

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Savannah State College - June 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	10	116	361	337	432	792	1010	1026	998	879	712	516	291	91	3	0	0	0	0	7575
2	0	0	0	0	0	17	149	358	544	707	886	781	651	970	865	693	494	281	88	4	0	0	0	0	7488
3	0	0	0	0	0	18	90	175	219	481	820	704	478	551	818	562	406	282	123	7	0	0	0	0	5733
4	0	0	0	0	0	14	136	334	540	724	862	971	845	860	423	593	481	259	79	1	0	0	0	0	7122
5	0	0	0	0	0	10	105	211	474	635	740	920	980	902	836	675	471	267	75	5	0	0	0	0	7306
6	0	0	0	0	0	15	77	211	313	595	791	948	1012	947	775	666	462	260	89	6	0	0	0	0	7167
7	0	0	0	0	0	15	126	299	399	665	795	630	916	1036	795	576	428	311	107	6	0	0	0	0	7102
8	0	0	0	0	0	19	127	351	498	736	786	974	998	953	841	687	506	272	100	5	0	0	0	0	7854
9	0	0	0	0	0	23	115	379	609	758	917	1034	1034	1001	864	731	534	327	116	6	0	0	0	0	8449
10	0	0	0	0	0	17 ?	19 ?	18	70	219	509	442	254	102	105	107	125	142	44	3	0	0	0	0	2176
11	0	0	0	0	0	23	111	205	324	437	262	545	735	389	283	222	178	62	25	6	0	0	0	0	3805
12	0	0	0	0	0	37	196	377	578	656	849	723	768	850	788	723	518	304	109	5	0	0	0	0	7483
13	0	0	0	0	0	21	124 ?	335	565	745	860	1001	839	683	830	562	495	312	107	4	0	0	0	0	7484
14	0	0	0	0	0	16	120	327	473	648	665	744	908	902	830	714	270	98	88	3	0	0	0	0	6806
15	0	0	0	0	0	16	127	292	509	703	642	531	739	750	560	667	506	253	21	1	0	0	0	0	6317
16	0	0	0	0	0	19	125	366	522	711	803	884	914	679	666	312	38	100	69	5	0	0	0	0	6214
17	0	0	0	0	0	14	107	193	269	281	360	590	712	618	519	287	200	155	91	14	0	0	0	0	4410
18	0	0	0	0	0	12	129	358	422	480	736	1000	1002	1018	890	703	526	280	78	5	0	0	0	0	7639
19	0	0	0	0	0	16	148	354	528	425	461	393	607	425	337	648	166	120	38	1	0	0	0	0	4667
20	0	0	0	0	0	6	38	85	203	263	438	311	236	223	176	151	126	81	35	4	0	0	0	0	2377
21	0	0	0	0	0	10	92	215	521	702	795	742	783	394	660	487	309	150	87	7	0	0	0	0	5956
22	0	0	0	0	0	17	78	110	237	530	714	606	713	347	365	143	396	247	92	7	0	0	0	0	4603
23	0	0	0	0	0	14	140	337	533	705	881	972	931	827	678	460	377	200	74	7	0	0	0	0	7134
24	0	0	0	0	0	15	107	332	397	508	524	681	428	597	636	383	193	127	58	3	0	0	0	0	4990
25	0	0	0	0	0	14	121	266	359	271	237	673	531	696	608	474	298	113	15	0	0	0	0	0	4675
26	0	0	0	0	0	24	140	301	563	491	600	625	462	428	743	531	320	33	7	3	0	0	0	0	5271
27	0	0	0	0	0	17	76	46	156	293	633	741	710	486	120	221	80	24	17	3	0	0	0	0	3624
28	0	0	0	0	0	2	39	105	56	102	451	723	682	191	199	209	11	18	36	2	0	0	0	0	2827
29	0	0	0	0	0	2	3	3	4	5	2	3	3	19	80	40	17	6	5	1	0	0	0	0	194
30	0	0	0	0	0	2	10	52	215	269	625	431	582	590	661	517	452	236	58	5	0	0	0	0	4704
Avg	0	0	0	0	0	15	103	245	381	506	648	711	716	648	594	482	330	187	67	4	0	0	0	0	5638
S D	0	0	0	0	0	7	44	119	170	208	221	239	255	290	262	215	172	101	34	3	0	0	0	0	1985
S/A	0	0	0	0	0	0.46	0.42	0.48	0.45	0.41	0.34	0.34	0.36	0.45	0.44	0.45	0.52	0.54	0.51	0.62	0	0	0	0	0.35
Min	0	0	0	0	0	2	3	3	4	5	2	3	3	19	80	40	11	6	5	0	0	0	0	0	194
Max	0	0	0	0	0	37	196	379	609	758	917	1034	1034	1036	890	731	534	327	123	14	0	0	0	0	8449

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 5116 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 - June 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	24	109	465	169	197	563	810	849	893	876	820	722	528	221	6	0	0	0	0	7252
2	0	0	0	0	0	41	357	624	655	639	782	521	365	825	835	763	646	472	188	5	0	0	0	0	7720
3	0	0	0	0	0	26	57	59	44	185	576	459	200	255	644	404	245	249	161	12	0	0	0	0	3577
4	0	0	0	0	0	18	237	482	625	700	748	785	568	583	229	534	523	355	111	0	0	0	0	0	6496
5	0	0	0	0	0	17	56	55	261	325	349	532	646	628	677	599	485	313	65	7	0	0	0	0	5018
6	0	0	0	0	0	19	54	179	136	412	533	684	797	754	595	612	510	302	118	16	0	0	0	0	5721
7	0	0	0	0	0	26	198	386	257	489	502	273	675	866	681	506	423	475	209	28	0	0	0	0	5995
8	0	0	0	0	0	31	147	510	511	698	453	728	686	745	714	678	638	441	218	23	0	0	0	0	7220
9	0	0	0	0	0	47	214	656	807	844	794	929	935	940	849	875	799	674	366	125	0	0	0	0	9855
10	0	0	0	0	0	79	43	5	12	34	67	55	28	11	13	16	25	49	23	20	0	0	0	0	482
11	0	0	0	0	0	38	57	65	133	116	33	133	185	53	39	35	30	17	17	11	0	0	0	0	962
12	0	0	0	0	0	71	205	211	352	325	329	215	326	437	604	764	686	523	252	9	0	0	0	0	5309
13	0	0	0	0	0	50	478	619	755	754	696	757	565	436	717	518	631	556	294	8	0	0	0	0	7835
14	0	0	0	0	0	24	162	404	366	448	335	395	634	629	654	491	124	31	63	5	0	0	0	0	4767
15	0	0	0	0	0	23	105	321	476	594	337	219	412	453	373	679	630	361	7	0	0	0	0	0	4990
16	0	0	0	0	0	57	194	534	591	686	603	640	592	312	312	110	6	29	50	8	0	0	0	0	4724
17	0	0	0	0	0	25	45	64	78	45	58	146	223	97	113	49	26	45	35	24	0	0	0	0	1072
18	0	0	0	0	0	20	93	311	278	232	390	735	669	653	614	583	523	305	57	11	0	0	0	0	5475
19	0	0	0	0	0	38	317	563	556	73	56	49	166	42	47	502	33	36	19	2	0	0	0	0	2497
20	0	0	0	0	0	11	19	22	37	40	61	38	27	27	23	22	25	22	21	9	0	0	0	0	404
21	0	0	0	0	0	16	45	46	386	524	455	232	243	46	296	261	113	110	136	21	0	0	0	0	2930
22	0	0	0	0	0	22	45	30	69	269	390	315	333	74	122	15	204	184	38	17	0	0	0	0	2126
23	0	0	0	0	0	25	263	516	643	694	771	789	647	556	423	231	272	121	45	33	0	0	0	0	6028
24	0	0	0	0	0	32	109	429	280	137	74	88	56	128	116	58	42	39	30	16	0	0	0	0	1632
25	0	0	0	0	0	23	68	70	72	39	32	168	67	278	204	240	152	36	6	6	0	0	0	0	1462
26	0	0	0	0	0	36	125	301	441	72	208	325	180	88	372	288	138	7	4	5	0	0	0	0	2591
27	0	0	0	0	0	19	36	9	30	44	94	227	213	102	13	36	15	7	10	16	0	0	0	0	870
28	0	0	0	0	0	4	15	33	10	14	74	228	264	23	25	30	2	7	21	3	0	0	0	0	752
29	0	0	0	0	0	7	2	1	0	1	0	0	0	2	10	6	3	1	3	1	0	0	0	0	38
30	0	0	0	0	0	3	5	13	41	39	232	64	105	102	352	271	367	242	51	40	0	0	0	0	1927
Avg	0	0	0	0	0	29	129	266	302	322	353	385	389	368	385	367	301	218	95	16	0	0	0	0	3924
S/D	0	0	0	0	0	18	113	227	247	271	258	282	271	313	291	282	267	205	98	22	0	0	0	0	2661
S/A	0	0	0	0	0	0.6	0.88	0.85	0.82	0.84	0.73	0.73	0.7	0.85	0.76	0.77	0.89	0.94	1.03	1.38	0	0	0	0	0.68
Min	0	0	0	0	0	3	2	1	0	1	0	0	0	2	10	6	2	1	3	0	0	0	0	0	38
Max	0	0	0	0	0	79	478	656	807	844	794	929	935	940	876	875	799	674	366	125	0	0	0	0	9855

Daylight Data Recovery: 2% missing; 0% exceed the 15% QC threshold -- 133613 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: XXXXXXX  
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 - June 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	10	85	156	235	279	289	230	193	151	123	111	106	90	48	3	0	0	0	0	2109
2	0	0	0	0	0	14	62	86	144	213	193	280	292	189	143	132	125	99	51	3	0	0	0	0	2028
3	0	0	0	0	0	16	78	150	191	334	304	264	281	311	261	260	267	181	89	6	0	0	0	0	2995
4	0	0	0	0	0	13	77	124	154	182	195	215	287	303	225	202	181	120	56	1	0	0	0	0	2336
5	0	0	0	0	0	9	91	186	307	385	426	406	344	306	249	232	193	142	61	4	0	0	0	0	3341
6	0	0	0	0	0	14	67	138	222	277	314	288	229	229	259	219	167	138	66	5	0	0	0	0	2633
7	0	0	0	0	0	13	73	129	238	285	346	369	251	212	200	200	184	129	65	6	0	0	0	0	2698
8	0	0	0	0	0	17	88	129	182	196	378	273	323	245	221	186	138	98	56	5	0	0	0	0	2535
9	0	0	0	0	0	21	59	93	111	108	209	138	113	106	126	82	74	64	42	5	0	0	0	0	1349
10	0	0	0	0	0	16 ?	16 ?	16	62	193	424	390	226	91	93	95	111	124	39	2	0	0	0	0	1899
11	0	0	0	0	0	22	98	177	247	344	233	415	553	338	248	195	161	55	23	5	0	0	0	0	3113
12	0	0	0	0	0	35	158 ?	290	362	399	559	515	448	434	269	155	120	96	56	5	0	0	0	0	3899
13	0	0	0	0	0	19	66	87	99	166	242	272	282	265	202	175	128	89	45	4	0	0	0	0	2141
14	0	0	0	0	0	15	80	154	247	302	367	360	283	302	260	343	193	87	74	3	0	0	0	0	3071
15	0	0	0	0	0	14	101	151	215	242	346	320	333	318	233	164	138	109	19	1	0	0	0	0	2702
16	0	0	0	0	0	13	78	128	157	181	266	268	331	383	392	232	34	90	60	5	0	0	0	0	2617
17	0	0	0	0	0	12	96	165	221	247	307	449	493	524	418	250	184	137	85	13	0	0	0	0	3603
18	0	0	0	0	0	10	105	222	250	303	385	291	342	394	353	266	219	155	65	5	0	0	0	0	3365
19	0	0	0	0	0	13	71	110	193	369	411	346	443	385	297	268	146	106	33	1	0	0	0	0	3192
20	0	0	0	0	0	6	34	76	179	233	384	275	209	198	156	135	112	72	31	4	0	0	0	0	2101
21	0	0	0	0	0	8	82	196	281	307	382	520	543	350	409	287	241	103	60	7	0	0	0	0	3775
22	0	0	0	0	0	16	69	97	193	325	363	302	385	277	256	132	273	174	84	6	0	0	0	0	2951
23	0	0	0	0	0	12	76	114	140	171	195	213	293	296	301	286	219	147	66	7	0	0	0	0	2535
24	0	0	0	0	0	13	79	148	225	405	459	596	372	476	533	339	169	112	51	2	0	0	0	0	3981
25	0	0	0	0	0	12	105	237	314	241	208	510	464	430	428	300	204	99	13	0	0	0	0	0	3566
26	0	0	0	0	0	24	113	166	302	435	411	312	284	344	446	305	240	31	7	3	0	0	0	0	3423
27	0	0	0	0	0	16	68	42	138	259	549	522	500	388	109	194	71	22	15	3	0	0	0	0	2896
28	0	0	0	0	0	2	35	92	50	91	385	503	422	169	177	186	10	16	32	2	0	0	0	0	2172
29	0	0	0	0	0	2	3	3	3	4	2	3	3	17	71	36	16	5	4	1	0	0	0	0	173
30	0	0	0	0	0	2	9	46	190	239	418	370	479	492	353	311	238	137	45	5	0	0	0	0	3334
Avg	0	0	0	0	0	14	74	130	195	257	332	341	333	297	260	209	155	101	48	4	0	0	0	0	2751
S D	0	0	0	0	0	7	31	62	80	97	114	126	124	120	114	78	69	44	23	2	0	0	0	0	797
S/A	0	0	0	0	0	0.48	0.42	0.48	0.41	0.38	0.34	0.37	0.37	0.4	0.44	0.37	0.44	0.43	0.47	0.62	0	0	0	0	0.29
Min	0	0	0	0	0	2	3	3	3	4	2	3	3	17	71	36	10	5	4	0	0	0	0	0	173
Max	0	0	0	0	0	35	158	290	362	435	559	596	553	524	533	343	273	181	89	13	0	0	0	0	3981

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 5116 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