

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Savannah State College - May 1999**

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	2	25	78	133	121	134	189	238	148	125	94	87	35	7	0	0	0	0	0	1418
2	0	0	0	0	0	3	78	253	550	705	889	814	845	990	825	682	482	118	23	0	0	0	0	0	7257
3	0	0	0	0	0	5	109 ?	312	554	749	899	997	1017	964	868	579	414	292	59	0	0	0	0	0	7818
4	0	0	0	0	0	8	107	324	532	726	875	962	992	952	846	688	433	246	54	0	0	0	0	0	7745
5	0	0	0	0	0	5	67	237	144	392	172	570	337	193	260	231	114	39	4	0	0	0	0	0	2764
6	0	0	0	0	0	6	68	293	396	654	786	923	946	899	182	491	14	16	3	0	0	0	0	0	5678
7	0	0	0	0	0	4	105	283	445	378	605	492	452	233	103	157	292	178	40	0	0	0	0	0	3766
8	0	0	0	0	0	7	106	306	519	715	859	909	973	953	750	679	496	263	65	0 ?	0	0	0	0	7600
9	0	0	0	0	0	8	93	363 ?	543	733	886	986	929	687	549	675	457	250	61	0	0	0	0	0	7221
10	0	0	0	0	0	8	119	288	525	713	861	959	1001	953	842	609	330	156	38	0	0	0	0	0	7403
11	0	0	0	0	0	4	108	334	543	689	472	626	919	942	861	695	468	263	66	0	0	0	0	0	6991
12	0	0	0	0	0	1	36	161	176	180	254	678	659	788	878	559	452	243	64	0	0	0	0	0	5129
13	0	0	0	0	0	5	90	298	328	725	858	977	781	704	718	458	241	222	36	0	0	0	0	0	6441
14	0	0	0	0	0	7	56	164	203	700	720	809	780	661	593	549	464	233	69	0	0	0	0	0	6009
15	0	0	0	0	0	2	26	74	129	194	299	475	515	448	517	597	402	250	64	1	0	0	0	0	3993
16	0	0	0	0	0	13	144	150	287	398	657	780	839	643	792	533	444	198	51	0	0	0	0	0	5930
17	0	0	0	0	0	12	114	315	547	640	848	860	994	862	854	663	478	219	66	1	0	0	0	0	7472
18	0	0	0	0	0	13	140	308	405	724	711	296	966	986	860	660	480	249	55	1	0	0	0	0	6854
19	0	0	0	0	0	6	110	301	364	353	770	937	769	530	597	320	379	188	57	1	0	0	0	0	5683
20	0	0	0	0	0	12	113	330	512	650	907	618	1057	967	858	668	480	265	77	1	0	0	0	0	7514
21	0	0	0	0	0	16	144	326	569	759	899	981	1018	977	866	686	488	270	78	2	0	0	0	0	8077
22	0	0	0	0	0	15	125	324	547	627	850	931	702	876	830	655	436	98	62	3	0	0	0	0	7079
23	0	0	0	0	0	12	112	225	520	711	857	937	918	604	596	652	447	234	66	2	0	0	0	0	6894
24	0	0	0	0	0	8	54	160	349	524	773	629	655	837	571	402	357	284	79	2	0	0	0	0	5684
25	0	0	0	0	0	16	146	365	571	766	910	992	1028	981	866	698	507	290	91	2	0	0	0	0	8229
26	0	0	0	0	0	13	124	336	548	696	853	874	773	849	567	465	234	39	15	0	0	0	0	0	6386
27	0	0	0	0	0	10	71	178	377	256	374	435	568	966	781	596	375	249	85	2	0	0	0	0	5325
28	0	0	0	0	0	10	98	252	421	495	853	826	1005	570	744	679	488	249	81	2	0	0	0	0	6773
29	0	0	0	0	0	16	174	316	496	682	786	604	626	713	621	393	308	166	64	4	0	0	0	0	5968
30	0	0	0	0	0	20	150	354	498	596	800	955	998	889	861	596	488	251	98	4	0	0	0	0	7557
31	0	0	0	0	0	18	153	355	500	627	825	896	843	896	828	652	423	207	80	4	0	0	0	0	7305
Avg	0	0	0	0	0	9	102	270	427	577	717	772	811	763	678	550	386	202	57	1	0	0	0	0	6321
S D	0	0	0	0	0	5	37	81	141	190	229	219	213	240	228	162	126	80	25	1	0	0	0	0	1558
S/A	0	0	0	0	0	0.54	0.37	0.3	0.33	0.33	0.32	0.28	0.26	0.31	0.34	0.29	0.33	0.39	0.44	1.2	0	0	0	0	0.25
Min	0	0	0	0	0	1	25	74	129	121	134	189	238	148	103	94	14	16	3	0	0	0	0	0	1418
Max	0	0	0	0	0	20	174	365	571	766	910	997	1057	990	878	698	507	292	98	4	0	0	0	0	8229

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 5127 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: SS  
Latitude: 32.03° N  
Longitude: 81.07° W  
Elevation: 11 Meters AMSL  
Time Zone: -5

Instrument: PSP  
Calibration Constant: 7.98 uV/Wm-2  
Serial Number: 28401F3  
Calibration Date: 5/19/98

**Direct Normal Solar Radiation  
Hourly Integrated and Daily Totals  
Watt-Hours per Square Meter  
Savannah State College - May 1999**

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	5	17	22	27	18	17	24	29	19	17	16	21	14	7	0	0	0	0	0	252
2	0	0	0	0	0	9	54	422	828	749	920	302	393	934	860	848	704	55	20	0	0	0	0	0	7099
3	0	0	0	0	0	24	783	627	812	882	929	954	949	868	787	516	355	536	205	0	0	0	0	0	9226
4	0	0	0	0	0	161	295	615	754	834	877	878	898	877	866	814	628	518	144	0	0	0	0	0	9160
5	0	0	0	0	0	35	50	115	42	100	19	109	37	23	37	42	25	15	3	0	0	0	0	0	653
6	0	0	0	0	0	18	32	251	259	533	553	663	679	645	38	291	3	7	2	0	0	0	0	0	3974
7	0	0	0	0	0	10	155	208	280	95	149	83	35	29	12	26	80	125	33	8	0	0	0	0	1328
8	0	0	0	0	0	22	191	461	601	726	777	722	788	834	686	734	750	572	210	71	0	0	0	0	8145
9	0	0	0	0	0	25	251	778	759	832	877	856	737	437	318	671	621	478	156	0	0	0	0	0	7798
10	0	0	0	0	0	60	253	410	654	745	779	743	675	635	725	579	241	185	45	0	0	0	0	0	6728
11	0	0	0	0	0	14	203	575	695	542	116	107	211	761	856	793	680	518	140	0	0	0	0	0	6212
12	0	0	0	0	0	3	19	49	35	29	37	181	270	502	669	419	586	389	143	7	0	0	0	0	3339
13	0	0	0	0	0	13	73	247	135	764	790	734	479	429	499	288	138	245	16	6	0	0	0	0	4858
14	0	0	0	0	0	18	32	64	65	464	403	481	450	398	381	500	590	415	200	21	0	0	0	0	4481
15	0	0	0	0	0	5	14	20	24	28	39	65	62	54	117	476	449	363	123	42	0	0	0	0	1880
16	0	0	0	0	0	52	391	64	61	58	232	311	471	353	692	491	518	240	86	0	0	0	0	0	4020
17	0	0	0	0	0	87	236	538	705	555	694	545	803	667	851	749	654	294	100	1	0	0	0	0	7478
18	0	0	0	0	0	50	273	404	244	609	435	62	694	821	784	725	673	456	97	1	0	0	0	0	6329
19	0	0	0	0	0	10	96	209	114	57	486	732	414	237	371	128	434	249	96	2	0	0	0	0	3635
20	0	0	0	0	0	25	146	487	495	493	657	272	815	722	728	689	625	463	167	7	0	0	0	0	6790
21	0	0	0	0	0	29	254	502	731	805	831	820	854	858	826	742	647	464	156	13	0	0	0	0	8533
22	0	0	0	0	0	29	171	406	570	473	547	597	314	565	695	608	444	38	40	15	0	0	0	0	5513
23	0	0	0	0	0	23	68	180	524	639	706	698	587	288	351	527	449	293	72	6	0	0	0	0	5411
24	0	0	0	0	0	16	27	41	66	202	393	144	221	457	293	191	312	450	157	6	0	0	0	0	2977
25	0	0	0	0	0	56	393	679	797	876	923	930	948	926	886	828	750	591	270	4	0	0	0	0	9858
26	0	0	0	0	0	63	160	441	523	599	743	615	483	554	315	235	83	11	8	0	0	0	0	0	4832
27	0	0	0	0	0	24	38	46	112	37	42	52	115	695	649	545	362	371	193	10	0	0	0	0	3291
28	0	0	0	0	0	17	55	181	219	135	638	477	756	207	510	680	613	362	162	10	0	0	0	0	5022
29	0	0	0	0	0	46	430	509	533	654	533	190	200	281	285	109	115	70	42	11	0	0	0	0	4008
30	0	0	0	0	0	67	356	547	558	490	601	740	768	671	737	492	530	295	114	19	0	0	0	0	6985
31	0	0	0	0	0	42	326	595	451	492	640	633	540	671	656	630	373	176	52	13	0	0	0	0	6290
Avg	0	0	0	0	0	34	188	345	409	468	529	475	506	530	532	496	434	299	105	9	0	0	0	0	5358
S/D	0	0	0	0	0	31	166	224	283	296	302	304	291	280	284	254	236	185	72	14	0	0	0	0	2480
S/A	0	0	0	0	0	0.91	0.88	0.65	0.69	0.63	0.57	0.64	0.57	0.53	0.53	0.51	0.54	0.62	0.69	1.63	0	0	0	0	0.46
Min	0	0	0	0	0	3	14	20	24	18	17	24	29	19	12	16	3	7	2	0	0	0	0	0	252
Max	0	0	0	0	0	161	783	778	828	882	929	954	949	934	886	848	750	591	270	71	0	0	0	0	9858

Daylight Data Recovery: 2% missing; 0% exceed the 15% QC threshold -- 128497 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: SS  
 Latitude: 32.03° N  
 Longitude: 81.07° W  
 Elevation: 11 Meters AMSL  
 Time Zone: -5

Instrument: Estimated DNI  
 Calibration Constant: 0.00  
 Serial Number: XXXXXXXX  
 Calibration Date: 1/1/1997

**Diffuse Solar Radiation on a Horizontal Surface (Shadow Band PSP)**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Savannah State College - May 1999**

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	1	22	69	118	108	119	167	211	131	111	83	77	30	6	0	0	0	0	0	1254
2	0	0	0	0	0	4	67	76	73	157	98	535	471	132	113	93	111	99	20	0	0	0	0	0	2048
3	0	0	0	0	0	4	46	65	85	96	98	104	110	164	215	212	231	119	27	0	0	0	0	0	1577
4	0	0	0	0	0	5	55	84	94	107	117	138	133	144	126	120	108	73	30	0	0	0	0	0	1336
5	0	0	0	0	0	4	57	191	122	315	155	468	301	171	230	201	100	34	4	0	0	0	0	0	2353
6	0	0	0	0	0	6	62	195	239	256	305	299	294	302	147	282	13	14	3	0	0	0	0	0	2416
7	0	0	0	0	0	4	72	202	285	309	475	413	419	206	93	139	249	137	36	0	0	0	0	0	3039
8	0	0	0	0	0	6	65	119	163	170	183	228	215	181	178	161	97	68	31	0	0	0	0	0	1865
9	0	0	0	0	0	6	57	81	94	107	121	178	219	280	284	200	125	86	35	0	0	0	0	0	1874
10	0	0	0	0	0	7	68	114	136	152	181	257	350	364	234	194	203	92	30	0	0	0	0	0	2382
11	0	0	0	0	0	4	59	99	130	282	374	525	716	237	141	133	103	81	42	0	0	0	0	0	2927
12	0	0	0	0	0	1	32	141	155	157	221	506	398	321	318	265	135	109	40	0	0	0	0	0	2799
13	0	0	0	0	0	5	75	202	242	146	165	280	317	304	297	252	169	130	33	0	0	0	0	0	2616
14	0	0	0	0	0	6	50	136	165	346	366	352	344	291	275	199	141	88	35	0	0	0	0	0	2794
15	0	0	0	0	0	2	23	66	115	172	265	413	455	397	422	262	159	113	42	1	0	0	0	0	2906
16	0	0	0	0	0	10	53	126	250	353	452	484	382	317	206	186	162	117	38	1	0	0	0	0	3137
17	0	0	0	0	0	10	57	91	120	213	237	340	213	239	130	126	119	105	47	1	0	0	0	0	2050
18	0	0	0	0	0	11	80	130	264	264	326	238	292	217	193	140	111	81	37	1	0	0	0	0	2385
19	0	0	0	0	0	6	86	210	297	309	333	238	366	310	279	229	149	100	38	1	0	0	0	0	2951
20	0	0	0	0	0	12	75	124	215	267	325	359	263	289	239	172	135	97	47	1	0	0	0	0	2619
21	0	0	0	0	0	15	78	108	124	141	163	197	185	171	162	151	130	100	49	1	0	0	0	0	1774
22	0	0	0	0	0	13	85	151	199	267	367	360	396	345	237	214	186	85	57	3	0	0	0	0	2964
23	0	0	0	0	0	11	96	141	199	219	231	268	345	331	298	271	197	121	53	2	0	0	0	0	2783
24	0	0	0	0	0	7	48	142	308	365	424	490	439	405	323	261	178	118	49	2	0	0	0	0	3560
25	0	0	0	0	0	12	53	74	82	91	90	99	101	107	107	97	88	71	42	2	0	0	0	0	1117
26	0	0	0	0	0	12	85	148	227	232	191	284	301	327	297	296	186	35	13	0	0	0	0	0	2634
27	0	0	0	0	0	9	63	158	308	228	336	385	456	309	219	194	174	112	48	2	0	0	0	0	3002
28	0	0	0	0	0	9	86	174	286	392	281	369	264	371	311	184	143	111	51	2	0	0	0	0	3034
29	0	0	0	0	0	14	66	90	168	183	313	422	430	449	372	316	244	138	56	3	0	0	0	0	3264
30	0	0	0	0	0	16	64	117	153	225	262	243	245	254	225	231	187	138	75	3	0	0	0	0	2437
31	0	0	0	0	0	15	73	98	223	243	257	286	313	262	264	191	208	136	70	4	0	0	0	0	2643
Avg	0	0	0	0	0	8	63	127	182	222	253	320	321	269	227	195	149	95	38	1	0	0	0	0	2469
S D	0	0	0	0	0	4	17	43	73	85	108	122	124	88	82	61	51	32	17	1	0	0	0	0	608
S/A	0	0	0	0	0	0.53	0.27	0.34	0.4	0.38	0.43	0.38	0.39	0.33	0.36	0.31	0.35	0.34	0.44	1.15	0	0	0	0	0.25
Min	0	0	0	0	0	1	22	65	73	91	90	99	101	107	93	83	13	14	3	0	0	0	0	0	1117
Max	0	0	0	0	0	16	96	210	308	392	475	535	716	449	422	316	249	138	75	4	0	0	0	0	3560

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 5127 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: SS  
Latitude: 32.03° N  
Longitude: 81.07° W  
Elevation: 11 Meters AMSL  
Time Zone: -5

Instrument: PSP  
Calibration Constant: 7.53 uV/Wm-2  
Serial Number: 17862F3  
Calibration Date: 5/19/98