

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Savannah State College - November 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	3	88	259	419	423	388	163	266	168	102	61	2	0	0	0	0	0	0	2343
2	0	0	0	0	0	0	2	96	288	467	603	724	698	629	299	104	69	2	0	0	0	0	0	0	3981
3	0	0	0	0	0	0	2	105	317	509	642	720	730	666	541	359	152	8	0	0	0	0	0	0	4751
4	0	0	0	0	0	0	2	119	297	481	613	688	700	640	514	338	137	6	0	0	0	0	0	0	4534
5	0	0	0	0	0	0	2	72	243	462	600	669	670	609	491	321	129	6	0	0	0	0	0	0	4274
6	0	0	0	0	0	0	2	59	253	459	606	673	680	616	501	326	128	8	?	0	?	0	0	0	4311
7	0	0	0	0	0	0	2	86	213	?	432	568	645	660	594	467	300	113	4	0	0	0	0	0	4084
8	0	0	0	0	0	0	2	91	203	403	535	603	616	560	443	275	102	4	0	0	0	0	0	0	3836
9	0	0	0	0	0	0	1	58	193	429	516	579	607	543	388	268	110	4	0	0	0	0	0	0	3695
10	0	0	0	0	0	0	1	68	340	?	401	549	684	687	446	215	301	107	3	0	0	0	0	0	3803
11	0	0	0	0	0	0	0	26	172	405	547	623	577	392	422	269	89	2	0	0	0	0	0	0	3524
12	0	0	0	0	0	0	0	15	41	82	105	119	145	145	180	107	30	1	0	0	0	0	0	0	970
13	0	0	0	0	0	0	1	53	?	281	?	399	548	623	627	571	451	271	97	3	0	0	0	0	3924
14	0	0	0	0	0	0	1	81	182	403	540	622	633	577	461	285	104	3	0	0	0	0	0	0	3892
15	0	0	0	0	0	0	1	57	214	398	535	611	617	572	446	272	98	2	0	0	0	0	0	0	3823
16	0	0	0	0	0	0	0	61	227	406	532	602	612	551	435	274	100	2	0	0	0	0	0	0	3800
17	0	0	0	0	0	0	0	65	248	438	569	641	649	592	476	293	104	2	0	0	0	0	0	0	4077
18	0	0	0	0	0	0	0	56	206	395	536	613	595	551	446	266	96	2	0	0	0	0	0	0	3762
19	0	0	0	0	0	0	0	52	170	246	340	489	457	408	264	164	81	1	0	0	0	0	0	0	2672
20	0	0	0	0	0	0	0	41	173	381	516	572	594	541	435	257	88	1	0	0	0	0	0	0	3601
21	0	0	0	0	0	0	0	35	164	330	230	140	79	54	51	64	40	1	0	0	0	0	0	0	1188
22	0	0	0	0	0	0	0	16	89	96	212	284	376	351	236	145	55	1	0	0	0	0	0	0	1862
23	0	0	0	0	0	0	0	37	186	299	504	571	474	552	453	241	64	3	0	0	0	0	0	0	3384
24	0	0	0	0	0	0	0	41	88	190	336	322	316	264	335	173	40	2	0	0	0	0	0	0	2107
25	0	0	0	0	0	0	0	42	236	311	495	567	530	537	451	246	76	2	0	0	0	0	0	0	3494
26	0	0	0	0	0	0	0	45	134	30	146	421	463	421	234	148	48	1	0	0	0	0	0	0	2092
27	0	0	0	0	0	0	0	35	206	385	520	596	604	552	441	268	88	1	?	0	0	0	0	0	3695
28	0	0	0	0	0	0	0	34	202	375	505	577	587	536	425	259	83	0	0	0	0	0	0	0	3584
29	0	0	0	0	0	0	0	32	152	298	?	489	561	574	524	419	254	80	1	0	0	0	0	0	3385
30	0	0	0	0	0	0	0	30	204	386	522	599	608	556	443	272	92	1	0	0	0	0	0	0	3714
Avg	0	0	0	0	0	0	1	56	206	357	479	551	544	494	384	241	89	3	0	0	0	0	0	0	3405
S D	0	0	0	0	0	0	1	26	66	117	138	153	167	145	119	76	29	2	0	0	0	0	0	0	929
S/A	0	0	0	0	0	0	1.15	0.46	0.32	0.33	0.29	0.28	0.31	0.29	0.31	0.32	0.32	0.76	0	0	0	0	0	0	0.27
Min	0	0	0	0	0	0	0	15	41	30	105	119	79	54	51	64	30	0	0	0	0	0	0	0	970
Max	0	0	0	0	0	0	3	119	340	509	642	724	730	666	541	359	152	8	0	0	0	0	0	0	4751

Daylight Data Recovery: 0% missing; 1% exceed the 15% QC threshold -- 3801 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 - November 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	6	190	423	572	289	60	16	36	15	18	12	1	0	0	0	0	0	0	1637
2	0	0	0	0	0	0	0	358	682	799	765	787	807	809	228	17	45	2	0	0	0	0	0	0	5299
3	0	0	0	0	0	0	5	438	791	916	958	981	988	968	922	814	572	90	0	0	0	0	0	0	8444
4	0	0	0	0	0	0	6	521	751	873	923	947	954	936	886	774	523	52	0	0	0	0	0	0	8145
5	0	0	0	0	0	0	5	265	569	835	893	906	875	845	800	711	462	35	0	0	0	0	0	0	7201
6	0	0	0	0	0	0	5	179	696	857	925	931	932	907	869	758	499	52	0	0	0	0	0	0	7612
7	0	0	0	0	0	0	15	312	1000	741	805	841	854	816	738	619	357	20	0	0	0	0	0	0	7118
8	0	0	0	0	0	0	5	327	366	649	726	747	757	741	677	530	299	16	0	0	0	0	0	0	5841
9	0	0	0	0	0	0	5	101	302	692	693	684	705	620	295	385	213	11	0	0	0	0	0	0	4707
10	0	0	0	0	0	0	2	199	1234	690	814	825	746	426	121	553	342	41	0	0	0	0	0	0	5992
11	0	0	0	0	0	0	1	9	252	664	787	805	621	357	595	482	213	25	0	0	0	0	0	0	4812
12	0	0	0	0	0	0	3	6	8	9	9	9	11	13	19	17	9	1	0	0	0	0	0	0	115
13	0	0	0	0	0	0	14	439	912	711	825	856	859	843	773	593	337	21	0	0	0	0	0	0	7183
14	0	0	0	0	0	0	0	451	377	687	779	842	852	839	786	633	381	18	0	0	0	0	0	0	6643
15	0	0	0	0	0	0	0	160	448	657	759	797	794	830	750	575	390	14	0	0	0	0	0	0	6174
16	0	0	0	0	0	0	2	226	538	713	770	792	800	771	707	608	380	10	0	0	0	0	0	0	6318
17	0	0	0	0	0	0	5	264	601	849	909	934	937	925	883	729	462	13	0	0	0	0	0	0	7508
18	0	0	0	0	0	0	7	149	512	740	837	862	826	830	801	632	378	5	0	0	0	0	0	0	6580
19	0	0	0	0	0	0	0	83	172	22	101	239	269	196	46	19	122	32	0	0	0	0	0	0	1302
20	0	0	0	0	0	0	0	76	359	726	817	765	814	820	790	613	352	27	0	0	0	0	0	0	6160
21	0	0	0	0	0	0	0	22	81	415	69	7	4	3	4	6	9	1	0	0	0	0	0	0	621
22	0	0	0	0	0	0	0	5	12	8	20	33	127	194	173	110	63	4	0	0	0	0	0	0	749
23	0	0	0	0	0	0	0	66	462	419	807	788	454	767	536	482	54	5	0	0	0	0	0	0	4840
24	0	0	0	0	0	0	0	41	21	37	67	30	31	39	283	188	10	2	0	0	0	0	0	0	749
25	0	0	0	0	0	0	0	94	627	568	704	784	600	726	658	389	113	3	0	0	0	0	0	0	5267
26	0	0	0	0	0	0	0	57	50	1	13	246	463	397	225	70	83	0	0	0	0	0	0	0	1605
27	0	0	0	0	0	0	0	134	621	809	890	920	918	898	853	706	418	3	0	0	0	0	0	0	7171
28	0	0	0	0	0	0	0	137	632	813	881	906	906	892	841	689	400	4	0	0	0	0	0	0	7101
29	0	0	0	0	0	0	0	29	265	733	843	864	862	829	771	601	286	1	0	0	0	0	0	0	6086
30	0	0	0	0	0	0	0	264	642	823	896	925	923	906	852	708	424	5	0	0	0	0	0	0	7368
Avg	0	0	0	0	0	0	3	187	480	601	652	670	657	639	563	468	274	17	0	0	0	0	0	0	5212
S D	0	0	0	0	0	0	4	146	298	286	324	331	319	318	315	269	175	20	0	0	0	0	0	0	2522
S/A	0	0	0	0	0	0	1.35	0.78	0.62	0.48	0.5	0.49	0.49	0.5	0.56	0.57	0.64	1.17	0	0	0	0	0	0	0.48
Min	0	0	0	0	0	0	0	5	8	1	9	7	4	3	4	6	9	0	0	0	0	0	0	0	115
Max	0	0	0	0	0	0	15	521	1234	916	958	981	988	968	922	814	572	90	0	0	0	0	0	0	8444

Daylight Data Recovery: 2% missing; 0% exceed the 15% QC threshold -- 156310 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 - November 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	2	56	102	131	251	347	152	243	160	96	58	2	0	0	0	0	0	0	1600
2	0	0	0	0	0	0	2	30	51	67	136	192	147	117	170	98	58	2	0	0	0	0	0	0	1070
3	0	0	0	0	0	0	2	27	45	54	59	62	60	55	52	44	30	4	0	0	0	0	0	0	494
4	0	0	0	0	0	0	2	29	42	51	55	57	57	54	47	41	27	3	0	0	0	0	0	0	463
5	0	0	0	0	0	0	2	29	47	53	64	69	84	82	72	50	32	3	0	0	0	0	0	0	587
6	0	0	0	0	0	0	2	30	48	48	55	60	59	55	49	40	25	1 ?	0	0	0	0	0	0	472
7	0	0	0	0	0	0	1	33	59	76	91	95	94	92	86	68	39	2	0	0	0	0	0	0	737
8	0	0	0	0	0	0	1	40	79	94	107	116	117	108	96	77	41	3	0	0	0	0	0	0	879
9	0	0	0	0	0	0	1	42	90	103	110	136	146	165	231	128	65	3	0	0	0	0	0	0	1220
10	0	0	0	0	0	0	1	37	69	75	76	154	202	183	151	99	39	2	0	0	0	0	0	0	1087
11	0	0	0	0	0	0	0	25	88	93	92	109	175	175	124	92	47	2	0	0	0	0	0	0	1022
12	0	0	0	0	0	0	0	14	39	78	100	113	138	138	170	101	28	1	0	0	0	0	0	0	920
13	0	0	0	0	0	0	1	35	64	70	77	82	77	71	67	58	33	2	0	0	0	0	0	0	636
14	0	0	0	0	0	0	1	34	70	89	98	93	91	82	73	60	33	2	0	0	0	0	0	0	727
15	0	0	0	0	0	0	1	33	78	100	107	113	114	85	77	70	27	1	0	0	0	0	0	0	806
16	0	0	0	0	0	0	0	30	65	86	101	110	108	100	90	62	31	1	0	0	0	0	0	0	783
17	0	0	0	0	0	0	0	31	68	60	64	65	62	55	48	40	22	1	0	0	0	0	0	0	516
18	0	0	0	0	0	0	0	40	62	69	74	83	81	71	60	47	28	1	0	0	0	0	0	0	617
19	0	0	0	0	0	0	0	38	125	237	284	342	290	292	242	158	60	1	0	0	0	0	0	0	2068
20	0	0	0	0	0	0	0	32	61	67	70	109	93	72	58	47	26	1	0	0	0	0	0	0	635
21	0	0	0	0	0	0	0	32	138	151	195	135	76	53	49	62	39	1	0	0	0	0	0	0	931
22	0	0	0	0	0	0	0	16	85	93	201	264	298	240	153	112	43	2	0	0	0	0	0	0	1507
23	0	0	0	0	0	0	0	29	63	110	72	100	199	120	208	72	56	3	0	0	0	0	0	0	1033
24	0	0	0	0	0	0	0	38	83	174	301	304	297	243	210	102	38	2	0	0	0	0	0	0	1792
25	0	0	0	0	0	0	0	31	71	73	124	102	169	132	145	135	53	2	0	0	0	0	0	0	1038
26	0	0	0	0	0	0	0	38	122	30	140	276	185	202	128	125	31	1	0	0	0	0	0	0	1277
27	0	0	0	0	0	0	0	18	43	51	54	56	56	54	47	37	18	0	0	0	0	0	0	0	434
28	0	0	0	0	0	0	0	18	38	43	47	48	48	43	38	33	17	0	0	0	0	0	0	0	375
29	0	0	0	0	0	0	0	28	79	124	54	59	63	67	65	58	31	1	0	0	0	0	0	0	630
30	0	0	0	0	0	0	0	15	40	55	62	64	63	59	53	42	23	1	0	0	0	0	0	0	478
Avg	0	0	0	0	0	0	1	31	70	87	111	131	127	117	107	75	37	2	0	0	0	0	0	0	895
S D	0	0	0	0	0	0	1	9	25	42	68	86	72	68	61	33	13	1	0	0	0	0	0	0	417
S/A	0	0	0	0	0	0	1.15	0.28	0.36	0.49	0.61	0.66	0.57	0.59	0.57	0.44	0.35	0.56	0	0	0	0	0	0	0.47
Min	0	0	0	0	0	0	0	14	38	30	47	48	48	43	38	33	17	0	0	0	0	0	0	0	375
Max	0	0	0	0	0	0	2	56	138	237	301	347	298	292	242	158	65	4	0	0	0	0	0	0	2068

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 3801 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