

August 2005

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	18	121	287	549	575	483	811	681	609	707	496	435	179	56	3	0	0	0	0	6010
2	0	0	0	0	0	34	114	253	321	711	852	931	961	850	773	609	425	219	51	3	0	0	0	0	7108
3	0	0	0	0	0	25	146	329	523	699	820	902	777	84	494	294	204	137	51	6	0	0	0	0	5493
4	0	0	0	0	0	29	144	318	541 ?	701	798	957	970 ?	915	789	469 ?	341	211	48	2	0	0	0	0	7230
5	0	0	0	0	0	28	160	347	464	681	837	927	940	898 ?	?	597 ?	384	198	43	0	0	0	0	0	6506 ?
6	0	0	0	0	0	26	146	301	521	682	823	933	998	912	788	606	324	201	50	0	0	0	0	0	7311
7	0	0	0	0	0	35	148	349	528	635	695	739	742	154	305	338	422	213	65	0	0	0	0	0	5368
8	0	0	0	0	0	9	62	208	357	350	456	601	684	446	462	298	119	43	11	0	0	0	0	0	4105
9	0	0	0	0	0	18	173	315	340	147	383	306	74 ?	61 ?	66 ?	103	58 ?	30 ?	13	0	0	0	0	0	2086 ?
10	0	0	0	0	0	10	49	147	299	567	775	917	908	793	740	483	367	185	36	0	0	0	0	0	6278
11	0	0	0	0	0	22	130	319	494	659	723	692	497	1022	785	641	384	187	37	0	0	0	0	0	6592
12	0	0	0	0	0	27	139	299	476	679	497	744	399	553	734	572	378	187	38	0	0	0	0	0	5722
13	0	0	0	0	0	23	126	309	530	700	815	914	928	877	754	590	390	191	32	0	0	0	0	0	7178
14	0	0	0	0	0	28	127	326	526	712	849	918	907	884	771	607	316	159	40	0	0	0	0	0	7171
15	0	0	0	0	0	17	108	273	467	633	766	843	800	353	90 ?	66 ?	80	65	48	0	0	0	0	0	4609
16	0	0	0	0	0	22	80	182	402	647	742	711	573	480	642	399	180	19 ?	14	0	0	0	0	0	5094
17	0	0	0	0	0	10	85	163	233	243	379	172	194	186	460	533	405	188	35	0	0	0	0	0	3285
18	0	0	0	0	0	23	134	324	534	710	841	878	800	712	810	608	387	95	34	0	0	0	0	0	6892
19	0	0	0	0	0	14	71	332	487	460	650	726	779	548	427	364	229	154	28	0	0	0	0	0	5269
20	0	0	0	0	0	18	124	290	502	686	762	597	648	525	383	439	336	149	25	0	0	0	0	0	5482
21	0	0	0	0	0	15	112	270	487	659	796	871	838	845	546	171 ?	?	22 ?	25	0	0	0	0	0	5659 ?
22	0	0	0	0	0	15	104	268	517	696	824	903	766	772	740	503	343	146	26	0	0	0	0	0	6622
23	0	0	0	0	0	7	47	72	131	508	558	589	653	208	253	177	77 ?	31	11	0	0	0	0	0	3320
24	0	0	0	0	0	10	84	290	490	663	757	860	696	747	656	566	373	160	28	0	0	0	0	0	6380
25	0	0	0	0	0	15	127	331	403	615	678	799	863	867	594	517	386	178	31	0	0	0	0	0	6405
26	0	0	0	0	0	14	127	339	529	779	793	770	690	603	576	280	167	67	15	0	0	0	0	0	5748
27	0	0	0	0	0	13	79	132	240	373	564	701	635	468	350	181	185	120	21	0	0	0	0	0	4062
28	0	0	0	0	0	13	115	311	525	700	837	939	936	828	482	509	250	43	17	0	0	0	0	0	6505
29	0	0	0	0	0	18	116	301	465	699	767	880	906	708	539	468	174	73	27	0	0	0	0	0	6141
30	0	0	0	0	0	8	37	185	252	416	457	688	615	727	693	496	246	84	19	0	0	0	0	0	4925
31	0	0	0	0	0	11	68	239	483	630	699	785	869	786	684	459	182	90	12	0	0	0	0	0	5996
Avg	0	0	0	0	0	19	110	271	439	601	699	774	733	627	570	434	285	130	32	0	0	0	0	0	5695
S D	0	0	0	0	0	8	35	71	112	151	149	181	217	272	208	165	117	66	15	1	0	0	0	0	1286
S/A	0	0	0	0	0	0.41	0.32	0.26	0.25	0.25	0.21	0.23	0.3	0.43	0.37	0.38	0.41	0.51	0.46	2.88	0	0	0	0	0.23
Min	0	0	0	0	0	7	37	72	131	147	379	172	74	61	66	66	58	19	11	0	0	0	0	0	2086
Max	0	0	0	0	0	35	173	349	549	779	852	957	998	1022	810	641	435	219	65	6	0	0	0	0	7311
n	0	0	0	0	0	232	372	372	368	371	371	370	354	352	349	354	348	354	300	4	0	0	0	0	4872

Daylight Data Recovery: 0.0% missing; 2.6% exceed the 15% QC threshold -- 5000 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31256F3 Calibration Factor: 7.561 μV/W/m² Calibration Date: 08/2003

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

August 2005

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	15	228	345	584	388	184	409	328	329	511	407	633	299	211	0	0	0	0	0	4872
2	0	0	0	0	0	41	21	81	89	590	540	654	721	562	669	634	585	432	157	0	0	0	0	0	5775
3	0	0	0	0	0	56	290	465	569	628	624	607	431	1 ?	230	80	37	55	29	0	0	0	0	0	4102
4	0	0	0	0	0	68	237	355	508 ?	565	515	662	726 ?	726	688	300 ?	355	368	132	0	0	0	0	0	6207 ?
5	0	0	0	0	0	89	380	579	476	601	682	747	718	697 ?	? 710 ?	512	348	121	0	0	0	0	0	0	6660 ?
6	0	0	0	0	0	28	248	288	442	458	585	682	771	818	795	661	232	341	154	0	0	0	0	0	6503
7	0	0	0	0	0	94	279	437	402	361	451	410	391	7 ?	10	39	512	408	106	0	0	0	0	0	3908
8	0	0	0	0	0	0	1	24	54	5	22	96	128	47	75	20	2	0	0	0	0	0	0	0	474
9	0	0	0	0	0	29	271	196	102	58 ?	188	33	1	0	0	1	0	0	2	0	0	0	0	0	882
10	0	0	0	0	0	0	0	3	20	255	537	649	590	511	610	436	384	292	81	0	0	0	0	0	4369
11	0	0	0	0	0	41	269	494	556	635	573	434	187	736	652	550	393	305	74	0	0	0	0	0	5899
12	0	0	0	0	0	46	220	335	442	570	226	420	136	273	570	532	426	278	68	0	0	0	0	0	4542
13	0	0	0	0	0	51	244	427	595	571	599	731	751	767	736	673	545	405	98	0	0	0	0	0	7193
14	0	0	0	0	0	64	338	583	698	731	744	805	773	830	822	777	350	106	58	0	0	0	0	0	7678
15	0	0	0	0	0	11	102	223	360	410	453	459	355	28	0 ?	1	3	1	20	0	0	0	0	0	2426
16	0	0	0	0	0	5	16	52	224	426	423	211	218	210	361	209	84	0	32	0	0	0	0	0	2472
17	0	0	0	0	0	1	36	25	3	3	8	1	1	1	64	381	665	482	178	0	0	0	0	0	1848
18	0	0	0	0	0	107	426	629	722	721	742	655	509	468	658	692	643	133	88	0	0	0	0	0	7193
19	0	0	0	0	0	24	2	552	451	208	385	324	324	123	93	130	60	104	41	0	0	0	0	0	2822
20	0	0	0	0	0	21	221	422	592	641	550	293	332	259	123	215	343	200	28	0	0	0	0	0	4239
21	0	0	0	0	0	9	146	340	539	611	679	688	549	583	215	0	0	1	12	0	0	0	0	0	4372
22	0	0	0	0	0	32	226	494	677	766	791	795	553	540	627	488	494	330	56	0	0	0	0	0	6869
23	0	0	0	0	0	1	2	1	0	93	71	201	228	3	4	5	0	0	1	0	0	0	0	0	609
24	0	0	0	0	0	0	100	392	443	490	458	636	399	395	439	573	521	282	88	0	0	0	0	0	5217
25	0	0	0	0	0	68	483	673	311	637	528	636	658	782	414	623	707	610	218	0	0	0	0	0	7347
26	0	0	0	0	0	49	419	674	738	861	510	335	259	268	358	24	1	5	0	0	0	0	0	0	4502
27	0	0	0	0	0	0	60	0	2	14	129	241	139	9	10	0	60	156	3	0	0	0	0	0	822
28	0	0	0	0	0	19	417	647	740	794	721	817	815	724	305	540	292	22	0	0	0	0	0	0	6855
29	0	0	0	0	0	86	369	517	527	723	611	610	734	496	214	316	83	62	119	0	0	0	0	0	5468
30	0	0	0	0	0	0	0	40	27	76	82	288	319	431	574	403	142	11	3	0	0	0	0	0	2396
31	0	0	0	0	0	6	47	241	553	623	538	562	695	654	618	469	49	56	15	0	0	0	0	0	5126
Avg	0	0	0	0	0	34	197	340	401	468	456	487	443	396	382	351	294	197	71	0	0	0	0	0	4505
S D	0	0	0	0	0	32	152	225	248	258	230	236	249	294	277	263	244	177	65	0	0	0	0	0	2178
S/A	0	0	0	0	0	0.94	0.77	0.66	0.62	0.55	0.5	0.48	0.56	0.74	0.72	0.75	0.83	0.9	0.92	0	0	0	0	0	0.48
Min	0	0	0	0	0	0	0	0	0	3	8	1	1	0	0	0	0	0	0	0	0	0	0	0	474
Max	0	0	0	0	0	107	483	674	740	861	791	817	815	830	822	777	707	610	218	0	0	0	0	0	7678
n	0	0	0	0	0	232	372	370	368	369	372	370	364	349	354	360	372	371	300	4	0	0	0	0	4927

Daylight Data Recovery: 0.0% missing; 1.5% exceed the 15% QC threshold -- 5000 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25521E6 Calibration Factor: 8.034 μV/W/m² Calibration Date: 06/2002

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

August 2005

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	17	67	128	187	274	300	369	328	265	235	190	99	82	28	3	0	0	0	0	2572
2	0	0	0	0	0	29	110	212	252	230	314	238	167	225	150	138	115	83	32	3	0	0	0	0	2297
3	0	0	0	0	0	23	80	137	176	204	239	260	305	83	304	221	186	116	50	6	0	0	0	0	2389
4	0	0	0	0	0	25	92	168	210 ?	266	344	383	?	?	?	300 ?	198	102	33	2	0	0	0	0	2124 ?
5	0	0	0	0	0	23	69	107	179	210	224	203	296	400 ?	?	217 ?	125	90	29	0	0	0	0	0	2171 ?
6	0	0	0	0	0	23	91	194	249	330	300	273	244	176	169	164	217	100	31	0	0	0	0	0	2562
7	0	0	0	0	0	28	85	166	277	334	283	345	362	149	304	321	172	96	53	0	0	0	0	0	2974
8	0	0	0	0	0	10	62	200	327	349	439	515	552	407	404	289	118	43	10	0	0	0	0	0	3726
9	0	0	0	0	0	16	119	241	282	158	233	229	58 ?	49 ?	54	103	52	28	13	0	0	0	0	0	1634
10	0	0	0	0	0	10	49	147	290	359	294	294	343	327	248	207	183	103	27	0	0	0	0	0	2882
11	0	0	0	0	0	18	71	117	150	168	214	279	304	359	261	282	200	105	29	0	0	0	0	0	2557
12	0	0	0	0	0	25	92	169	214	249	304	351	270	312	279	227	179	115	32	0	0	0	0	0	2819
13	0	0	0	0	0	21	80	140	176	267	281	216	203	172	158	148	131	80	21	0	0	0	0	0	2092
14	0	0	0	0	0	25	68	97	114	156	183	144	160	121	104	98	134	131	34	0	0	0	0	0	1570
15	0	0	0	0	0	19	90	190	262	334	376	416	474	329	90 ?	60	80	65	48	0	0	0	0	0	2833
16	0	0	0	0	0	22	79	169	267	324	376	514	360	283	344	257	134	17 ?	12	0	0	0	0	0	3158
17	0	0	0	0	0	10	78	157	233	243	377	172	183	186	400	262	92	60	18	0	0	0	0	0	2470
18	0	0	0	0	0	18	51	79	104	160	184	256	306	270	290	167	96	52	25	0	0	0	0	0	2059
19	0	0	0	0	0	15	71	107	230	301	300	402	442	431	355	276	206	130	24	0	0	0	0	0	3290
20	0	0	0	0	0	18	70	122	153	197	267	314	320	287	289	306	184	101	24	0	0	0	0	0	2651
21	0	0	0	0	0	16	80	133	175	206	205	223	319	329	373	107 ?	23 ?	19	27	0	0	0	0	0	2235
22	0	0	0	0	0	15	72	109	120	125	132	150	239	292	250	195	126	63	21	0	0	0	0	0	1908
23	0	0	0	0	0	7	47	72	131	431	501	393	430	206	250	177	50 ?	28	11	0	0	0	0	0	2734
24	0	0	0	0	0	10	67	141	238	296	337	263	301	359	293	211	143	92	20	0	0	0	0	0	2772
25	0	0	0	0	0	14	41	69	198	137	215	200	238	167	258	131	79	40	14	0	0	0	0	0	1800
26	0	0	0	0	0	11	46	77	92	143	320	443	447	362	274	268	167	67	15	0	0	0	0	0	2733
27	0	0	0	0	0	15	70	132	240	368	437	451	496	466	343	181	163	81	21	0	0	0	0	0	3465
28	0	0	0	0	0	12	38	63	94	111	204	177	180	192	225	162	116	36	17	0	0	0	0	0	1627
29	0	0	0	0	0	18	50	106	140	159	235	294	223	255	369	264	132	62	19	0	0	0	0	0	2327
30	0	0	0	0	0	8	37	166	240	361	388	411	309	340	242	243	180	82	19	0	0	0	0	0	3027
31	0	0	0	0	0	12	58	142	161	166	226	257	222	209	211	167	163	77	12	0	0	0	0	0	2084
Avg	0	0	0	0	0	17	70	137	199	246	291	304	303	267	260	205	137	76	25	0	0	0	0	0	2501
S D	0	0	0	0	0	6	20	44	63	87	85	104	111	104	90	68	50	32	11	1	0	0	0	0	539
S/A	0	0	0	0	0	0.34	0.28	0.32	0.32	0.35	0.29	0.34	0.37	0.39	0.35	0.33	0.36	0.42	0.44	2.88	0	0	0	0	0.22
Min	0	0	0	0	0	7	37	63	92	111	132	144	58	49	54	60	23	17	10	0	0	0	0	0	1570
Max	0	0	0	0	0	29	119	241	327	431	501	515	552	466	404	321	217	131	53	6	0	0	0	0	3726
n	0	0	0	0	0	210	372	371	368	372	372	372	356	346	345	356	356	365	299	4	0	0	0	0	4865

Daylight Data Recovery: 0.0% missing; 2.7% exceed the 15% QC threshold -- 5000 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17880F3 Calibration Factor: 8.067 μV/W/m² Calibration Date: 07/2002

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

August 2005

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	0.9	0.3	0.3	0.3	0.8	0.5	0.9	1.5	2.2	2.1	2.4	3.3	3.9	3.7	3.7	3.5	2.9	2.5	2	1.5	1.1	0.8	0.4	0.2	1.7
2	0	0.1	0.1	0	0.1	0.1	0.3	0.3	0.5	1	1.4	1.2	1.4	2.2	1.4	1.4	2	1.8	1.4	1	1	0.3	0.7	0.4	0.8
3	0.9	1.2	1.2	1	1	0.9	1.2	1.4	1	1.2	1.2	1.8	2	2.5	1	1.7	0.3	0.9	0.2	0.4	0.2	0.2	0	0.2	1
4	0.3	0.5	0.5	0.9	1	0.7	1.6	0.7	1.3	1.7	2	1.9	1.7	2.3	2.1	2.9	3	3	2.3	1.8	1.2	0.8	0.5	0.2	1.5
5	0	0.4	0.1	0	0	0.2	0	1.1	1.5	1.9	2.2	2.4	2.1	1.9	2.2	1.9	2	2.3	2	1.7	1.5	1	0.9	1.3	1.3
6	1.3	1.1	0.7	0.7	0.5	0.1	0.5	1.6	2	2.3	1.9	2.2	2.3	2.3	2.6	2.2	2.3	2.1	1.4	1.2	0.5	0.1	0.2	0.6	1.4
7	0.8	1	0.9	0.1	0	0.1	0.2	0.5	0.7	1	0.5	0.8	1.6	2.7	0.8	0.3	1.6	2	2.4	0.5	0.7	0.4	0.6	0.5	0.9
8	0.7	0.4	0.1	0.1	0.2	0.2	0.1	0.8	2.1	2.4	2.5	3.4	3.7	3.5	4.2	3.3	1.9	3	0.6	0.4	0.9	0.2	0.5	0.8	1.5
9	1.1	1.8	1.2	1.6	1.5	1.6	1.8	2.8	2.4	1.5	1.2	2.7	2.6	1.2	0.2	0.1	0.8	0	0.1	0.1	0	0	0	0.2	1.1
10	0	0.1	0.6	1.1	0.5	0.8	0.7	0.8	0.3	0.7	0.8	1.4	1.5	1.6	1.4	1.5	1.4	1.8	0.6	0.1	0.2	0.6	0.5	0.8	0.8
11	0.9	1.2	0.7	1.1	1.3	0.6	0.8	0.9	1.4	0.9	1	0.9	1.2	0.8	2	2	2.3	3.1	2.3	1.5	1.5	1.2	0.3	0.7	1.3
12	1.4	1	0.2	0.2	0	0.1	0.3	0.7	0.3	0.9	0.9	1.1	2.4	2.8	3.1	3.2	3.6	3	1.7	2	1.7	1.4	1.3	0.3	1.4
13	0.2	0.5	0.9	0.6	0.1	0.1	0.2	0.9	1.1	1.5	2	2.1	1.9	1.8	2.3	3.1	3.4	3.4	2.1	1.4	1.2	0.7	0.6	0	1.3
14	0.3	0	0	0.1	0	0	0.3	1	1.4	1.1	1.7	2	1.5	1.9	2	1.5	2.4	2.7	1.8	0.8	0.5	0.4	0.8	1.1	1
15	1.1	1.2	1.4	1.1	0.8	0.6	0.6	1.4	1.5	1.2	1.7	1.9	1.9	1.7	3.1	1.6	0.5	0.1	0.2	0	0	0	0.1	0.7	1
16	0.4	0.1	0.4	0.6	1.7	1.3	1.5	1.8	1.7	2.3	2.4	2.2	2.3	1.3	2.1	4	2.8	1.4	0.7	0.2	1.8	0.6	0.3	0.7	1.4
17	1.2	0.6	0.1	0.2	0.6	0.9	1.4	1.7	1.8	3.2	2.3	2.9	2.8	2.2	3.1	3.3	2.7	2.2	1.5	0.7	0.8	0.4	0.5	0.6	1.6
18	0.3	0	0.3	0.6	0.4	0.7	0.7	1.3	1.8	2.9	3.1	3.1	3.4	2.7	3.2	3.5	2.6	2	2.2	1.9	1.5	1	0.6	0	1.7
19	0.1	0.7	0.4	0.5	0.5	0.5	0.2	1.4	2.3	1.6	2.4	1.8	2.1	1.9	3.8	3.3	3.1	2.7	2.2	1.5	1.4	1.2	0.7	1.1	1.6
20	0.3	0.4	0.8	0.3	0	0	0	0.2	0.7	1.1	1.3	1.1	1.3	1.5	2.4	3.2	2.9	2.7	2.5	2.1	1.5	0.9	1	1.1	1.2
21	0.8	0.9	0.5	0.9	0.2	0.2	0.7	1.2	1.1	1.7	1.8	2	2.3	2.6	2.6	4.1	1.6	1.6	0.6	0.5	0.1	0.2	0	0	1.2
22	0.2	0.4	0.3	0.9	0.6	0.3	0.3	1.3	1.7	1.7	1.4	2	1.5	1.2	1.6	1.8	2.1	1.7	0.9	0.4	0.8	1	1.1	1.4	1.1
23	1.1	0.9	0.6	1.1	0.8	0.4	0.1	1.1	2.1	2.6	3	2.6	3.2	3.2	2.7	2.6	2.3	2.5	1.8	1.4	1.1	1	1.1	0.6	1.7
24	1	1.6	1.5	1.9	1.4	1.3	1.6	1.8	2.2	3.8	4.3	4	3	3.2	3.4	3.8	3.2	3	1.8	1.3	1	0.8	0.5	0.6	2.2
25	0.8	0.9	1.2	1.2	1.3	1.2	2	2.2	2.5	3.4	3.6	3.6	3.8	3.3	3.6	2.9	3.2	2.7	1.9	1.4	1.3	0.6	0.7	0.8	2.1
26	0.1	0.2	0.5	0.4	0.5	0.5	0.5	0.7	1.7	2.6	2.1	1.8	1.2	2	2.8	1.8	1.7	1.5	1.7	1.2	1.2	0.6	0.2	0.3	1.2
27	0.2	0.2	0.4	0.6	0.5	0.5	0.6	1	1.6	2.5	3.5	4.2	4.5	4.7	4.3	4.4	3.6	2.9	2	1.5	1.5	1.5	2.1	1.9	2.1
28	1.2	1.1	1	0	0.2	0.3	0.2	0.9	1.3	1.8	2.9	3.1	2.9	3.3	3.8	3.4	3.3	2.3	2.3	1.9	1.3	1.2	1.6	1.7	1.8
29	1	0.6	0.4	0.9	0.8	0.4	0.6	2.2	2.5	2.6	2.8	3.2	3.9	4	3.5	3.2	2.8	2	2.1	2	1.4	1.3	1.4	1.3	2
30	0.7	0.4	0.6	1.2	0.4	0.5	0.4	1.4	3	2.3	1.9	1.8	1.8	2.1	2.7	2.3	2.9	2.8	3.5	2.9	3	3.5	3.3	3.2	2
31	3.1	2.9	3.1	2.8	2.5	2.9	3.4	4	4.6	5.4	6.3	5.8	6.2	5.8	6.3	5.7	3.4	2.2	2.4	2.3	2	2.2	2.2	2	3.7
Avg	0.7	0.7	0.7	0.7	0.6	0.6	0.8	1.3	1.7	2	2.2	2.4	2.5	2.5	2.7	2.7	2.4	2.2	1.7	1.2	1.1	0.8	0.8	0.8	1.5
S D	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.9	1	1.2	1.1	1.1	1.1	1.2	1.2	0.9	0.8	0.8	0.7	0.6	0.7	0.7	0.7	0.6
S/A	0.86	0.84	0.91	0.83	0.9	1.01	0.96	0.58	0.51	0.5	0.52	0.46	0.46	0.43	0.44	0.45	0.36	0.38	0.49	0.61	0.59	0.83	0.9	0.84	0.38
Min	0	0	0	0	0	0	0	0.2	0.3	0.7	0.5	0.8	1.2	0.8	0.2	0.1	0.3	0	0.1	0	0	0	0	0	0.8
Max	3.1	2.9	3.1	2.8	2.5	2.9	3.4	4	4.6	5.4	6.3	5.8	6.2	5.8	6.3	5.7	3.6	3.4	3.5	2.9	3	3.5	3.3	3.2	3.7
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% 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

August 2005

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	328	353	326	325	328	329	350	343	11	38	35	50	50	47	55	58	60	54	50	55	52	44	18	8	40
2	0	352	324	332	335	332	313	344	334	25	57	57	68	69	41	78	163	165	152	145	141	154	163	200	98
3	231	238	251	244	238	237	241	279	297	312	353	31	40	23	239	143	137	134	260	267	313	192	246	252	283
4	281	292	294	308	320	339	1	28	67	77	105	103	97	87	99	89	113	120	126	127	135	127	140	162	97
5	181	165	173	146	147	154	147	151	183	181	198	204	206	194	180	190	170	154	156	170	182	172	208	212	183
6	212	222	214	217	216	216	206	239	226	244	208	212	174	190	216	195	154	132	167	216	221	176	186	210	201
7	224	216	220	231	282	250	266	290	271	207	239	177	117	131	188	58	85	97	127	152	153	142	126	133	148
8	128	138	114	109	29	30	78	119	122	106	113	100	92	122	106	119	115	130	219	9	65	89	88	66	109
9	91	99	81	85	91	93	89	95	106	75	75	63	336	326	316	328	267	243	243	231	0	282	287	302	75
10	0	289	278	276	286	277	287	291	294	297	234	235	245	246	230	186	204	227	188	165	144	158	187	214	237
11	216	236	237	251	238	250	253	288	278	308	281	263	74	256	219	201	161	129	128	132	158	159	172	207	199
12	224	222	198	155	174	224	209	211	198	179	257	143	101	130	128	137	129	129	153	149	154	161	163	170	147
13	204	216	211	214	222	148	231	213	198	202	202	189	171	183	142	136	126	140	151	154	167	159	161	182	165
14	160	241	168	147	3	357	220	196	228	191	142	148	206	183	231	220	140	126	142	194	180	195	188	215	177
15	217	227	231	226	224	217	232	260	253	284	232	247	248	340	125	234	250	56	174	358	181	259	327	348	238
16	317	313	359	60	69	78	85	55	73	89	110	87	125	164	120	116	125	124	101	276	317	5	256	253	98
17	284	279	240	291	298	299	307	327	353	19	21	36	17	11	36	33	29	36	31	19	1	8	332	335	11
18	348	322	313	314	330	353	18	21	45	72	84	78	85	73	81	84	81	68	65	76	86	84	72	54	71
19	54	97	110	97	4	56	57	73	94	134	144	182	182	161	119	139	130	129	124	135	134	142	147	158	132
20	206	234	249	269	0	283	265	282	332	333	308	307	28	71	79	90	87	90	106	118	136	143	125	125	91
21	129	129	143	182	218	200	226	237	254	234	224	222	200	208	83	47	312	306	250	269	165	360	116	0	216
22	283	294	293	306	329	312	332	355	1	12	47	108	61	187	204	235	235	232	236	267	1	15	44	69	337
23	65	48	50	206	116	315	306	308	327	359	353	24	54	56	33	35	51	9	42	36	27	29	44	31	28
24	16	352	351	351	358	347	348	7	35	48	47	47	31	32	38	42	33	45	43	41	37	37	7	0	30
25	331	336	337	337	333	336	349	359	14	24	44	47	49	44	55	56	51	48	52	57	51	49	349	341	31
26	354	342	336	323	332	322	353	32	37	63	63	69	49	69	91	96	93	110	78	62	52	54	351	344	63
27	357	9	345	1	16	37	60	62	69	82	85	94	92	107	104	108	110	108	106	89	72	73	74	70	91
28	69	109	144	255	57	68	58	16	56	68	81	85	77	83	91	92	94	75	70	71	69	71	73	75	80
29	55	13	5	53	49	43	45	62	69	67	63	66	79	83	85	92	90	93	89	84	91	98	100	98	77
30	114	115	118	124	125	126	117	124	131	147	177	168	204	195	184	181	134	133	153	160	160	158	160	164	156
31	172	177	177	190	189	189	194	195	207	222	222	221	222	224	230	234	237	239	243	257	264	273	275	285	220
Avg	187	201	233	252	328	329	325	4	56	65	92	97	92	105	110	110	111	111	115	117	113	117	123	139	108
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% 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

August 2005

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

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	2.2	1	1.3	1.2	1.8	1.3	1.9	3	4.1	3.9	4.5	5.9	6.8	6.7	6.2	5.9	5.1	4.3	3.4	2.9	2.2	1.7	1.1	0.5	3.3
2	0	0.3	0.5	0.2	0.2	0.3	0.9	0.8	1.4	2.2	2.7	2.5	2.7	3.7	3	2.6	3.6	3.3	2.4	1.7	1.7	0.9	1.4	1.1	1.7
3	1.3	1.8	1.9	1.4	1.5	1.4	2.1	2.9	2.5	2.8	2.9	3.2	3.3	4.9	2.1	2.9	0.9	1.5	0.6	0.8	0.4	0.6	0.1	0.5	1.8
4	1	1.3	1.3	1.6	1.7	1.5	2.6	1.8	2.7	3	3.5	3.7	3.5	4	3.5	4.7	4.9	4.7	3.5	2.9	2.2	1.6	1.3	0.8	2.6
5	0.4	1	0.2	0.2	0.1	0.5	0.2	2.2	2.9	3.3	4	4.1	4.1	3.4	4.3	3.5	3.7	3.8	3.9	3.3	3.1	2.3	1.9	2.4	2.5
6	2.4	2.2	1.5	1.5	1.3	0.3	1.5	2.9	3.6	4.2	3.6	3.8	4.2	4.1	4.8	3.9	4.3	3.5	2.9	2.1	1.3	0.6	1.1	1.5	2.6
7	1.5	1.9	1.7	0.3	0.3	0.5	1	1.5	1.9	2.2	1.6	1.9	3.3	5	2.2	0.8	2.8	3.2	4.5	1.5	1.4	1.1	1.2	1.3	1.8
8	1.3	1	0.3	0.3	0.4	0.6	0.3	1.6	3.4	4	3.9	5.3	6	6	6.6	5.6	3.4	5	1.2	1.1	2.2	0.7	1.3	1.7	2.6
9	2.2	3.2	2.3	3.1	2.7	2.9	2.9	4.8	3.7	2.9	2.2	4.5	4.9	2.9	0.7	0.6	1.9	0.2	0.5	0.2	0	0.2	0.2	0.8	2.1
10	0	0.8	2	2.5	1.6	2.1	2.1	2.1	1.4	2	2.3	3.2	3.2	2.9	3	2.9	2.5	2.7	1.4	0.4	0.5	1.5	1.4	1.6	1.9
11	1.9	2	1.4	1.7	2	1.4	1.7	2.1	2.7	2.4	2.6	2.1	2.3	2.3	3.7	3.8	3.9	4.9	3.6	2.4	2.9	2.4	1.2	1.8	2.5
12	2.3	1.7	0.7	0.7	0.4	0.6	1.2	1.7	1	2.2	2.3	2.3	3.9	4.5	5	5.2	5.7	4.8	3.4	3.4	3	2.7	2.5	1.1	2.6
13	0.7	1.4	1.7	1.6	0.8	0.3	0.8	2.1	2.4	3.1	3.5	3.8	3.9	3.6	4	5.1	5.6	5.6	3.7	2.8	2.6	1.6	1.6	0.4	2.6
14	0.8	0.2	0.2	0.3	0	0	0.9	2.3	2.7	2.6	3.7	3.7	3.1	4	3.4	2.9	3.8	4.1	3.3	2.1	1.6	1.3	2	2	2.1
15	2.1	2.1	2.3	2.2	1.6	1.4	1.5	2.8	2.7	2.7	3.4	3.7	3.8	3.7	5.6	2.9	1.3	0.4	0.7	0.1	0.2	0.1	0.6	1.6	2.1
16	1.3	0.4	1.3	1.4	3.1	2.6	2.8	3.5	3.2	4.2	4.2	3.7	3.7	2.5	3.7	6.4	4.5	2.8	1.6	0.5	4	1.9	1.1	1.6	2.8
17	3	1.8	0.4	0.9	2	2.4	3.6	3.8	3.8	5.7	4.5	5.1	4.8	4.3	5.5	6	4.8	4.1	3	1.7	1.8	1.1	1	1.2	3.2
18	0.6	0	0.6	1	1.1	1.4	1.6	2.3	3.2	5.2	5	5.4	5.2	4.9	5.3	5.5	4.4	3.5	3.8	3.3	2.9	2.1	1.2	0.4	2.9
19	0.4	1.3	0.9	1.1	1.3	1	0.7	2.7	4	3.4	4.1	3.8	3.7	3.5	6	5.5	5.3	4.3	3.6	2.6	2.2	2.3	1.5	2.2	2.8
20	1.1	0.9	1.6	0.8	0	0	0.2	0.9	1.8	2.7	2.8	2.6	2.7	3	4.3	5.1	4.8	4.6	4	3.5	2.6	2	1.9	2	2.3
21	1.7	2	1.4	2	1	1.2	1.8	2.5	2.4	3.1	3.4	3.6	4.5	4.6	4.8	7.3	4	3.9	1.6	1.5	0.5	0.8	0.2	0	2.5
22	0.7	1.3	1.1	2.1	1.9	1.4	1.3	2.7	3.3	3.2	2.8	3.6	2.7	2.7	3.1	3.5	3.5	2.7	1.6	0.9	1.7	2.2	2.2	2.4	2.3
23	2	1.8	1.4	2	1.9	1.4	0.4	2.8	4	4.3	5.2	4.7	5.6	5.5	4.9	4.6	4.5	4.6	3.7	3.3	3.1	2.6	2.5	1.9	3.3
24	2.4	3.3	2.8	3.5	3	2.7	3	3.9	4.5	6.9	7.4	6.7	5.6	6	6.3	6.5	5.9	5.3	3.4	2.7	2.4	2	1.4	1.4	4.1
25	1.5	1.5	1.9	2.1	2.3	2.2	3.1	4.1	4.9	6.1	6.3	6.3	6.6	6	6.2	5.3	5.4	4.6	3.5	2.4	2.3	1.5	1.6	1.5	3.7
26	0.2	0.8	1	0.8	0.8	1	1.2	1.8	3.2	4.6	4.1	3.6	2.8	3.6	4.6	3.1	2.9	2.7	3.2	2.2	2.4	1.4	0.7	0.9	2.2
27	0.8	0.8	0.8	1.3	1.3	1.2	1.4	1.9	2.8	4.4	6	7.2	7.6	7.6	6.9	7.2	6.4	5.2	3.6	3.1	2.8	2.8	3.7	3.3	3.7
28	2.4	2.2	2.1	0.2	0.6	0.9	1	2	2.5	3.3	4.6	5.1	4.7	5.5	5.9	5.9	5.3	4.1	3.8	3.4	2.7	2.5	2.7	3.1	3.2
29	2	1.4	1.3	2	1.8	1.4	1.8	4	4.2	4.1	4.7	5.7	6.2	6.4	5.4	5.2	4.7	3.5	3.8	3.7	2.7	2.4	2.3	2.4	3.5
30	1.9	1.4	1.7	2.3	1.4	1.6	1.3	2.7	4.9	4	3.4	3.8	3.3	4.3	4.9	4.4	4.7	4.9	5.6	5	5.3	6.2	6.4	5.8	3.8
31	5.8	5.6	6.3	6.1	4.9	5.6	6.6	7.3	8.3	9.2	10.3	9.9	10.5	9.7	10.5	9.4	5.6	3.9	4.1	3.7	3.6	4.2	4.2	3.8	6.6
Avg	1.5	1.6	1.5	1.6	1.4	1.4	1.7	2.7	3.2	3.8	4.1	4.3	4.5	4.6	4.7	4.6	4.2	3.8	3	2.3	2.2	1.8	1.7	1.7	2.8
SD	1.1	1.1	1.1	1.2	1.1	1.1	1.3	1.3	1.4	1.6	1.7	1.7	1.8	1.6	1.8	1.9	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.2	0.9
S/A	0.72	0.69	0.75	0.77	0.74	0.79	0.74	0.47	0.42	0.41	0.43	0.39	0.39	0.36	0.38	0.4	0.32	0.35	0.42	0.52	0.53	0.64	0.73	0.68	0.33
Min	0	0	0.2	0.2	0	0	0.2	0.8	1	2	1.6	1.9	2.3	2.3	0.7	0.6	0.9	0.2	0.5	0.1	0	0.1	0.1	0	1.7
Max	5.8	5.6	6.3	6.1	4.9	5.6	6.6	7.3	8.3	9.2	10.3	9.9	10.5	9.7	10.5	9.4	6.4	5.6	5.6	5	5.3	6.2	6.4	5.8	6.6
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% 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

