

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Savannah State College - April 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	0	19	166	172	288	690	687	162	302	490	81	265	132	19	0	0	0	0	0	3472
2	0	0	0	0	0	0	17	100	190	425	735	845	576	375	565	593	397	171	20	0	0	0	0	0	5010
3	0	0	0	0	0	0	22	116	352	602	759	870	910	865	756	581	361	144	21	0	0	0	0	0	6360
4	0	0	0	0	0	0	19	127	431	399	601	828	670	443	558	531	387	164	21	0	0	0	0	0	5179
5	0	0	0	0	0	0	36	210	436	638	792	898	916	890	783	611	296	86	14	0	0	0	0	0	6607
6	0	0	0	0	0	0	15	47	142	529	691	822	824	521	532	297	364	148	15	0	0	0	0	0	4948
7	0	0	0	0	0	0	20	143	361	361	249	499	617	802	512	383	154	140	12	0	0	0	0	0	4254
8	0	0	0	0	0	0	36	212	397	564	714	729	839	702	712	426	338	134	17	0	0	0	0	0	5819
9	0	0	0	0	0	0	14	68	210	443	606	607	784	599	636	480	360	169	20	0	0	0	0	0	4994
10	0	0	0	0	0	0	35	104	328	470	667	805	874	757	596	308	217	120	21	0	0	0	0	0	5304
11	0	0	0	0	0	0	54	237	463	658	801	898	926	889	751	556	313	170	26	0	0	0	0	0	6742
12	0	0	0	0	0	0	57	272	506	706	856	966	999	957	840	669	457	217	36	0	0	0	0	0	7537
13	0	0	0	0	0	0	63	270	499	701	850	958	987	939	837	665	450	204	19	0	0	0	0	0	7441
14	0	0	0	0	0	1	71	189	446	656	805	894	751	798	700	508	398	165	17	0	0	0	0	0	6400
15	0	0	0	0	0	0	35	105	181	398	355	691	722	474	323	387	348	125	24	0	0	0	0	0	4168
16	0	0	0	0	0	0	69	270	490	540	716	887	946	747	698	300	188	87	17	0	0	0	0	0	5956
17	0	0	0	0	0	0	9	73	158	159	189	439	436	480	585	598	380	165	33	0	0	0	0	0	3702
18	0	0	0	0	0	1	78	287	521	719	864	974	1018	974	858	681	468	227	43	0	0	0	0	0	7714
19	0	0	0	0	0	0	82	291	524	716	860	967	1004	961	845	668	459	220	40	0	0	0	0	0	7638
20	0	0	0	0	0	1	76	277	503	571	812	922	881	812	714	466	394	200	32	0	0	0	0	0	6661
21	0	0	0	0	0	1	78	275	497	684	824	907	945	907	793	632	438	208	37	0	0	0	0	0	7225
22	0	0	0	0	0	1	75	274	494	684	823	924	960	929	818	630	461	223	44	0	0	0	0	0	7338
23	0	0	0	0	0	1	73	280	495	688	843	956	980	939	809	642	441	207	40	0	0	0	0	0	7395
24	0	0	0	0	0	2	79	245	442	636	774	846	864	697	567	372	136	37	6	0	0	0	0	0	5703
25	0	0	0	0	0	0	5	24	45	132	180	240	154	203	156	161	67	44	10	0	0	0	0	0	1422
26	0	0	0	0	0	1	30	71	328	620	686	711	839	780	716	519	338	183	28	0	0	0	0	0	5852
27	0	0	0	0	0	2	58	274	480	668	818	914	1007	712	559	632	435	174	32	0	0	0	0	0	6766
28	0	0	0	0	0	2	52	90	145	286	357	112	188	422	428	314	89	30	4	0	0	0	0	0	2518
29	0	0	0	0	0	1	11	55	86	83	72	158	244	220	117	49	36	39	9	0	0	0	0	0	1182
30	0	0	0	0	0	1	17	53	73	79	69	106	111	112	59	47	30	15	4	0	0	0	0	0	775
Avg	0	0	0	0	0	1	43	174	347	504	635	735	738	674	610	460	315	145	23	0	0	0	0	0	5403
S/D	0	0	0	0	0	1	26	91	157	198	250	264	287	253	213	190	135	62	11	0	0	0	0	0	1940
S/A	0	0	0	0	0	1.33	0.59	0.52	0.45	0.39	0.39	0.36	0.39	0.38	0.35	0.41	0.43	0.43	0.5	0	0	0	0	0	0.36
Min	0	0	0	0	0	0	5	24	45	79	69	106	111	112	59	47	30	15	4	0	0	0	0	0	775
Max	0	0	0	0	0	2	82	291	524	719	864	974	1018	974	858	681	468	227	44	0	0	0	0	0	7714

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 4663 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: 9.16 uV/Wm-2  
 Serial Number: 18078F3  
 Calibration Date: 9/13/96  
 Note: Instrument was changed during month.

**Direct Normal Solar Radiation  
Hourly Integrated and Daily Totals  
Watt-Hours per Square Meter  
Savannah State College - April 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	0	26	155	49	45	446	378	22	29	115	15	182	140	29	0	0	0	0	0	1632
2	0	0	0	0	0	0	24	42	45	124	712	744	341	148	464	676	622	371	49	0	0	0	0	0	4362
3	0	0	0	0	0	0	31	46	292	684	747	789	804	785	739	631	471	226	31	0	0	0	0	0	6275
4	0	0	0	0	0	0	49	54	382	117	257	510	314	85	306	427	413	206	29	0	0	0	0	0	3148
5	0	0	0	0	0	0	116	474	703	812	865	897	868	876	837	691	165	37	21	0	0	0	0	0	7361
6	0	0	0	0	0	0	20	18	32	198	379	507	366	75	163	77	190	59	21	0	0	0	0	0	2105
7	0	0	0	0	0	0	25	114	285	55	34	85	61	477	243	293	54	95	13	0	0	0	0	0	1835
8	0	0	0	0	0	0	39	221	353	383	442	382	575	430	568	275	269	71	30	0	0	0	0	0	4039
9	0	0	0	0	0	0	13	22	67	134	192	172	420	183	359	236	292	210	47	0	0	0	0	0	2348
10	0	0	0	0	0	0	43	40	229	180	355	448	501	404	254	55	56	85	20	0	0	0	0	0	2669
11	0	0	0	0	0	0	150	441	585	753	760	776	794	799	709	515	250	220	40	0	0	0	0	0	6792
12	0	0	0	0	0	0	211	658	844	916	948	982	988	973	926	871	768	527	134	0	0	0	0	0	9746
13	0	0	0	0	0	0	219	613	791	879	917	951	943	930	923	863	761	480	45	0	0	0	0	0	9316
14	0	0	0	0	0	0	144	166	567	725	780	729	351	477	468	355	445	230	23	0	0	0	0	0	5460
15	0	0	0	0	0	0	39	37	53	165	134	281	350	155	65	169	360	106	27	0	0	0	0	0	1942
16	0	0	0	0	0	14	219	557	613	288	486	665	678	437	449	56	50	37	19	0	0	0	0	0	4568
17	0	0	0	0	0	0	6	24	37	25	26	56	58	55	217	552	524	289	81	0	0	0	0	0	1951
18	0	0	0	0	0	5	270	630	816	887	915	954	979	970	936	877	775	541	158	0	0	0	0	0	9714
19	0	0	0	0	0	1	292	638	814	873	902	937	954	944	907	840	740	502	137	0	0	0	0	0	9482
20	0	0	0	0	0	24	215	549	720	508	765	827	735	600	556	347	501	316	58	0	0	0	0	0	6723
21	0	0	0	0	0	8	199	520	703	782	820	817	839	822	787	735	650	410	95	0	0	0	0	0	8188
22	0	0	0	0	0	10	159	493	671	756	794	829	846	854	834	714	709	478	136	0	0	0	0	0	8284
23	0	0	0	0	0	9	113	425	674	776	838	892	890	884	837	770	667	409	106	0	0	0	0	0	8290
24	0	0	0	0	0	746	109	245	441	535	604	498	527	350	152	90	33	14	18	0	0	0	0	0	4363
25	0	0	0	0	0	1	3	8	9	21	25	31	19	26	22	28	15	16	13	0	0	0	0	0	237
26	0	0	0	0	0	7	23	22	169	382	333	344	538	394	464	320	239	161	42	0	0	0	0	0	3440
27	0	0	0	0	0	10	50	391	572	648	622	700	706	426	344	628	554	230	25	0	0	0	0	0	5906
28	0	0	0	0	0	7	33	28	30	89	94	12	22	39	54	51	22	9	3	1	0	0	0	0	495
29	0	0	0	0	0	6	8	17	18	14	10	20	31	28	16	8	9	14	8	1	0	0	0	0	207
30	0	0	0	0	0	2	11	17	15	12	9	13	14	14	8	8	6	6	3	0	0	0	0	0	139
Avg	0	0	0	0	0	28	95	255	386	426	507	541	518	456	457	406	360	217	49	0	0	0	0	0	4701
S/D	0	0	0	0	0	133	88	239	300	328	325	329	335	343	314	304	266	174	44	0	0	0	0	0	3083
S/A	0	0	0	0	0	4.7	0.93	0.94	0.78	0.77	0.64	0.61	0.65	0.75	0.69	0.75	0.74	0.8	0.9	3.83	0	0	0	0	0.66
Min	0	0	0	0	0	0	3	8	9	12	9	12	14	14	8	8	6	6	3	0	0	0	0	0	139
Max	0	0	0	0	0	746	292	658	844	916	948	982	988	973	936	877	775	541	158	1	0	0	0	0	9746

Daylight Data Recovery: 2% missing; 0% exceed the 15% QC threshold -- 123370 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 - April 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	0	16	120	151	259	339	367	142	277	404	70	190	90	18	0	0	0	0	0	2444
2	0	0	0	0	0	0	15	89	169	340	181	209	273	248	217	165	109	70	15	0	0	0	0	0	2100
3	0	0	0	0	0	0	19	103	204	158	176	191	196	191	185	178	141	82	17	0	0	0	0	0	1841
4	0	0	0	0	0	0	18	111	252	320	401	386	390	371	321	255	196	107	18	0	0	0	0	0	3147
5	0	0	0	0	0	0	22	72	95	106	111	119	139	134	132	165	211	76	12	0	0	0	0	0	1394
6	0	0	0	0	0	0	14	42	126	395	386	380	496	456	409	248	285	131	13	0	0	0	0	0	3381
7	0	0	0	0	0	0	18	104	225	325	222	424	562	391	316	184	131	112	10	0	0	0	0	0	3024
8	0	0	0	0	0	0	31	143	221	308	361	394	319	328	270	245	207	112	15	0	0	0	0	0	2956
9	0	0	0	0	0	0	13	61	175	355	452	453	403	439	357	331	223	111	17	0	0	0	0	0	3391
10	0	0	0	0	0	0	30	92	207	348	380	409	419	401	397	273	191	94	19	0	0	0	0	0	3260
11	0	0	0	0	0	0	33	99	161	147	187	210	202	187	189	211	194	107	21	0	0	0	0	0	1949
12	0	0	0	0	0	0	26	62	73	81	88	92	97	100	105	95	85	65	20	0	0	0	0	0	990
13	0	0	0	0	0	0	32	72	90	99	105	109	122	117	103	95	80	62	12	0	0	0	0	0	1098
14	0	0	0	0	0	0	53	136	148	156	168	243	429	376	325	278	180	91	15	0	0	0	0	0	2598
15	0	0	0	0	0	0	31	93	152	286	250	438	400	335	270	274	171	92	21	0	0	0	0	0	2814
16	0	0	0	0	0	0	37	84	169	348	311	289	320	358	336	262	163	76	15	0	0	0	0	0	2767
17	0	0	0	0	0	0	8	65	138	141	167	388	382	430	417	236	126	72	23	0	0	0	0	0	2593
18	0	0	0	0	0	1	37	71	84	97	107	111	109	107	103	94	84	64	23	0	0	0	0	0	1092
19	0	0	0	0	0	0	37	71	87	101	110	116	117	116	112	104	91	67	22	0	0	0	0	0	1149
20	0	0	0	0	0	1	42	84	113	215	174	169	195	272	266	232	138	101	24	0	0	0	0	0	2027
21	0	0	0	0	0	1	45	90	114	128	138	161	161	167	154	136	112	80	25	0	0	0	0	0	1512
22	0	0	0	0	0	1	47	96	126	144	156	165	168	159	140	145	103	74	26	0	0	0	0	0	1552
23	0	0	0	0	0	1	54	123	123	132	137	138	145	140	126	120	103	78	26	0	0	0	0	0	1447
24	0	0	0	0	0	2	60	157	194	253	263	389	369	378	444	309	120	33	6	0	0	0	0	0	2975
25	0	0	0	0	0	0	4	21	40	117	159	212	136	179	138	142	59	39	9	0	0	0	0	0	1256
26	0	0	0	0	0	1	27	64	229	342	403	396	332	422	332	306	213	129	27	0	0	0	0	0	3220
27	0	0	0	0	0	2	48	126	158	197	290	266	338	327	276	202	150	96	29	0	0	0	0	0	2504
28	0	0	0	0	0	2	47	79	128	218	280	100	166	387	384	279	77	26	3	0	0	0	0	0	2177
29	0	0	0	0	0	1	10	49	76	73	64	140	215	195	104	44	32	35	8	0	0	0	0	0	1043
30	0	0	0	0	0	1	14	47	64	70	62	94	99	98	52	41	26	13	3	0	0	0	0	0	685
Avg	0	0	0	0	0	0	30	88	143	209	221	252	261	269	246	191	140	79	17	0	0	0	0	0	2146
S D	0	0	0	0	0	1	15	31	54	103	112	124	131	119	117	82	60	29	7	0	0	0	0	0	830
S/A	0	0	0	0	0	1.39	0.5	0.35	0.38	0.49	0.51	0.49	0.5	0.44	0.48	0.43	0.43	0.36	0.4	0	0	0	0	0	0.39
Min	0	0	0	0	0	0	4	21	40	70	62	92	97	98	52	41	26	13	3	0	0	0	0	0	685
Max	0	0	0	0	0	2	60	157	252	395	452	453	562	456	444	331	285	131	29	0	0	0	0	0	3391

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 4663 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: 8.29 uV/Wm-2  
Serial Number: 18040F3  
Calibration Date: 9/13/96  
Note: Instrument was changed during month.