3	4.6	3.5	1.8	1.9	1.8	1.3	1.3	2.1	3.1	4	3.7	2.9	3.1	3.4	3.1	2.8	2.5	2	1.7	1.7	1.6	2.9
8	1.6	1.5	1	0.2	-0.3	-0.8	-1	-0.4	0.4	0.5	1.1	1.9	2.6	3	3.4	4	4.2	2.8	1.5	0.7	0.2	0.2	-0.2	-0.4	1.2
9	-0.4	-0.7	-0.9	-0.9	-0.9	-0.4	-0.1	0.3	0.8	2	3.2	4.1	5	5.6	6.7	7.9	8.4	7.4	5.6	4	3.4	3	2.3	2.1	2.8
10	2.2	2.5	3.1	3.5	3.6	2.7	2	2	2.4	2.9	3.4	4.3	5	5.2	4.3	4.2	4.7	5.2	5	4.7	4.7	4.5	4.2	3.6	3.7
11	3.4	3.3	2.6	2.2	1.8	1.4	1	1.2	2.6	4.2	5.2	6.1	6.7	7.4	8.5	9.3	9.5	8.6	7.4	6.9	6.6	6.1	5.7	5.1	5.1
12	5.1	4.7	4.4	4.3	4.1	4.5	4.7	4.5	6.6	9.2	10.6	11.4	11.9	12.3	12.7	13	12.4	10.4	8.5	7	5.7	4.6	3.6	2.7	7.5
13	1.5	0.8	1.2	0.8	0.8	0.4	0.2	0.4	2.1	3.7	4.1	4.8	5.8	6.6	7.5	8.3	8.7	8.3	7.6	6.8	6.1	6.2	6.2	6	4.4
14	5.3	5	4.8	4.3	3.7	3.1	1.8	1.9	4	6.4	7.8	9.2	10.3	11	11.3	10.9	10.7	10.1	9.8	9.1	8.5	7.7	7.4	7.4	7.3
15	7.7	7.6	7	6.6	7.3	7.4	7	6.8	7	7.7	8.6	9.4	9.4	9.2	8.8	5.2	4.1	4.1	3.9	3.7	3.2	3	3.1	3.6	6.3
16	4.1	3.5	3.7	3.4	3.3	3.1	3.4	3.7	3.8	3.9	4.3	4.7	5	4.9	4.9	4.8	4.9	5.2	5.4	5.7	6.1	6.7	7.4	8.2	4.8
17	7.7	7.5	7.2	6.8	6.2	6	5.4	4.8	3.3	2.6	2.6	2.4	1.4	1.3	1.1	0.8	0.4	-0.3	-0.6	-0.8	-0.8	-0.9	-1.1	-1.1	2.6
18	-1.2	-1.3	-1.3	-1.5	-1.6	-1.5	-1.4	-1.2	-1	-0.5	0.3	1.3	2.9	4.2	5.1	5.4	4.9	3.6	2.3	1.5	1	0.7	0.3	0	0.9
19	-0.1	0.7	0.2	0.9	1	0.8	0.7	1.2	3.2	5.8	6.6	7.6	8.9	9.9	11	11.7	10.9	8.5	7.1	6.7	6.2	5.7	6.6	6.8	5.3
20	7.3	7.2	7	7	7.1	6.8	6.7	7.1	7.7	8.5	9	8.3	8.2	8	8.3	8.2	7.6	7	5.9	5.5	5.2	5.2	5.1	4.6	7
21	4.2	3.9	3.7	3.6	3.3	3.5	4	5.2	7.1	9.3	11.3	12.9	13	13.2	13.2	12.8	11.4	10.6	10	9.6	9.5	9	8.6	8.5	8.4
22	8.5	8.4	8.2	7.8	7.7	7.7	7.7	7.9	8.9	10.4	13.8	17.3	22.3	24.1	24.5	21.6	15.9	15.8	15.7	15.9	16.7	17.3	17.4	17.6	14.1
23	18.7	18.5	18.1	17.7	17.7	17.5	17	16.8	16.9	16.6	15.5	14.1	11.4	10.4	10.3	10.5	10.4	9.8	8.6	7.8	7	6.3	5.5	4.6	12.8
24	3.7	3.4	3.2	2.9	1.8	1.1	0.7	2.4	5.6	8.1	9.9	11.8	13.8	14.8	16.5	17.6	17.7	16.7	14.9	13.8	13.1	12.7	12.5	12.3	9.6
25	12.4	11.2	9.4	8.3	7.5	6.8	6.1	5.7	5.9	5.6	5.7	5.5	5.3	4.9	4.4	3.9	3.7	3.1	2.8	2.6	2.5	2.5	2.4	2.4	5.4
26	2.3	2.1	1.3	0.6	0.6	0.7	0.9	1.2	1.6	2.1	3.4	4.4	4.8	4.9	4.8	4.7	4.4	4.3	4.2	4.1	3.9	3.7	3.5	3.6	3
27	3.6	3.8	4	3.9	4	4.3	4.6	4.9	5.6	6.3	6.4	6.3	6.2	6.2	6.3	6.2	6	5.7	5.6	5.6	5.7	5.7	5.9	5.9	5.4
28	5.1	4.6	4.4	4.1	3.9	3.6	3.2	3	3.1	3.5	3.5	3.8	4.3	4.5	4.8	4.8	4.4	4	3.6	3.6	3.6	3.4	3.4	3.5	3.9

Avg	5	4.8	4.5	4.2	4	3.7	3.6	3.8	4.6	5.5	6.4	7.1	7.8	8.2	8.7	8.6	8.1	7.3	6.6	6.2	5.9	5.6	5.4	5.1	5.9
SD	4.2	4.1	4.1	4	4.1	4.1	4.1	4.1	4	4.1	4.1	4.2	4.5	4.8	5.1	5	4.4	4.2	4	3.9	4	4	4	4	3.4
S/A	0.84	0.87	0.91	0.96	1.03	1.1	1.16	1.09	0.87	0.74	0.64	0.59	0.58	0.59	0.59	0.58	0.55	0.57	0.6	0.64	0.68	0.71	0.74	0.79	0.58
Min	-1.2	-1.3	-1.3	-1.5	-1.6	-1.5	-1.4	-1.2	-1	-0.5	0.3	1.3	1.4	1.3	1.1	0.8	0.4	-0.3	-0.6	-0.8	-0.8	-0.9	-1.1	-1.1	0.9
Max	18.7	18.5	18.1	17.7	17.7	17.5	17	16.8	16.9	16.6	15.5	17.3	22.3	24.1	24.5	21.6	17.7	16.7	15.7	15.9	16.7	17.3	17.4	17.6	14.1
n	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	8064

Data Recovery: 0.0% missing; 0.0% failed QC -- 8064 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
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

Relative Humidity (Tower)
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	?	?	?	?	?	?	?	?	?	?	103.6?	102.3	100.2	97.3	92.4	90.1	89	92.3	94.5	90.8	92.2	92.3	91	90.7	94.2 ?
2	88.6	88.6	88.9	90.3	92.1	94	95.1	95.3	88.3	84.9	78	69.7	65.1	59.5	56	55.8	62.3	68.7	74.8	81.3	76.5	76.9	82	87.7	79.2
3	87.1	90.1	96.3	98.4	96	93.3	88.2	90.9	83.9	77.5	72.3	68.4	71.9	73.6	73.9	75.3	82.2	84.3	85.2	79.3	76.3	80.9	81.9	81.7	82.9
4	82.6	83.2	79.9	78.1	76.9	75.6	73.7	71.2	69.7	76	85.1	95.6	100.4	98.1	73.4	49.2	40	40.4	43	44.8	49.2	50.3	46.4	54.8	68.2
5	56.8	53.1	51.1	53.6	62	65.6	69.3	68.3	61.4	56	46.4	43.8	41.1	39.4	36.5	52.4	63.6	67.8	72.1	74.1	75.3	78	81.3	82.2	60.5
6	84.2	89.4	95.4	94.1	91.7	89.2	87.4	83.7	79.5	76.2	73.4	71.5	68.8	67.3	69.7	68.8	70.9	76.4	79.5	81.3	92.1	99.7	103.3	104.5 ?	83.3
7	?	?	?	?	?	104.9 ?	104.8	104.7	103.8	102.3	100.4	97.7	95.7	96.8	98.2	94.9	91.5	92.3	94.5	96.5	98.8	100.3	100.7	101.7	99 ?
8	99	91.5	90.1	91.6	91.7	91.3	92.6	91	81.2	70.3	62.7	60.4	61	61.1	62.2	61.3	64.2	72	80.1	86	92	95.3	98	100.2	81.1
9	100	99.2	98.9	96.4	90.9	80.7	75.2	78.8	75	66.3	55.6	45.5	42.6	41.9	40.5	37.7	37.7	42.3	52.3	60.6	68.2	73.1	78.4	80.9	67.4
10	90.4	93.4	86.6	77.9	80.4	91.6	100.5	103	104.6 ?	105 ?	?	?	?	?	?	104.7	102.1	99.5	99.1	99.2	96.3	93	87.8	83.2	94.6 ?
11	75.1	71.6	76	77.8	77.8	80	82.1	80.6	74.2	66.5	59.3	54.5	48.7	47	46.5	47.9	49.2	54.4	62.5	66.8	69.9	76.4	78	82.4	66.9
12	81.1	81.4	81.9	80.5	80.4	77.7	75.1	75.3	65	51.4	44.5	37.2	34.7	34.7	33.8	32.7	28.4	29.3	26.1	25.1	26	27.4	29.6	29.3	49.5
13	32.1	35.5	32.9	32.4	31.8	34.1	36.4	37.5	34.4	28.3	26.6	24.6	25.5	26.6	26.8	26.7	27	29	31.1	34.3	37.1	38.2	41.5	47.4	32.4
14	52	54.3	56	60	63.4	67	79.9	80.4	70.3	61.1	55.9	52.1	51.3	49.6	50.5	52.2	52.4	56.1	60.5	65.2	75.6	80.5	82.4	87	63.1
15	83	82.5	90.5	98	98	99.4	101.9	104	104.7 ?	?	?	?	?	104.5	104.4	103.5	103.6	103	103.9	103.7	104.4	104.8	104.9 ?	?	100.1 ?
16	?	?	104.3 ?	104.7	105 ?	104.9 ?	103	102.2	102.9	103.7	103.8	104.1	103.8	104.1	104.2	104.7	104.4	104.4	104.7	104.9	104.9 ?	?	?	?	104.2 ?
17	?	?	?	?	?	?	?	104.6 ?	103.9	103.5	102.4	101.7	101.7	101.9	100.7	100.2	100.3	103.4	104.7	?	104.9 ?	104.6	104.7	104.8	103 ?
18	104.8	104.8	104.9 ?	105 ?	104.9 ?	104.8	103.8	102	100.2	98.2	94.3	90.6	86.5	83.4	80.4	77.3	78.8	85.8	92.2	95.8	97.9	99.8	101.2	102.6	95.8
19	103.2	99.9	101.7	99.5	99.6	101.3	101.4	101.5	98.1	79.6	75.1	74	72.5	69	66.2	64.6	69.9	75	84.2	91.3	94.8	98	97.2	97.9	88.1
20	98.5	99.8	101	101.2	99.9	101.5	102.7	101.1	97.8	89.9	81.1	78.6	77	76.2	72.7	73.1	72.6	75.5	80.4	83.8	87.6	90.5	92.2	95.5	88.7
21	97.5	99	100.1	100.8	101.5	100.5	95.4	89.8	85.1	77.9	68.7	64.8	69.1	71.5	73.5	77	87.9	94.8	97.5	98.6	98.7	99.8	99.9	100.4	89.6
22	100.3	101.1	101.8	103.5	104.6	?	?	?	?	?	?	?	94	84.4	80.5	88.9	103	103.6	104.7	104.5	100.3	97.3	96.1	97.7	98 ?
23	100.8	98.8	95.1	98.3	98.6	96.1	92.5	84.7	80.4	73.8	68.1	66.8	74.6	64.7	53	47.6	46	46.2	51.7	55	58.8	59.7	62.5	67.5	72.6
24	73.5	74.4	75.2	75	80.5	85.2	88	81.5	78.7	59.1	45.1	44.5	45.4	48.3	46.8	42.4	44.5	53.2	64.3	70	74.4	78.2	80.2	80.6	66.2
25	78.3	80.3	73.4	72.2	74.2	72.9	75.8	76.6	72.1	68.3	69	68	64.4	64.7	63.7	64.7	67.1	70.9	73.9	74.6	73	71.7	71.3	69	71.2
26	68.3	69.5	84.5	99.2	102.8	103.3	103.3	102.1	102.3	103.4	100.5	98.1	98.3	98.3	101.8	103.7	104.4	104.6	104.3	103.2	103.6	103.6	103.5	103.7	98.8
27	104.3	104.3	104.8 ?	104.9	?	?	105 ?	104.7	104.7	104.3	104.1	104.1	104.1	103.4	103.5	104	104.1	104.2	104.6	104.8	104.5	104.4	104.6	104.6	104.4 ?
28	104	104.3	104.1	104.4	104	104	104.1	104.3	103.9	102.5	101.9	100.8	98.2	96.5	95.1	94.4	95.6	96.7	97.9	97.7	98.2	97	97	96.6	100.1

Avg	85.2	85.4	87	87.9	87.9	88.3	89.5	89.2	85.6	79.4	75.1	72.8	72.9	72.7	70.6	71.3	73	75.9	79.4	80.5	83.3	84.1	85.1	86	82.3
S D	18.7	18.2	18.4	18.5	17.6	16.9	16	15.9	17.7	20.3	22.4	23.8	24.1	24	23.9	24.5	25.2	24.3	23.2	22.1	21.1	20.6	20.2	19.2	18.2
S/A	0.22	0.21	0.21	0.21	0.2	0.19	0.18	0.18	0.21	0.26	0.3	0.33	0.33	0.33	0.34	0.34	0.35	0.32	0.29	0.27	0.25	0.24	0.24	0.22	0.22
Min	32.1	35.5	32.9	32.4	31.8	34.1	36.4	37.5	34.4	28.3	26.6	24.6	25.5	26.6	26.8	26.7	27	29	26.1	25.1	26	27.4	29.6	29.3	32.4
Max	104.8	104.8	104.9	105	105	104.9	105	104.7	104.7	105	104.1	104.1	104.1	104.5	104.4	104.7	104.4	104.6	104.7	104.9	104.9	104.8	104.9	104.8	104.4
n	287	286	281	291	271	274	295	305	303	290	295	300	312	324	324	335	336	336	336	323	323	324	319	305	7380

Data Recovery: 0.0% missing; 8.5% failed QC -- 8064 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
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

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	3.8	3.8	3.8	3.7	3.6	3.4	3.2	2.9	2.7	2.7	2.9	3.4	3.6	3.9	4.8	5.8	6.1	5.9	4.5	3.9	4.6	4.9	5	4.6	4.1
2	3.2	2.2	1.4	0.8	0.2	-0.4	-0.8	-0.9	0.6	3.1	5.4	8.2	10.2	11.3	11.9	12.5	12.1	10.3	8.1	6.3	5.6	5.9	5.2	4	5.3
3	3.4	2.9	2.2	1.7	1.7	1.8	2.1	2.4	4	6.6	9.2	11.8	13.9	14.9	15.5	15.6	14	12.1	10.7	10.8	11.7	12	11.4	11.2	8.5
4	11.2	11.1	11.3	11.6	11.8	12.2	12.6	13.3	14.2	14.7	15.1	14.4	13.8	14.4	16.1	18.3	18.8	17.5	14.5	11.9	9.7	7.8	6.6	5.5	12.8
5	4.2	4	4.2	3.8	2.5	0.9	-0.2	-0.6	1.4	4.3	7	9.2	10.6	11.1	11.1	11.2	9.9	6.8	3.9	2.2	1.7	1.4	1	0.6	4.7
6	0.2	-0.8	-1.5	-1.4	-1.1	-0.6	-0.4	0	0.8	1.8	2.9	4.2	5.8	7.2	7.7	7.8	7.2	6.4	5.9	5.8	5.5	4.7	4.4	4.3	3.2
7	4.6	5	5.3	5.3	4.9	3.7	2.6	2.2	2	1.7	1.9	2.8	4.3	4.9	4.6	4.1	4.1	3.7	2.9	2.1	1.3	0.8	0.8	0.5	3.2
8	0.3	0	-0.2	-0.8	-1.7	-2.3	-2.9	-2.9	-1.5	0.6	2	3.8	5.8	7.2	7.2	6.7	6.5	5.1	2.3	0.2	-1.3	-2.1	-2.5	-2.8	1.1
9	-2.6	-2.5	-2.7	-2.9	-3	-2.9	-2.5	-1.8	-0.6	0.9	2.8	4.3	5.9	7.4	7.8	8.7	9.5	9	5.9	2.7	1	0.6	0.1	-0.3	1.9
10	0.4	1.3	1.6	2.4	3	2.9	2.3	2	2.1	2.5	3.2	4.3	5.2	5.7	5.6	5.1	4.8	4.8	4.6	4.1	3.7	3.4	3	2.7	3.4
11	2.2	2	1.6	1.1	0.4	0	-0.5	-0.7	1.2	3.9	6.3	8.1	9	9.6	9.9	10.5	10.8	10.2	8	6.2	5.7	5.2	4.8	4.3	5
12	3.8	3.7	3.4	3.1	2.9	2.9	3.3	3.1	4.6	7.6	10.4	12.3	13.3	13.9	14.1	14.4	14.4	13	9.9	7.2	5.2	3.5	2.2	1.1	7.2
13	0	-1	-1.9	-1.8	-2.1	-2.2	-2.5	-2.2	0.1	3	5.3	6.6	7.6	8.2	8.7	9.2	9.6	9.3	7.6	6.3	5.3	4.8	4.6	4.5	3.6
14	4.1	3.5	3	2.6	2	1.4	0.5	-0.1	0.8	3.9	7.8	9.9	11.1	12	12.5	12.3	11.7	11.3	10.7	10.1	9.6	8.9	8.3	7.5	6.9
15	7.3	7.3	7	6.4	6.2	6.5	6.7	6.8	7	7.3	8	8.9	9.5	9.6	9.4	8.4	6	4.8	4.3	4	3.7	3.3	3.2	3.2	6.4
16	3.6	3.8	3.7	3.7	3.5	3.4	3.3	3.3	3.4	3.6	3.9	4.3	4.7	5	5	5	4.9	5	5.2	5.4	5.7	6.1	6.6	7.4	4.6
17	7.9	7.8	7.7	7.4	7	6.6	6.2	5.7	4.9	3.9	3.3	3.5	3.4	3	2.9	2.5	1.9	1.2	0.4	-0.1	-0.4	-0.5	-0.6	-0.7	3.5
18	-0.8	-0.9	-0.9	-1	-1.1	-1.2	-1.2	-1.1	-0.9	-0.3	0.5	1.8	3.7	5.4	6.5	7.3	7.4	6.1	3.6	1.6	0.2	-0.6	-1.2	-1.8	1.3
19	-2	-1.9	-1.8	-1.6	-1.1	-0.7	-0.7	-0.7	0.7	4.4	7.5	9.4	11.2	12.3	13.2	13.8	14	12.1	9	7.1	5.7	4.4	4.2	5.2	5.2
20	6.1	6.6	6.5	6.5	6.7	6.8	6.7	6.7	6.9	7.7	9.5	10.3	10.4	10.6	10.6	10.9	10	9	7.4	6.1	5.5	5.3	5.1	4.4	7.6
21	3.4	2.8	2.7	2.4	2.2	1.9	2.1	2.9	5.8	8.9	11.9	14.2	15.7	15.7	15.8	15.4	14.2	12.4	11.3	10.5	10.1	9.8	9.5	9.2	8.8
22	9.2	9.2	9.1	8.8	8.5	8.3	8.2	8.2	8.7	9.6	11.4	14.7	19.2	23.5	25.5	25.8	21.3	17.8	16.6	16.1	16	16	16.1	16.4	14.3
23	17.1	17.9	17.6	17.6	17.5	17.3	16.9	16.5	17.2	18	17.9	16.8	15	13	12.1	11.8	11.8	11.5	9.7	7.9	6.6	5.7	4.7	3.6	13.4
24	2.2	1.5	0.9	0.3	-0.4	-1.5	-2.4	-1.6	2.3	6.5	9.8	12.4	14.5	15.9	16.9	18.2	18.9	18.6	16.3	13.9	12.5	11.8	11.6	11.3	8.8
25	11.3	10.9	10	9	7.9	6.9	6	5.5	6	7	7.8	8.5	8.7	8.3	7.8	7	6.2	5.1	3.9	3.2	2.8	2.6	2.5	2.5	6.6
26	2.6	2.5	2.3	1.5	0.9	0.7	0.7	0.8	1	1.4	2.1	3.4	4.5	5.3	5.5	5.5	5.2	4.9	4.6	4.3	4.1	3.9	3.7	3.7	3.1
27	3.6	3.6	3.8	3.9	4	4.1	4.3	4.6	5	5.6	6.2	6.4	6.5	6.6	6.5	6.5	6.3	6.1	5.8	5.7	5.7	5.7	5.7	5.9	5.3
28	5.8	5.2	4.8	4.5	4.2	4	3.7	3.4	3.3	3.5	3.7	4.2	4.8	5.5	6.1	6.4	6.1	5.4	4.7	4.2	4	3.9	3.7	3.7	4.5

Avg	4.1	4	3.7	3.5	3.3	3	2.8	2.8	3.7	5.2	6.6	7.9	9	9.7	10.1	10.2	9.8	8.8	7.2	6.1	5.4	5	4.6	4.3	5.9
S D	4.3	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.3	4.1	4.2	4.3	4.4	4.7	5	5.2	4.9	4.5	4.1	4	4	4.1	4.1	4.2	3.4
S/A	1.05	1.13	1.21	1.28	1.39	1.52	1.67	1.65	1.16	0.8	0.64	0.54	0.49	0.48	0.49	0.51	0.5	0.51	0.57	0.65	0.74	0.81	0.88	0.96	0.58
Min	-2.6	-2.5	-2.7	-2.9	-3	-2.9	-2.9	-2.9	-1.5	-0.3	0.5	1.8	3.4	3	2.9	2.5	1.9	1.2	0.4	-0.1	-1.3	-2.1	-2.5	-2.8	1.1
Max	17.1	17.9	17.6	17.6	17.5	17.3	16.9	16.5	17.2	18	17.9	16.8	19.2	23.5	25.5	25.8	21.3	18.6	16.6	16.1	16	16	16.1	16.4	14.3
n	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	8064

Data Recovery: 0.0% missing; 0.0% failed QC -- 8064 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
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

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	0.4	0.4	0.4	1.4	1.1	1.3	2	1.5	2.6	2.5	3.5	4.3	3.7	3.3	2.7	2.6	1.9	1.1	1.3	1.8	1.1	1.2	1.8	1.6	1.9
2	1.4	1.4	1.3	1.4	1	1.4	1	1.7	1.9	2.4	2.2	2.8	3.8	4.4	3.5	3.5	1.8	0.9	0.3	0.5	2.1	0.8	0.2	0.8	1.8
3	0.3	0.3	0.5	1.5	0.5	1.7	2.6	2	2	2.6	2.6	2.7	3.3	3.3	3.4	3	2.7	1.9	1.6	2.8	3.3	3.2	3.1	2.9	2.2
4	3.1	3.5	3.4	3.2	3.8	3.7	4.2	5.2	5.7	5.4	5	4.7	5.5	5	6.2	6.4	4.9	3.7	3.5	2.9	2.6	2.3	1.9	1	4
5	1.8	2.1	2.2	1.2	0.9	1	1.1	1.8	2.4	2.5	2.6	2.3	2.6	2.9	2.5	2.9	3.3	2.8	2	1.5	1	1	0.7	1.2	1.9
6	0.9	0.3	0.9	0.9	1	1	1.5	1.3	1.1	2.4	2.7	3.1	3	3.7	4.3	4.5	4.2	3.5	3.6	3.7	2.9	3.2	2.9	3.3	2.5
7	2.7	3	3.3	2.6	4.4	4.8	3.7	3.8	4.1	3.3	2.5	2.7	2.5	2.5	2.2	1.8	2	1.4	0.7	0.1	0	0	0	0.5	2.3
8	1.6	2.1	1.4	0.9	0.9	0.6	0	0.1	2.6	3	2.4	2.2	2	2.1	2.1	1.6	1.9	2	2.2	1.2	0.8	0.7	0.4	0.6	1.5
9	1	0.4	0.3	0.3	0.7	0.8	1	1.3	1.4	2.3	3	3	2.8	3.4	3.2	2.8	1.8	1	0.1	0.1	1.1	0.7	0.4	0.2	1.4
10	0.7	0.8	0.8	0.9	0.5	1.6	2.2	2.4	3.2	1	0.8	1.8	0.8	2	2.9	4.1	4.5	5.2	4.3	3.8	3.9	3.6	3.7	3.4	2.5
11	3.7	3.1	3.2	2.4	2.1	1.8	1.6	1.7	2.9	3.5	3.9	4.4	4.6	4.6	4.2	4.9	4.4	3.3	2.5	2.7	3.1	3.3	3.2	3.3	3.3
12	4	3.2	3.1	2.9	2.9	3.5	3.7	3	4.6	5.8	7.1	8.3	7.7	7.4	6	5.1	5.4	4.5	3.6	3.1	2.7	2.4	2.3	1.9	4.3
13	2.2	1.2	2.2	1.9	2.1	1.7	2.2	2.7	3	4.1	5.2	5.6	5.2	5.7	6.4	7.3	6.1	4.2	3.6	3.1	3.9	3.5	3.8	3.7	3.8
14	2.5	2.5	2.2	1.5	1.4	0.5	0.4	0.3	0.3	0.4	1.4	1.9	2.1	2.2	2.3	2.5	3	2.3	0.9	1.7	0.7	1.3	1.3	1.2	1.5
15	1.3	1.9	1.8	1.7	1.6	1.4	1.3	1	0.8	0.4	0.3	1.2	1.7	1.4	2.4	5	4.5	4.8	5.2	5.5	5.9	5	5.2	4.6	2.8
16	4.7	4.7	6.3	5	4.8	6	6.9	6.4	6	5.9	6.5	6.4	7.6	8.1	7	7.1	7.5	6.5	7.1	5.9	6	5.2	4.3	3.6	6.1
17	4.1	3.9	3.2	2.4	1.9	1.8	2.5	2.6	2.5	2.9	3.1	2.5	3.1	2.4	2.7	2.4	1.7	1.7	0.5	0	0	0	0	0	2
18	0	0	0	0	0	0	0	0	0	1.1	2.3	2.4	2.2	2.2	2.5	2.9	2	1.9	1.5	0.4	0	0	0	0	0.9
19	0	0	0	0.1	0	0.2	0	0	0.5	1.4	2.4	3.2	2.7	2.6	2.1	2.4	2.3	2.5	2	0.9	0	0.2	1.2	1.6	1.2
20	1.8	1.4	0.4	0.8	0.6	0.2	0.5	0.7	1.4	2.7	3.2	4	4	3.9	3.3	2.6	2.3	2	2.1	1.6	1.4	0.9	0.6	0.5	1.8
21	0.5	0.7	0.4	0.8	0.5	1.4	1.1	1.6	2.7	2.9	2.9	2.4	3.1	2.7	2.8	2.7	2.6	2.1	1.8	2.3	2.4	1.5	1.9	2.3	1.9
22	1.6	1.6	1.3	1.2	0.5	0.8	0.5	1	2.3	2.2	2.5	3.5	5.4	6.2	7.2	6.4	3.1	2.2	2	3.8	4	5.6	3.9	4.3	3
23	5.9	5	4.9	3.6	3.2	4	5.2	6.9	7.2	9.2	9.1	10.3	9.3	9.9	10.1	9.4	7.6	6.9	4	4.1	3.8	3.9	2.7	1.4	6.1
24	1.8	1.6	1.3	1.3	0.6	0.4	0.6	2.4	3.4	4.2	4.3	4.5	5.1	6	5	5.6	4	2.7	2.3	2.3	1.8	2.2	2.1	2.3	2.8
25	2	2	3.7	3.6	3.2	3.5	4.1	3.9	5.3	6	6	5.9	5.7	5	4.7	4.7	4.4	3.8	3.7	4.1	4.1	3.8	4.4	4.4	4.2
26	4.4	4.1	4.6	3.4	2.6	2.4	2.4	2.5	2.3	2.5	2.5	2.4	2.5	2.7	2.7	2.6	2.9	2.9	2.4	2.6	3	3.1	2.8	2.3	2.9
27	2.1	2.1	2.6	2.6	2.7	2.7	3.1	2.8	2.5	3.6	3.9	4	4.3	4.8	4.5	4.8	4.9	5.2	5.1	4.5	4.4	4.2	4	4.4	3.7
28	4.9	5.6	5	4.5	4.2	3.7	3.1	3.3	3.3	3.5	3.3	3.5	3.1	2.8	2.4	1.9	1.2	1.5	1.2	0.5	0.3	0.4	0.2	0.1	2.6

Avg	2.2	2.1	2.2	1.9	1.8	1.9	2.1	2.3	2.8	3.2	3.5	3.8	3.9	4	4	4.1	3.5	3	2.5	2.4	2.4	2.3	2.1	2.1	2.7
SD	1.6	1.6	1.7	1.3	1.4	1.5	1.7	1.7	1.7	1.9	1.9	2	2	2.1	2	1.9	1.7	1.6	1.7	1.6	1.8	1.7	1.6	1.5	1.3
S/A	0.73	0.74	0.79	0.67	0.79	0.79	0.81	0.76	0.63	0.6	0.55	0.54	0.5	0.51	0.5	0.48	0.49	0.53	0.65	0.68	0.74	0.75	0.76	0.73	0.48
Min	0	0	0	0	0	0	0	0	0	0.4	0.3	1.2	0.8	1.4	2.1	1.6	1.2	0.9	0.1	0	0	0	0	0	0.9
Max	5.9	5.6	6.3	5	4.8	6	6.9	6.9	7.2	9.2	9.1	10.3	9.3	9.9	10.1	9.4	7.6	6.9	7.1	5.9	6	5.6	5.2	4.6	6.1
n	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	8064

Data Recovery: 0.0% missing; 0.0% failed QC -- 8064 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
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

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	232	223	236	227	232	237	249	217	221	227	232	228	226	229	232	237	235	251	241	244	239	240	235	241	233
2	235	230	234	233	234	231	227	217	231	228	227	231	215	218	226	216	209	184	159	167	183	175	113	111	218
3	121	103	340	337	11	11	22	23	37	52	45	51	68	77	57	66	70	77	107	129	145	140	143	147	76
4	146	149	156	149	145	138	141	142	146	142	155	158	152	164	215	217	222	229	236	243	239	253	246	241	176
5	248	255	260	245	217	199	174	194	227	245	274	284	245	226	240	5	23	30	34	35	12	4	14	15	277
6	2	337	328	333	335	329	348	350	1	17	11	22	25	22	23	27	23	24	5	7	338	329	335	331	5
7	338	336	332	308	273	286	304	274	287	270	263	275	268	255	254	260	252	244	236	238	1	184	168	182	283
8	217	228	239	239	238	238	258	302	335	350	344	23	85	135	84	136	141	120	108	117	113	114	151	174	109
9	180	168	146	151	160	166	186	209	187	193	214	218	225	210	198	183	164	173	104	80	73	71	96	307	193
10	352	50	33	350	342	332	355	28	30	13	358	33	196	242	243	233	221	221	216	216	217	221	224	219	238
11	211	200	208	217	198	190	193	212	219	221	221	218	213	192	176	171	173	167	145	158	150	157	158	155	189
12	172	185	183	182	174	183	187	175	186	213	208	218	222	218	217	230	229	251	245	250	246	250	245	242	213
13	218	216	239	241	237	241	226	218	229	222	215	207	209	204	210	207	209	202	197	179	185	203	213	217	211
14	216	222	221	210	182	175	332	343	13	92	135	186	190	186	178	182	184	202	208	216	186	52	65	68	189
15	87	88	72	90	88	73	57	49	28	66	179	225	250	261	294	327	319	325	332	332	335	342	340	351	342
16	356	348	4	351	356	0	4	4	1	360	357	354	1	3	352	348	349	343	346	341	338	338	337	320	352
17	290	289	285	268	263	258	252	262	258	270	271	261	245	270	267	258	261	267	249	0	0	0	0	0	268
18	0	0	0	0	0	0	0	0	0	219	224	249	240	239	247	248	248	243	236	235	355	183	0	0	241
19	128	154	116	91	55	96	0	177	115	113	124	113	117	166	112	116	84	77	82	87	139	129	161	166	116
20	195	179	188	219	203	198	230	260	287	332	357	348	336	348	357	1	7	20	22	27	38	341	322	335	347
21	322	326	339	307	350	30	28	33	38	51	45	51	40	37	23	22	19	6	357	353	348	319	312	312	15
22	325	4	322	24	53	49	38	57	66	71	98	118	122	131	142	175	210	172	135	114	132	120	129	127	126
23	141	144	144	143	145	153	165	169	170	172	172	188	199	196	204	210	218	221	222	214	209	214	221	209	186
24	194	191	200	188	160	147	106	54	56	68	96	113	127	138	140	145	147	139	133	136	134	135	139	155	129
25	191	272	317	315	325	334	337	331	334	332	342	331	348	350	351	343	340	339	341	346	345	343	333	344	336
26	341	340	332	327	312	297	292	294	292	310	334	334	340	328	316	314	324	324	313	306	318	306	312	317	319
27	307	311	299	301	303	312	324	323	333	350	346	342	344	347	340	339	332	325	335	327	322	322	308	284	326
28	283	289	286	282	280	274	271	276	283	280	275	285	288	287	289	304	305	301	352	328	341	19	360	312	286

Avg	241	258	280	273	259	280	292	269	281	268	246	239	223	213	228	235	253	271	304	298	282	285	274	266	251
n	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	8064

Data Recovery: 0.0% missing; 0.0% failed QC -- 8064 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
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	1.5	1.5	1.4	2.6	2.5	3.1	4.4	2.9	4.9	5.1	6.8	7.6	6.3	5.9	5.2	5.5	4.4	2.6	3.1	3.7	2.8	3.3	3.9	3.8	3.9
2	3.2	3	2.9	3	2.7	3	2.6	3	4.2	4.1	4.4	5.3	6.4	6.9	6	5.4	2.9	1.5	0.5	0.8	2.8	1.3	0.4	1.5	3.2
3	0.7	0.6	0.7	2	1.1	2.5	3.8	3.2	3.1	3.7	3.7	3.8	4.8	4.9	5	4.4	3.8	2.8	2.5	4.5	5.4	4.8	4.7	4.8	3.4
4	5	5.4	5.4	5.1	5.9	5.8	7	7.7	9.3	8.3	8	7.6	8.2	7.5	10.5	10.4	8.5	6.3	6.1	5.2	4.6	4.4	3.7	2.1	6.6
5	3	3.7	3.6	2.1	1.4	1.6	1.6	2.4	4.5	5	4.8	4.2	4.8	5.2	5.2	4.7	4.6	4.1	2.9	2.2	1.7	1.5	1.2	1.9	3.2
6	1.3	0.6	1.2	1.2	1.5	1.5	2.1	1.9	1.9	3.7	3.9	4.6	4.8	5.6	6.5	6.6	6.3	5.2	5.3	5.6	4.4	4.6	4.3	5	3.7
7	4.4	4.5	5.4	4.2	7	7.8	5.9	6.9	6.9	5.9	5.2	5.3	5.2	5.1	5.3	3.9	4.2	3.3	2.1	0.6	0	0.2	0.4	1.3	4.2
8	2.9	4	3.2	2.4	2	1.8	0.3	0.6	4.8	4.5	3.8	3.7	3.7	3.6	3.4	3	3.2	3	3.2	2.1	1.4	1.2	0.8	1	2.6
9	1.5	0.9	0.7	0.8	1.3	1.2	1.6	2	2.3	3.7	4.8	5	5	5.2	5.3	4.4	2.8	1.7	0.3	0.4	1.6	1.1	0.7	0.5	2.3
10	1.1	1.3	1.4	1.6	0.9	2.4	3.6	3.6	5	1.9	1.7	2.9	1.9	4.2	5.3	7.6	8	8.5	7	6.2	6.4	5.6	5.9	5.6	4.2
11	5.6	5	5.1	4	3.6	3	2.8	2.9	4.7	6.1	6.6	6.8	7.2	6.7	6.4	7.5	7.1	5.3	4.1	4.2	4.9	5.2	4.9	4.9	5.2
12	5.6	4.7	4.2	4.2	4.3	5.1	5.5	4.7	6.8	8.9	11.3	12.8	12	11.5	9.8	9.5	9.7	8.5	6.8	5.9	4.8	4.3	4.1	3.4	7
13	3.2	2	4	3.4	3.8	3.1	3.6	4.6	5.9	7.4	8.3	8.6	8.1	8.8	10	10.6	9	6.5	5.1	4.5	5.3	5.2	5.4	5.7	5.9
14	3.7	3.9	3.6	2.2	1.8	0.8	0.8	0.6	0.7	1	2.4	3	3.5	3.5	3.5	3.9	4.2	3.9	1.5	2.8	1.4	1.9	2	1.9	2.4
15	1.9	3.1	2.7	2.6	2.6	2.1	2.1	2	1.5	0.8	0.8	2.2	3.5	3.2	4.2	8.1	7.3	7.9	8.5	9	9.1	8.1	8.5	7.6	4.6
16	8	7.7	10.1	7.9	8	9.3	10.7	9.8	9.3	9.3	9.9	10	11.9	11.9	10.9	10.7	11.4	10.3	11.3	9.9	9.1	8.1	6.8	6.2	9.5
17	6.5	6.3	5.9	4.8	4.2	4.5	5.4	5.3	5.2	5.6	6	5.3	6	5.1	5.4	5	4.1	3.7	1.1	0	0	0	0	0	4
18	0	0	0	0	0	0	0	0	0	2.4	4.6	4.6	4.5	4.4	5.1	5.2	4.1	3.8	3	1.3	0	0.1	0	0	1.8
19	0.2	0.3	0	0.2	0	0.5	0	0.2	1.1	2.5	3.6	4.5	4.4	4.4	3.5	4	3.6	3.5	2.8	1.5	0.2	0.6	2	2.5	1.9
20	2.8	2.3	0.9	1.4	1.2	0.6	1.1	1.5	3	4.6	5	6.3	6.2	5.7	5.3	4.1	3.5	2.9	3.1	2.5	2.4	1.6	1.2	1	2.9
21	1	1.2	0.8	1.2	1	1.9	1.7	2.6	4	4.3	4.1	3.6	4.6	4	4.1	4.1	3.9	3.3	2.9	3.6	3.7	2.6	3.1	3.7	3
22	2.7	2.6	2.3	1.9	1.1	1.5	1.3	1.6	3.4	3.2	3.9	5.5	8.4	9.7	10.8	10.7	5.7	3.8	3.7	6.1	6.1	8.4	6.5	6.6	4.9
23	9.4	8	8.2	5.8	5.2	6.2	8.3	10.4	11.1	14.2	14.2	16	14.2	15.1	15.2	15	12.6	11.8	7.3	7.1	6.2	6	4.9	2.3	9.8
24	2.5	2.3	1.8	1.8	1	0.6	0.8	3.1	4.8	6.1	6.2	7	8	9.1	8	8.4	6.4	4.1	3.7	3.4	2.9	3.4	3.1	3.4	4.2
25	3.3	3.2	6.1	5.5	5.3	5.8	6.1	5.8	8.5	9.1	8.7	8.8	8.8	8.1	7.3	7.1	6.8	6.2	5.6	6.3	6.4	5.9	6.5	7	6.6
26	6.9	6.3	7	5.8	4.2	3.8	4	4.4	3.8	4	4.4	4.2	4.5	4.6	4.5	4.6	4.8	4.9	4.7	4.6	5.2	5.3	4.9	3.9	4.8
27	3.7	4.1	4.5	4.5	4.5	4.9	4.9	5.1	4.5	6	6.3	7	7.1	7.7	7.3	7.9	7.9	8.6	8.7	7.4	7.2	7.1	6.4	7.1	6.3
28	7.9	8.7	7.8	7.5	7	6.2	5.6	5.7	5.7	6.2	5.5	5.9	5.2	4.6	4.3	3.8	2.9	2.9	2.6	1.6	1.2	1.2	0.9	0.7	4.7

Avg	3.5	3.5	3.6	3.2	3	3.2	3.5	3.7	4.7	5.3	5.7	6.1	6.4	6.5	6.5	6.6	5.8	5	4.3	4	3.8	3.7	3.5	3.4	4.5
SD	2.5	2.4	2.7	2.1	2.2	2.4	2.7	2.7	2.7	2.9	2.9	3	2.8	2.9	2.8	2.9	2.7	2.6	2.6	2.6	2.7	2.6	2.4	2.3	2
S/A	0.7	0.7	0.74	0.65	0.73	0.74	0.76	0.72	0.57	0.55	0.51	0.49	0.44	0.44	0.43	0.44	0.45	0.53	0.61	0.65	0.7	0.71	0.71	0.68	0.45
Min	0	0	0	0	0	0	0	0	0	0	0.8	0.8	2.2	1.9	3.2	3.4	3	2.8	1.5	0.3	0	0	0	0	1.8
Max	9.4	8.7	10.1	7.9	8	9.3	10.7	10.4	11.1	14.2	14.2	16	14.2	15.1	15.2	15	12.6	11.8	11.3	9.9	9.1	8.4	8.5	7.6	9.8
n	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	8064

Data Recovery: 0.0% missing; 0.0% failed QC -- 8064 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
36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5

February 2003

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	1012	1012	1011	1010	1009	1008	1008	1009	1009	1009	1007	1007	1006	1006	1006	1006	1006	1007	1007	1008	1008	1008	1009	1009	1008
2	1009	1009	1010	1010	1010	1011	1011	1012	1012	1012	1012	1011	1010	1009	1009	1009	1009	1010	1010	1011	1011	1011	1011	1011	1011
3	1011	1011	1011	1012	1012	1012	1012	1013	1014	1014	1014	1013	1012	1011	1010	1009	1008	1008	1008	1008	1008	1007	1007	1007	1011
4	1006	1005	1005	1004	1003	1002	1001	1001	1000	999	1000	1000	999	999	1000	1001	1002	1004	1005	1007	1008	1009	1009	1010	1003
5	1010	1010	1010	1011	1011	1012	1013	1014	1016	1016	1017	1017	1017	1017	1017	1018	1019	1020	1021	1022	1022	1023	1023	1024	1017
6	1024	1024	1024	1024	1025	1025	1025	1026	1028	1028	1028	1027	1026	1025	1024	1023	1022	1021	1021	1020	1019	1018	1016	1015	1023
7	1013	1012	1009	1007	1007	1007	1006	1008	1007	1008	1009	1009	1009	1010	1010	1011	1011	1012	1013	1014	1014	1015	1015	1016	1011
8	1016	1016	1017	1017	1018	1019	1020	1021	1022	1022	1022	1022	1021	1020	1019	1019	1019	1020	1020	1020	1020	1020	1020	1020	1020
9	1020	1020	1019	1019	1019	1019	1019	1020	1021	1021	1021	1021	1020	1019	1019	1018	1018	1017	1017	1017	1017	1017	1017	1017	1019
10	1016	1015	1014	1012	1013	1012	1010	1009	1008	1007	1005	1002	1001	1000	1000	1001	1002	1004	1005	1007	1008	1009	1010	1010	1007
11	1011	1011	1012	1012	1012	1013	1014	1015	1015	1016	1016	1015	1014	1013	1012	1011	1011	1011	1011	1011	1012	1012	1011	1011	1013
12	1011	1011	1011	1011	1010	1011	1011	1011	1012	1012	1011	1010	1010	1010	1009	1010	1010	1012	1013	1014	1015	1015	1016	1016	1012
13	1016	1016	1016	1016	1017	1017	1018	1018	1019	1019	1019	1019	1017	1016	1015	1015	1015	1015	1016	1016	1016	1017	1018	1018	1017
14	1018	1018	1019	1019	1019	1020	1021	1021	1022	1022	1022	1021	1020	1020	1020	1020	1020	1020	1020	1021	1020	1019	1019	1018	1020
15	1018	1018	1017	1016	1015	1015	1014	1014	1015	1015	1015	1015	1015	1015	1016	1017	1018	1019	1020	1021	1022	1023	1023	1023	1017
16	1023	1023	1023	1023	1024	1024	1023	1023	1023	1023	1022	1021	1020	1018	1018	1017	1016	1016	1015	1015	1013	1012	1010	1008	1019
17	1008	1008	1007	1007	1007	1008	1008	1009	1009	1010	1009	1010	1011	1010	1010	1010	1011	1011	1012	1013	1013	1013	1014	1014	1010
18	1014	1014	1014	1014	1014	1015	1016	1017	1018	1019	1019	1019	1019	1019	1019	1019	1020	1022	1022	1023	1024	1024	1024	1018	
19	1024	1024	1024	1024	1024	1024	1025	1025	1026	1026	1026	1025	1024	1024	1023	1022	1022	1022	1021	1021	1022	1022	1022	1021	1023
20	1021	1021	1021	1021	1021	1022	1022	1023	1024	1025	1025	1025	1025	1024	1023	1024	1023	1023	1023	1023	1022	1023	1022	1022	1023
21	1021	1021	1020	1020	1020	1019	1019	1019	1019	1018	1017	1017	1016	1014	1014	1013	1012	1012	1012	1012	1011	1011	1010	1010	1016
22	1009	1008	1008	1007	1007	1006	1005	1004	1004	1003	1002	1001	999	998	997	998	999	999	998	997	997	995	994	993	1001
23	992	991	990	990	989	989	989	989	990	990	991	993	995	996	998	1001	1004	1007	1010	1012	1014	1015	1017	1018	999
24	1019	1020	1020	1021	1021	1021	1022	1022	1022	1022	1022	1021	1019	1018	1017	1016	1016	1016	1017	1018	1018	1018	1018	1018	1019
25	1018	1019	1019	1019	1020	1021	1022	1023	1024	1025	1025	1025	1024	1024	1024	1024	1024	1025	1025	1025	1025	1025	1025	1024	1023
26	1024	1024	1023	1022	1022	1022	1022	1023	1023	1022	1021	1021	1021	1020	1019	1019	1018	1019	1019	1019	1019	1019	1018	1018	1021
27	1017	1016	1016	1016	1016	1016	1016	1016	1016	1016	1016	1015	1014	1012	1011	1010	1010	1010	1009	1009	1009	1008	1008	1008	1013
28	1008	1007	1008	1008	1009	1010	1012	1013	1013	1015	1016	1016	1016	1016	1017	1017	1018	1018	1019	1020	1021	1022	1022	1023	1015

Avg	1015	1014	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1014	1014	1013	1013	1014	1014	1015	1015	1015	1015	1015	1015	1015
SD	7	7	7	7	8	8	8	8	8	9	9	9	8	8	8	7	7	7	6	6	6	7	7	7	7
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	
Min	992	991	990	990	989	989	989	989	990	990	991	993	995	996	997	998	999	999	998	997	997	995	994	993	
Max	1024	1024	1024	1024	1025	1025	1025	1026	1028	1028	1028	1027	1026	1025	1024	1024	1024	1025	1025	1025	1025	1025	1025	1024	
n	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	8064	

Data Recovery: 0.0% missing; 0.0% failed QC -- 8064 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.