

**Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Savannah State College - August 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	4	83	251	455	624	760	844	877	829	752	623	454	251	78	2	0	0	0	0	6886
2	0	0	0	0	0	4	73	215	444	631	631	898	932	892	497	512	414	173	28	1	0	0	0	0	6345
3	0	0	0	0	0	2	76	266	485	560	815	947	945	628	615	480	391	271	81	1	0	0	0	0	6562
4	0	0	0	0	0	2	48	125	409	666	809	898	759	899	782	622	474	263	76	0	0	0	0	0	6833
5	0	0	0	0	0	2	40	242	479	657	822	948	872	755	829	639	456	254	73	1	0	0	0	0	7069
6	0	0	0	0	0	2	77	260	467	660	844	876	939	920	820	668	474	264	70	1	0	0	0	0	7343
7	0	0	0	0	0	3	70	267	462	657	696	958	941	917	821	639	473	228	66	1	0	0	0	0	7197
8	0	0	0	0	0	2	62	207	449	631	779	888	907	852	616	142	10 ?	9	16	2	0	0	0	0	5572
9	0	0	0	0	0	1	40	203	384	576	611	858	833	663	554	340	255	224	64	1	0	0	0	0	5607
10	0	0	0	0	0	1	36	146	432	629	787	872	875	632	712	555	470	204	62	0	0	0	0	0	6415
11	0	0	0	0	0	2	67	232	437	626	782	841	835	612	763	472	364	276	66	3	0	0	0	0	6379
12	0	0	0	0	0	2	78	235	408	578	721	877	921	644	604	588	408	211	52	0	0	0	0	0	6326
13	0	0	0	0	0	1	66	201	404	526	569	830	851	807	493	206	121	71	24	0	0	0	0	0	5170
14	0	0	0	0	0	1	48	192	399	551	729	860	887	844	746	587	404	74	1 ?	0	0	0	0	0	6323
15	0	0	0	0	0	1	58	186	417	482	451	477	608	757	695	559	417	175	51	0	0	0	0	0	5335
16	0	0	0	0	0	0	56	243	447	620	693	750	663	742	606	542	45	99	22	0	0	0	0	0	5532
17	0	0	0	0	0	0	29	77	96	594	634	817	710	410	418	445	445	215	54	0	0	0	0	0	4945
18	0	0	0	0	0	1	61	231	437	623	781	881	896	715	698	564	436	244	46	0	0	0	0	0	6613
19	0	0	0	0	0	1	64	233	438	633	791	822	932	887	780	627	432	167	10	0	0	0	0	0	6817
20	0	0	0	0	0	0	9	90	170	592	803	887	921	665	634	606	426	222	36	0	0	0	0	0	6061
21	0	0	0	0	0	1	81	244	444	649	811	880	719	667	460	636	413	194	32	0	0	0	0	0	6231
22	0	0	0	0	0	0	58	232	441	620	777	864	841	833	656	128	58	3 ?	0	0	0	0	0	0	5513
23	0	0	0	0	0	0	64	242	450	574	816	669	494	719	67	125	209	162	50	0	0	0	0	0	4642
24	0	0	0	0	0	0	45	222	305	655	637	690	859	789	725	523	377	159	26	0	0	0	0	0	6011
25	0	0	0	0	0	0	64	143	235	631	696	871	589	691	276	368	271	159	12	0	0	0	0	0	5005
26	0	0	0	0	0	0	45	215	418	617	742	862	704	884	394	515	423	162	33	0	0	0	0	0	6015
27	0	0	0	0	0	0	52	229	436	622	731	809	653	923	789	382	106	205	77	0	0	0	0	0	6015
28	0	0	0	0	0	0	68	222	432	630	617	1000	924	846	784	623	441	212	32	0	0	0	0	0	6832
29	0	0	0	0	0	0	17	42	115	226	175	173	250	210	181	79	73	51	18	0	0	0	0	0	1609
30	0	0	0	0	0	0	30	181	435	631	787	874	909	863	747	575	371	177	28	0	0	0	0	0	6608
31	0	0	0	0	0	0	56	250	474	663	815	907	930	891	782	619	415	192	26	0	0	0	0	0	7019
Avg	0	0	0	0	0	1	55	204	397	601	713	827	806	754	622	483	340	180	42	0	0	0	0	0	6027
S D	0	0	0	0	0	1	18	56	101	80	133	153	157	154	191	173	146	73	24	1	0	0	0	0	1065
S/A	0	0	0	0	0	0.95	0.33	0.27	0.25	0.13	0.19	0.18	0.2	0.2	0.31	0.36	0.43	0.41	0.57	1.65	0	0	0	0	0.18
Min	0	0	0	0	0	0	9	42	96	226	175	173	250	210	67	79	10	3	0	0	0	0	0	0	1609
Max	0	0	0	0	0	4	83	267	485	666	844	1000	945	923	829	668	474	276	81	3	0	0	0	0	7343

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 4959 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 - August 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	16	106	301	452	521	554	596	550	519	549	504	461	316	84	8	0	0	0	0	5538
2	0	0	0	0	0	25	41	241	464	510	258	646	696	471	111	174	192	83	17	1	0	0	0	0	3927
3	0	0	0	0	0	16	92	386	577	465	618	727	680	314	386	239	238	425	163	2	0	0	0	0	5327
4	0	0	0	0	0	15	43	44	434	705	725	769	557	687	698	618	619	462	179	0	0	0	0	0	6555
5	0	0	0	0	0	6	22	338	646	712	781	787	603	423	640	565	536	404	138	3	0	0	0	0	6603
6	0	0	0	0	0	9	134	427	581	684	752	671	700	752	714	660	540	435	138	31	0	0	0	0	7228
7	0	0	0	0	0	12	96	452	563	667	496	717	720	777	758	651	604	259	61	6	0	0	0	0	6839
8	0	0	0	0	0	13	50	167	436	518	573	664	652	548	323	17	2	1	8	9	0	0	0	0	3979
9	0	0	0	0	0	4	28	91	196	295	133	435	296	213	171	131	155	142	49	3	0	0	0	0	2342
10	0	0	0	0	0	11	29	39	367	486	591	570	472	247	377	316	322	192	63	0	0	0	0	0	4080
11	0	0	0	0	0	13	61	228	392	494	571	527	454	279	503	271	178	139	40	105	0	0	0	0	4254
12	0	0	0	0	0	7	57	192	353	413	477	633	659	368	380	438	353	205	42	10	0	0	0	0	4588
13	0	0	0	0	0	6	33	76	213	208	181	392	412	383	143	30	29	25	15	3	0	0	0	0	2148
14	0	0	0	0	0	9	30	85	220	204	410	466	506	510	474	418	333	37	0	0	0	0	0	0	3701
15	0	0	0	0	0	11	47	69	140	131	112	103	203	406	430	395	393	136	46	1	0	0	0	0	2623
16	0	0	0	0	0	0	42	64	190	490	489	471	355	429	416	340	8	29	22	1	0	0	0	0	3347
17	0	0	0	0	0	0	24	27	19	149	201	485	324	64	81	178	370	109	42	5	0	0	0	0	2079
18	0	0	0	0	0	9	56	46	46	75	227	463	528	373	388	293	125	89	37	2	0	0	0	0	2757
19	0	0	0	0	0	14	50	49	42	27	87	80	216	277	188	79	62	29	9	0	0	0	0	0	1209
20	0	0	0	0	0	2	7	32	35	8	0	14	45	66	55	37	36	46	32	0	0	0	0	0	416
21	0	0	0	0	0	3	106	33	4	0	0	14	43	37	44	32	37	46	23	0	0	0	0	0	423
22	0	0	0	0	0	5	54	34	34	21	20	25	21	29	47	16	14	1	4	0	0	0	0	0	325
23	0	0	0	0	0	3	72	29	24	33	22	27	36	47	7	21	54	46	33	0	0	0	0	0	453
24	0	0	0	0	0	0	35	24	47	41	51	61	26	41	56	60	42	58	24	0	0	0	0	0	568
25	0	0	0	0	0	3	78	46	48	16	40	22	41	40	38	43	32	36	9	0	0	0	0	0	493
26	0	0	0	0	0	4	34	42	31	15	32	20	28	20	35	46	26	33	37	0	0	0	0	0	403
27	0	0	0	0	0	0	53	30	22	9	10	10	20	3	5	9	29	55	62	0	0	0	0	0	318
28	0	0	0	0	0	0	112	40	34	31	45	17	4	6	1	12	15	9	70	0	0	0	0	0	395
29	0	0	0	0	0	3	15	15	25	38	24	23	32	27	26	14	19	23	56	0	0	0	0	0	340
30	0	0	0	0	0	1	34	34	36	19	11	11	5	12	29	43	53	48	38	0	0	0	0	0	375
31	0	0	0	0	0	1	80	15	7	0	0	0	0	0	0	1	11	4	91	0	0	0	0	0	210

Avg	0	0	0	0	0	7	55	119	215	258	274	337	319	270	260	215	190	127	53	6	0	0	0	0	2705
S/D	0	0	0	0	0	6	31	130	211	253	266	293	266	238	243	216	200	139	45	19	0	0	0	0	2287
S/A	0	0	0	0	0	0.86	0.56	1.09	0.98	0.98	0.97	0.87	0.83	0.88	0.93	1	1.05	1.1	0.86	3.09	0	0	0	0	0.85
Min	0	0	0	0	0	0	7	15	4	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	210
Max	0	0	0	0	0	25	134	452	646	712	781	787	720	777	758	660	619	462	179	105	0	0	0	0	7228

Daylight Data Recovery: 2% missing; 0% exceed the 15% QC threshold -- 143794 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 - August 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	3	62	136	198	242	283	283	344	340	279	252	190	128	60	2	0	0	0	0	2803
2	0	0	0	0	0	4	67	121	180	264	409	291	258	448	403	384	306	139	25	1	0	0	0	0	3300
3	0	0	0	0	0	2	58	119	159	220	284	264	288	334	279	301	252	111	49	1	0	0	0	0	2719
4	0	0	0	0	0	2	41	110	155	152	187	177	221	256	179	175	123	88	41	0	0	0	0	0	1907
5	0	0	0	0	0	2	36	106	116	139	154	210	291	362	280	227	155	102	46	1	0	0	0	0	2226
6	0	0	0	0	0	2	52	102	141	163	200	251	265	216	208	185	170	100	44	1	0	0	0	0	2101
7	0	0	0	0	0	2	53	99	147	173	275	289	248	191	174	164	134	129	55	1	0	0	0	0	2133
8	0	0	0	0	0	2	54	140	205	256	290	268	281	339	340	129	9 ?	9	15	2	0	0	0	0	2340
9	0	0	0	0	0	1	36	168	275	358	501	452	549	465	408	240	169	172	55	1	0	0	0	0	3851
10	0	0	0	0	0	1	31	132	226	276	285	342	423	404	394	328	295	132	50	0	0	0	0	0	3321
11	0	0	0	0	0	1	56	149	219	270	298	351	400	353	335	273	269	225	61	2	0	0	0	0	3265
12	0	0	0	0	0	1	70	163	213	283	314	290	292	300	281	274	213	136	45	0	0	0	0	0	2874
13	0	0	0	0	0	1	62	172	286	376	418	467	459	453	369	186	105	62	21	0	0	0	0	0	3436
14	0	0	0	0	0	1	45	159	279	404	383	429	405	373	347	288	222	59	1 ?	0	0	0	0	0	3395
15	0	0	0	0	0	1	52	163	336	388	358	381	416	385	332	282	202	130	44	0	0	0	0	0	3469
16	0	0	0	0	0	0	49	220	339	270	282	318	326	349	262	292	41	89	19	0	0	0	0	0	2856
17	0	0	0	0	0	0	26	68	86	463	461	372	403	351	351	319	247	174	49	0	0	0	0	0	3370
18	0	0	0	0	0	1	53	216	412	539 ?	582	455	397	373	375	356	366	213	41	0	0	0	0	0	4378
19	0	0	0	0	0	1	56	216	416	? 704 ?	677 ?	724	634	622	483 ?	399	157	9	0	0	0	0	0	0	5098 ?
20	0	0	0	0	0	0	8	79	152	184 ?	? ?	? 770 ?	517 ?	383 ?	509 ?	399	208	30	0	0	0	0	0	0	3238 ?
21	0	0	0	0	0	1	64	237	369 ?	? ?	? 626 ?	517 ?	472 ?	353	450 ?	338 ?	179	29	0	0	0	0	0	0	3634 ?
22	0	0	0	0	0	0	51	221	423	516 ?	? ?	? 678 ?	424 ?	515 ?	405 ?	116	51	2 ?	0	0	0	0	0	0	3403 ?
23	0	0	0	0	0	0	54	232	379 ?	458 ?	704 ?	405 ?	389	528 ?	61	111	181	149	46	0	0	0	0	0	3698 ?
24	0	0	0	0	0	0	40	210	232	539 ?	588	521 ?	573 ?	610 ?	588 ?	327 ?	267 ?	141	22	0	0	0	0	0	4658 ?
25	0	0	0	0	0	0	53	127	209	495 ?	427 ?	680 ?	396 ?	524 ?	244	273	206	130	11	0	0	0	0	0	3776 ?
26	0	0	0	0	0	0	40	202	393	? 500 ?	656 ?	469 ?	707 ?	280	246 ?	334 ?	152	30	0	0	0	0	0	0	4010 ?
27	0	0	0	0	0	0	45	220	392 ?	? 583 ?	470 ?	276 ?	? ?	? 66 ?	92	182 ?	72 ?	0	0	0	0	0	0	0	2397 ?
28	0	0	0	0	0	0	56	195	297 ?	377 ?	432 ?	392 ?	584 ?	552 ?	? 544 ?	? 209	23	0	0	0	0	0	0	0	3662 ?
29	0	0	0	0	0	0	15	37	102	199	155	152	220	186	160	69	64	45	17	0	0	0	0	0	1422
30	0	0	0	0	0	0	26	170	391 ?	? ?	? ?	? ?	? ?	? ?	? 498 ?	345	163	25	0	0	0	0	0	0	1618 ?
31	0	0	0	0	0	0	47	225	? ?	? ?	? ?	? ?	? ?	? ?	? ?	? 328 ?	191	16	0	0	0	0	0	0	808 ?
Avg	0	0	0	0	0	1	47	158	258	320	387	398	400	412	322	278	216	132	34	0	0	0	0	0	3070
S D	0	0	0	0	0	1	14	53	104	126	154	152	138	128	117	127	108	56	18	1	0	0	0	0	938
S/A	0	0	0	0	0	0.95	0.3	0.33	0.4	0.39	0.4	0.38	0.34	0.31	0.36	0.45	0.5	0.42	0.54	1.52	0	0	0	0	0.31
Min	0	0	0	0	0	0	8	37	86	139	154	152	220	186	61	66	9	2	0	0	0	0	0	0	808
Max	0	0	0	0	0	4	70	237	423	539	704	680	770	707	622	544	399	225	72	2	0	0	0	0	5098

Daylight Data Recovery: 0% missing; 16% exceed the 15% QC threshold -- 4959 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