

**Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Elizabeth City State Universit - September 1997**

Field: GHI

Hour 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	4	57	205	415	401	577	803	726	22	25	76	155	118	5	0	0	0	0	0	3588
2	0	0	0	0	0	5	90	229	483	603	793	870	883	814	684	507	298	108	7	0	0	0	0	0	6373
3	0	0	0	0	0	4	92	246	440	588	733	858	291	40	71	67	62	33	5	0	0	0	0	0	3530
4	0	0	0	0	0	3	61	231	379	631	679	878	855	882	743	543	343	124	5	0	0	0	0	0	6358
5	0	0	0	0	0	4	111	317	527	715	846	895	905	833	706	531	321	119	4	0	0	0	0	0	6833
6	0	0	0	0	0	4	107	312	524	706	824	855	873	734	700	466	310	107	2	0	0	0	0	0	6524
7	0	0	0	0	0	3	83	276	475	654	783	854	849	778	648	465	266	85	2	0	0	0	0	0	6222
8	0	0	0	0	0	3	61	174	439	584	739	766	834	722	510	449	234	71	1	0	0	0	0	0	5588
9	0	0	0	0	0	2	67	234	375	584	705	769	752	643	444	353	132	12	1	0	0	0	0	0	5073
10	0	0	0	0	0	3	67	147	331	565	530	765	700	704	519	504	143	36	1	0	0	0	0	0	5013
11	0	0	0	0	0	0	23	74	79	94	278	378	311	309	448	192	259	82	2	0	0	0	0	0	2528
12	0	0	0	0	0	1	59	209	411	612	589	676	529	248	257	163	266	113	1	0	0	0	0	0	4134
13	0	0	0	0	0	1	49	210	401	629	691	762	605	681	517	210	84	45	1	0	0	0	0	0	4886
14	0	0	0	0	0	2	78	251	449	618	732	775	712	655	503	270	174	40	0	0	0	0	0	0	5260
15	0	0	0	0	0	1	28	135	162	166	135	285	286	349	428	276	106	53	0	0	0	0	0	0	2412
16	0	0	0	0	0	1	68	220	404	517	738	409	552	671	544	309	138	53	0	0	0	0	0	0	4625
17	0	0	0	0	0	1	56	227	419	592	716	774	623	699	583	400	211	55	0	0	0	0	0	0	5355
18	0	0	0	0	0	1	46	204	358	545	629	685	224	202	352	306	105	29	0	0	0	0	0	0	3686
19	0	0	0	0	0	1	42	114	329	569	392	616	507	449	526	360	202	48	0	0	0	0	0	0	4154
20	0	0	0	0	0	1	59	131	412	585	742	816	799	722	573	399	170	37	0	0	0	0	0	0	5445
21	0	0	0	0	0	0	39	181	275	607	788	862	856	748	622	456	208	62	0	0	0	0	0	0	5705
22	0	0	0	0	0	0	74	258	477	658	791	648	728	788	344	148	78	12	0	0	0	0	0	0	5004
23	0	0	0	0	0	1	29	131	435	591	734	543	548	312	441	253	136	45	0	0	0	0	0	0	4200
24	0	0	0	0	0	0	18	55	62	49	64	103	64	80	75	59	21	6	0	0	0	0	0	0	654
25	0	0	0	0	0	0	11	41	47	74	65	92	133	150	150	126	39	6	0	0	0	0	0	0	933
26	0	0	0	0	0	0	60	187	387	498	648	483	640	602	558	339	113	18	0	0	0	0	0	0	4532
27	0	0	0	0	0	0	42	156	174	229	238	225	264	243	242	118	57	9	0	0	0	0	0	0	1996
28	0	0	0	0	0	0	15	55	94	45	30	149	103	324	408	260	100	26	0	0	0	0	0	0	1609
29	0	0	0	0	0	0	52	181	410	570	617	822	818	745	601	416	205	31	0	0	0	0	0	0	5469
30	0	0	0	0	0	0	57	242	449	625	749	813	800	719	555	379	188	26	0	0	0	0	0	0	5601
Avg	0	0	0	0	0	2	57	188	354	497	586	641	592	529	459	313	171	54	1	0	0	0	0	0	4443
S/D	0	0	0	0	0	1	25	71	138	204	246	250	258	264	192	145	87	37	2	0	0	0	0	0	1638
S/A	0	0	0	0	0	0.94	0.44	0.38	0.39	0.41	0.42	0.39	0.44	0.5	0.42	0.46	0.51	0.68	1.49	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	11	41	47	45	30	92	64	22	25	59	21	6	0	0	0	0	0	0	654
Max	0	0	0	0	0	5	111	317	527	715	846	895	905	882	743	543	343	124	7	0	0	0	0	0	6833

Daylight Data Recovery: 0% missing; 30% exceed the 15% QC threshold -- 41880 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: EC
Latitude: 36.30° N
Longitude: 76.25° W
Elevation: 4 Meters AMSL
Time Zone: -5

Instrument: PSP
Calibration Constant: 7.12 uV/Wm-2
Serial Number: 17897F3
Calibration Date: 9/13/96

**Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Elizabeth City State Universit - September 1997**

Field: DNI

Hour 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	1	72	203	109	199	384	259	0 ?	1	1	45	163	0	0	0	0	0	0	1437
2	0	0	0	0	0	2	170	417	597 ?	540	697	717	718	689	657	592	443	250	22	0	0	0	0	0	6510
3	0	0	0	0	0	1	104	207	350	393	360	493	51 ?	1	0	0	0	0	0	0	0	0	0	0	1961
4	0	0	0	0	0	2	28	234	238	482	487	705	713	935	914	827	739	538	67	0	0	0	0	0	6910
5	0	0	0	0	0	52	543	762	850	891	903	864	897	887	891	855	761	540	54	0	0	0	0	0	9752
6	0	0	0	0	0	44	511	728	823	838	796	675	718	490	741	605	664	464	35	0	0	0	0	0	8134
7	0	0	0	0	0	1	198	493	612	676	698	717	704	685	656	563	433	211	6	0	0	0	0	0	6655
8	0	0	0	0	0	2	37	52	363	421	502	397	571	511	261	404	275	110	0	0	0	0	0	0	3908
9	0	0	0	0	0	0	47	261	235	398	428	417	350	238	139	182	40	0	0	0	0	0	0	0	2737
10	0	0	0	0	0	0	31	69	329	391	201	449	334	367	417	628	105	1	0	0	0	0	0	0	3323
11	0	0	0	0	0	0	0	0	0	0	5	27	11	39	159	9	176	208	7	0	0	0	0	0	642
12	0	0	0	0	0	0	6	137	520	589	256	303	142	4	40	38	171	186	1	0	0	0	0	0	2392
13	0	0	0	0	0	0	0	179	456	550	387	480	281	474	282	70	0	14	0	0	0	0	0	0	3174
14	0	0	0	0	0	6	251	466	527	584	532	455	394	367	305	68	35	1	0	0	0	0	0	0	3990
15	0	0	0	0	0	0	2	8	1	1	1	5	1	28	60	53	3	48	0	0	0	0	0	0	211
16	0	0	0	0	0	0	68	189	288	217	371	77	164	349	360	180	66	68	0	0	0	0	0	0	2397
17	0	0	0	0	0	1	65	313	462	541	565	571	336	402	316	324	285	103	0	0	0	0	0	0	4284
18	0	0	0	0	0	0	7	201	207	322	198	222	13	1	37	117	9	1	0	0	0	0	0	0	1334
19	0	0	0	0	0	0	8	2	122	388	86	269	178	152	349	247	241	96	0	0	0	0	0	0	2138
20	0	0	0	0	0	0	62	111	417	496	629	700	660	651	583	476	211	8	0	0	0	0	0	0	5005
21	0	0	0	0	0	0	47	103	186	637	853	889	878	773	792	796	358	186	0	0	0	0	0	0	6497
22	0	0	0	0	0	1	328	616	817	876	897	460	579	724	106	18	0	0	0	0	0	0	0	0	5422
23	0	0	0	0	0	0	19	34	535	644	643	308	202	38	255	85	20	21	0	0	0	0	0	0	2805
24	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
25	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	7
26	0	0	0	0	0	0	211	449	466	270	323	86	258	414	519	291	20	0	0	0	0	0	0	0	3308
27	0	0	0	0	0	0	15	45	5	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	71
28	0	0	0	0	0	0	0	0	0	0	0	1	0	19	110	72	36	1	0	0	0	0	0	0	240
29	0	0	0	0	0	0	136	229	551	403	386	882	907	925	899	833	678	259	0	0	0	0	0	0	7087
30	0	0	0	0	0	0	290	638	779	847	876	895	894	876	781	709	586	171	0	0	0	0	0	0	8343
Avg	0	0	0	0	0	4	106	234	365	417	409	415	374	368	354	302	213	122	6	0	0	0	0	0	3689
S/D	0	0	0	0	0	12	146	229	262	276	297	297	315	329	307	300	249	157	16	0	0	0	0	0	2739
S/A	0	0	0	0	0	3.11	1.37	0.98	0.72	0.66	0.72	0.72	0.84	0.89	0.87	0.99	1.17	1.29	2.53	0	0	0	0	0	0.74
Min	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Max	0	0	0	0	0	52	543	762	850	891	903	895	907	935	914	855	761	540	67	0	0	0	0	0	9752

Daylight Data Recovery: 0% missing; 21% exceed the 15% QC threshold -- 41880 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: EC
Latitude: 36.30° N
Longitude: 76.25° W
Elevation: 4 Meters AMSL
Time Zone: -5

Instrument: NIP
Calibration Constant: 6.83 uV/Wm-2
Serial Number: 17828E6
Calibration Date: 9/13/96

Diffuse Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Elizabeth City State Universit - September 1997

Field: DHI

Hour 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	3	49	171	296	310	378	420	458	20	24	68	138	85	5	0	0	0	0	0	2425
2	0	0	0	0	0	4	59	114	150 ?	195	186	188	194	196	186	158	123	62	6	0	0	0	0	0	1820
3	0	0	0	0	0	4	69	189	266	281	392	374	237	36	62	60	54	29	5	0	0	0	0	0	2059
4	0	0	0	0	0	3	49	152	227	257	227	194	162	66	60	59	53	28	3	0	0	0	0	0	1541
5	0	0	0	0	0	3	28	41	46	49	55	76	56	52	46	41	32	27	2	0	0	0	0	0	556
6	0	0	0	0	0	2	28	48	57	82	122	201	185	285	145	125	62	30	2	0	0	0	0	0	1375
7	0	0	0	0	0	2	47	98	127	153	176	181	187	180	166	147	107	52	2	0	0	0	0	0	1624
8	0	0	0	0	0	3	53	153	222	259	294	361	288	257	276	217	129	54	1	0	0	0	0	0	2565
9	0	0	0	0	0	2	54	146	250	295	333	372	406	406	331	260	110	11	0	0	0	0	0	0	2975
10	0	0	0	0	0	2	58	123	157	268	320	304	358	357	208	145	92	33	1	0	0	0	0	0	2426
11	0	0	0	0	0	0	20	64	68	80	240	326	277	254	310	176	190	52	2	0	0	0	0	0	2061
12	0	0	0	0	0	1	55	159	159	178	341	372	373	229	213	139	196	84	1	0	0	0	0	0	2501
13	0	0	0	0	0	1	42	158	176	223	351	322	339	275	309	164	74	41	1	0	0	0	0	0	2476
14	0	0	0	0	0	2	46	106	161	191	269	341	328	326	270	227	156	35	0	0	0	0	0	0	2456
15	0	0	0	0	0	1	26	127	141	145	128	261	248	301	364	243	97	47	0	0	0	0	0	0	2130
16	0	0	0	0	0	1	57	160	242	345	422	320	387	366	277	203	115	43	0	0	0	0	0	0	2937
17	0	0	0	0	0	1	48	124	173	209	242	261	310	376	359	237	122	42	0	0	0	0	0	0	2504
18	0	0	0	0	0	1	43	148	254	309	450	467	199	175	308	232	97	27	0	0	0	0	0	0	2710
19	0	0	0	0	0	1	37	99	248	289	295	364	322	304	280	230	129	37	0	0	0	0	0	0	2635
20	0	0	0	0	0	1	50	92	186	228	215	192	210	191	177	160	99	34	0	0	0	0	0	0	1833
21	0	0	0	0	0	0	29	141	142	137	86	78	84	109	90	64	90	41	0	0	0	0	0	0	1092
22	0	0	0	0	0	0	29	52	51	55	63	212	196	201	245	126	70	11	0	0	0	0	0	0	1312
23	0	0	0	0	0	1	26	111	156	142	199	261	346	268	262	206	125	43	0	0	0	0	0	0	2147
24	0	0	0	0	0	0	16	48	54	43	56	91	55	69	64	51	18	5	0	0	0	0	0	0	571
25	0	0	0	0	0	0	10	36	41	65	58	80	117	131	132	111	35	6	0	0	0	0	0	0	821
26	0	0	0	0	0	0	33	72	148	308	381	386	383	268	215	193	98	17	0	0	0	0	0	0	2501
27	0	0	0	0	0	0	37	137	155	200	207	196	231	219	214	106	51	8	0	0	0	0	0	0	1760
28	0	0	0	0	0	0	13	48	83	39	26	132	90	274	311	213	85	25	0	0	0	0	0	0	1340
29	0	0	0	0	0	0	38	108	133	289	285	84	73	57	52	46	36	11	0	0	0	0	0	0	1211
30	0	0	0	0	0	0	25	53	64	67	69	69	67	70	71	61	41	12	0	0	0	0	0	0	670
Avg	0	0	0	0	0	1	39	109	154	190	229	249	239	211	201	149	94	34	1	0	0	0	0	0	1901
S/D	0	0	0	0	0	1	15	44	72	95	123	116	115	110	103	68	44	20	2	0	0	0	0	0	704
S/A	0	0	0	0	0	0.93	0.38	0.4	0.47	0.5	0.54	0.46	0.48	0.52	0.51	0.46	0.47	0.59	1.5	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	10	36	41	39	26	69	55	20	24	41	18	5	0	0	0	0	0	0	556
Max	0	0	0	0	0	4	69	189	296	345	450	467	458	406	364	260	196	85	6	0	0	0	0	0	2975

Daylight Data Recovery: 0% missing; 20% exceed the 15% QC threshold -- 41880 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: EC
Latitude: 36.30° N
Longitude: 76.25° W
Elevation: 4 Meters AMSL
Time Zone: -5

Instrument: PSP
Calibration Constant: 9.38 uV/Wm-2
Serial Number: 25782F3
Calibration Date: 9/13/96