

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Savannah State College - January 1998**

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	0	13	142	320	475	563	600	562	462	305	124	7	0	0	0	0	0	0	3574
2	0	0	0	0	0	0	0	15	138	300	428	532	521	363	335	162	83	7	0	0	0	0	0	0	2885
3	0	0	0	0	0	0	0	9	71	317	463	468	475	421	280	252	77	10	0	0	0	0	0	0	2844
4	0	0	0	0	0	0	0	13	128	241	461	563	479	447	397	174	59	2	0	0	0	0	0	0	2965
5	0	0	0	0	0	0	0	14	127	291	373	483	435	228	358	255	66	4	0	0	0	0	0	0	2634
6	0	0	0	0	0	0	0	18	88	183	149	230	248	292	350	298	61	5	0	0	0	0	0	0	1922
7	0	0	0	0	0	0	0	4	53	106	157	215	387	137	106	156	65	7	0	0	0	0	0	0	1393
8	0	0	0	0	0	0	0	1	13	63	71	137	203	126	164	258	93	7	0	0	0	0	0	0	1136
9	0	0	0	0	0	0	0	11	150	322	410	208	343	432	458	329	147	11	0	0	0	0	0	0	2821
10	0	0	0	0	0	0	0	15	128	344	484	597	637	605	505	344	155	12	0	0	0	0	0	0	3825
11	0	0	0	0	0	0	0	14	183 ?	231	472	582	621	586	487	331	144	12	0	0	0	0	0	0	3665
12	0	0	0	0	0	0	0	14	156	265	463	487	531	578	284	150	55	9	0	0	0	0	0	0	2993
13	0	0	0	0	0	0	0	7	46	166	295	434	384	268	170	123	74	6	0	0	0	0	0	0	1973
14	0	0	0	0	0	0	0	2	31	73	33	37	61	65	77	66	31	3	0	0	0	0	0	0	480
15	0	0	0	0	0	0	0	2	13	57	73	102	88	79	84	141	31	3	0	0	0	0	0	0	674
16	0	0	0	0	0	0	0	4	73	147	251	523	385	159	353	127	66	15	0	0	0	0	0	0	2101
17	0	0	0	0	0	0	0	4	41	125	456	615	648	617	515	364	177	19	0	0	0	0	0	0	3581
18	0	0	0	0	0	0	0	26	184	369	515	572	566	579	418	306	125	18	0	0	0	0	0	0	3678
19	0	0	0	0	0	0	0	1	37	142	292	383	115	118	109	108	45	6	0	0	0	0	0	0	1356
20	0	0	0	0	0	0	0	16	128 ?	260	493	625	542	553	570	360	184	26	0	0	0	0	0	0	3757
21	0	0	0	0	0	0	0	20	145	333	505	444	317	405	294	185	102	30	0	0	0	0	0	0	2780
22	0	0	0	0	0	0	0	8	72	88	164	61	83	53	55	32	27	3	0	0	0	0	0	0	647
23	0	0	0	0	0	0	0	0	4	20	57	69	160	176	300	196	91	6	0	0	0	0	0	0	1078
24	0	0	0	0	0	0	0	6	15	46	42	65	345	329	524	413	212	36	0	0	0	0	0	0	2034
25	0	0	0	0	0	0	0	18	160	359	521	630	696	656	564	405	207	37	0	0	0	0	0	0	4251
26	0	0	0	0	0	0	0	15	104	312	499	640	619	384	261	277	124	27	0	0	0	0	0	0	3262
27	0	0	0	0	0	0	0	0	8	88	157	205	157	146	116	74	44	4	0	0	0	0	0	0	999
28	0	0	0	0	0	0	0	21	172	371	540	657	700	673	574	417	221	42	0	0	0	0	0	0	4387
29	0	0	0	0	0	0	0	28	174	356	486	621	691	652	535	398	184	45	0	0	0	0	0	0	4171
30	0	0	0	0	0	0	0	19	160	354	508	615	670	649	548	412	214	40	0	0	0	0	0	0	4190
31	0	0	0	0	0	0	0	21	160	358	525	641	683	660	563	408	212	39	0	0	0	0	0	0	4271
Avg	0	0	0	0	0	0	0	12	100	226	349	420	432	387	349	253	113	16	0	0	0	0	0	0	2656
S D	0	0	0	0	0	0	0	8	59	116	174	212	206	210	169	117	62	14	0	0	0	0	0	0	1206
S/A	0	0	0	0	0	0	0	0.67	0.59	0.51	0.5	0.5	0.48	0.54	0.49	0.46	0.55	0.85	0	0	0	0	0	0	0.45
Min	0	0	0	0	0	0	0	0	4	20	33	37	61	53	55	32	27	2	0	0	0	0	0	0	480
Max	0	0	0	0	0	0	0	28	184	371	540	657	700	673	574	417	221	45	0	0	0	0	0	0	4387

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 20106 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

**Direct Normal Solar Radiation**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Savannah State College - January 1998**

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	0	110	552	782	896	300	11	11	5	3	26	5	0	0	0	0	0	0	2701
2	0	0	0	0	0	0	0	114	499	702	722	274	17	8	29	17	17	1	0	0	0	0	0	0	2401
3	0	0	0	0	0	0	0	10	35	196	488	23	23	24	4	4	1	0	0	0	0	0	0	0	826
4	0	0	0	0	0	0	0	19	17	106	526	2	19	9	2	20	12	10	0	0	0	0	0	0	741
5	0	0	0	0	0	0	0	54	29	77	202	27	18	26	9	6	11	6	0	0	0	0	0	0	464
6	0	0	0	0	0	0	0	27	36	9	22	32	33	37	18	4	16	4	0	0	0	0	0	0	240
7	0	0	0	0	0	0	0	14	21	25	28	32	45	17	17	27	21	13	0	0	0	0	0	0	259
8	0	0	0	0	0	0	0	3	4	13	12	19	26	18	26	9	8	6	0	0	0	0	0	0	143
9	0	0	0	0	0	0	0	12	8	206	446	32	26	18	2	0	0	1	0	0	0	0	0	0	751
10	0	0	0	0	0	0	0	24	0	210	619	0	0	0	0	0	0	14	0	0	0	0	0	0	866
11	0	0	0	0	0	0	0	8	454	140	595	0	0	0	0	0	0	15	0	0	0	0	0	0	1212
12	0	0	0	0	0	0	0	23	151	188	600	23	18	2	19	24	15	16	0	0	0	0	0	0	1079
13	0	0	0	0	0	0	0	15	17	25	75	41	33	26	24	22	20	3	0	0	0	0	0	0	300
14	0	0	0	0	0	0	0	3	13	16	5	3	9	10	13	15	11	5	0	0	0	0	0	0	103
15	0	0	0	0	0	0	0	3	5	11	12	14	12	15	28	11	8	13	0	0	0	0	0	0	132
16	0	0	0	0	0	0	0	5	17	20	131	33	30	21	19	21	19	11	0	0	0	0	0	0	327
17	0	0	0	0	0	0	0	7	17	28	285	0	0	0	0	0	7	0	0	0	0	0	0	0	344
18	0	0	0	0	0	0	0	38	20	175	567	15	10	0	1	0	0	40	0	0	0	0	0	0	866
19	0	0	0	0	0	0	0	1	13	29	200	36	15	16	17	19	16	7	0	0	0	0	0	0	367
20	0	0	0	0	0	0	0	5	267	320	665	0	5	10	3	0	0	0	0	0	0	0	0	0	1277
21	0	0	0	0	0	0	0	16	39	164	522	41	37	30	30	27	19	6	0	0	0	0	0	0	932
22	0	0	0	0	0	0	0	10	28	17	38	8	11	7	9	7	8	7	0	0	0	0	0	0	149
23	0	0	0	0	0	0	0	1	1	4	9	10	22	24	24	18	10	5	0	0	0	0	0	0	129
24	0	0	0	0	0	0	0	8	7	10	7	9	28	28	2	0	0	0	0	0	0	0	0	0	100
25	0	0	0	0	0	0	0	8	11	150	574	10	1	0	0	0	0	0	0	0	0	0	0	0	753
26	0	0	0	0	0	0	0	14	28	178	514	12	10	36	30	15	18	8	0	0	0	0	0	0	863
27	0	0	0	0	0	0	0	54	3	18	19	24	20	20	19	16	13	3	0	0	0	0	0	0	210
28	0	0	0	0	0	0	0	20	3	192	653	1	2	0	0	0	0	5	0	0	0	0	0	0	876
29	0	0	0	0	0	0	0	26	14	159	500	10	2	0	0	0	0	264	0	0	0	0	0	0	975
30	0	0	0	0	0	0	0	19	8	172	766	871	921	928	882	842	649	224	0	0	0	0	0	0	6281
31	0	0	0	0	0	0	0	126	513	751	861	925	938	936	893	810	613	190	0	0	0	0	0	0	7557
Avg	0	0	0	0	0	0	0	26	91	164	373	91	76	73	69	63	49	29	0	0	0	0	0	0	1104
S/D	0	0	0	0	0	0	0	33	167	208	292	222	225	226	215	201	153	66	0	0	0	0	0	0	1648
S/A	0	0	0	0	0	0	0	1.27	1.84	1.27	0.78	2.44	2.97	3.08	3.13	3.18	3.1	2.3	0	0	0	0	0	0	1.49
Min	0	0	0	0	0	0	0	1	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Max	0	0	0	0	0	0	0	126	552	782	896	925	938	936	893	842	649	264	0	0	0	0	0	0	7557

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 57190 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**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Savannah State College - January 1998**

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	0	7	32	44	52	178 ?	?	?	?	?	113	7	0	0	0	0	0	0	434 ?
2	0	0	0	0	0	0	0	8	38	53	91	313 ?	472 ?	351 ?	312	156	80	7	0	0	0	0	0	0	1880
3	0	0	0	0	0	0	0	9	64	167 ?	196	419 ?	375 ?	353 ?	269	220 ?	78	10	0	0	0	0	0	0	2160
4	0	0	0	0	0	0	0	12	118	165 ?	124 ?	?	406 ?	318 ?	276 ?	167	57	2	0	0	0	0	0	0	1645 ?
5	0	0	0	0	0	0	0	11	80 ?	238 ?	282	383 ?	336 ?	214	239 ?	140 ?	64	4	0	0	0	0	0	0	1992 ?
6	0	0	0	0	0	0	0	12	81	179	138	212	229	271	319 ?	169 ?	58	5	0	0	0	0	0	0	1675
7	0	0	0	0	0	0	0	4	49	97	144	197	360	127	98	132	61	6	0	0	0	0	0	0	1276
8	0	0	0	0	0	0	0	1	12	58	65	127	188	117	152	195 ?	69	7	0	0	0	0	0	0	990
9	0	0	0	0	0	0	0	11	107 ?	103 ?	207	191	230 ?	368	389 ?	216 ?	86 ?	11	0	0	0	0	0	0	1919 ?
10	0	0	0	0	0	0	0	16	82 ?	73 ?	81 ?	?	?	?	?	?	89 ?	14	0	0	0	0	0	0	356 ?
11	0	0	0	0	0	0	0	15	121 ?	168 ?	86 ?	?	?	?	?	?	110 ?	15	0	0	0	0	0	0	515 ?
12	0	0	0	0	0	0	0	13	99 ?	84 ?	151	401 ?	422 ?	464 ?	232	142	52	9	0	0	0	0	0	0	2068 ?
13	0	0	0	0	0	0	0	6	43	157	259	384	350	253	158	115	70	6	0	0	0	0	0	0	1800
14	0	0	0	0	0	0	0	2	29	68	30	35	56	59	70	61	29	3	0	0	0	0	0	0	442
15	0	0	0	0	0	0	0	2	12	53	68	94	81	72	77	130	29	2	0	0	0	0	0	0	622
16	0	0	0	0	0	0	0	4	70	140	189	295 ?	306	146	312	119	62	14	0	0	0	0	0	0	1656
17	0	0	0	0	0	0	0	4	37	115	248 ?	?	?	?	?	?	84 ?	21	0	0	0	0	0	0	510 ?
18	0	0	0	0	0	0	0	22 ?	?	160 ?	149 ?	?	513 ?	?	385 ?	266 ?	127	18	0	0	0	0	0	0	1638 ?
19	0	0	0	0	0	0	0	1	35	131	229	279 ?	106	108	101	101	42	6	0	0	0	0	0	0	1138
20	0	0	0	0	0	0	0	20	108 ?	95 ?	68 ?	?	316 ?	370 ?	380 ?	88 ?	106 ?	28	0	0	0	0	0	0	1579 ?
21	0	0	0	0	0	0	0	20	114	174 ?	201	256 ?	294	325 ?	279	175	97	30	0	0	0	0	0	0	1966
22	0	0	0	0	0	0	0	8	67	82	146	56	76	49	50	29	25	2	0	0	0	0	0	0	592
23	0	0	0	0	0	0	0	0	3	18	53	63	146	162	287	172	49	6	0	0	0	0	0	0	959
24	0	0	0	0	0	0	0	5	13	43	38	60	274	312	420 ?	?	?	20 ?	0	0	0	0	0	0	1185 ?
25	0	0	0	0	0	0	0	18	130 ?	159 ?	176	?	?	?	?	?	168 ?	19 ?	0	0	0	0	0	0	671 ?
26	0	0	0	0	0	0	0	14	98	208	138 ?	?	435 ?	362	245	197 ?	119	26	0	0	0	0	0	0	1843 ?
27	0	0	0	0	0	0	0	0	7	81	147	191	144	133	106	67	40	4	0	0	0	0	0	0	921
28	0	0	0	0	0	0	0	21	114 ?	101 ?	88 ?	?	?	?	?	?	?	39	0	0	0	0	0	0	363 ?
29	0	0	0	0	0	0	0	20	102 ?	192 ?	179	?	?	503 ?	417 ?	318 ?	135 ?	41	0	0	0	0	0	0	1905 ?
30	0	0	0	0	0	0	0	19	135 ?	119 ?	107	86	79	73	65	54	40	14	0	0	0	0	0	0	792
31	0	0	0	0	0	0	0	11	43	62	73	75	78	75	71	60	45	16	0	0	0	0	0	0	609
Avg	0	0	0	0	0	0	0	10	68	116	136	205	261	233	228	145	75	13	0	0	0	0	0	0	1229
S D	0	0	0	0	0	0	0	7	40	55	68	123	139	135	121	68	35	10	0	0	0	0	0	0	604
S/A	0	0	0	0	0	0	0	0.67	0.59	0.47	0.5	0.6	0.53	0.58	0.53	0.47	0.46	0.78	0	0	0	0	0	0	0.49
Min	0	0	0	0	0	0	0	0	3	18	30	35	56	49	50	29	25	2	0	0	0	0	0	0	356
Max	0	0	0	0	0	0	0	22	135	238	282	419	513	503	420	318	168	41	0	0	0	0	0	0	2160

Daylight Data Recovery: 0% missing; 13% exceed the 15% QC threshold -- 20106 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