

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Savannah State College - September 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	56	249	478	679	837	932	962	917	806	632	422	186	25	0	0	0	0	0	7179
2	0	0	0	0	0	0	54	239	459	655	810	906	939	896	779	606	404	179	27	?	0	?	0	0	6952
3	0	0	0	0	0	0	53	273	?	443	558	781	895	922	873	757	623	296	113	16	0	0	0	0	6602
4	0	0	0	0	0	0	60	182	409	629	802	845	906	869	697	475	327	183	21	0	0	0	0	0	6405
5	0	0	0	0	0	0	45	217	435	627	780	872	900	843	715	566	364	104	9	0	0	0	0	0	6475
6	0	0	0	0	0	0	25	148	229	511	648	783	693	623	605	517	341	133	15	0	0	0	0	0	5270
7	0	0	0	0	0	0	35	170	377	567	692	775	797	771	649	196	79	19	0	0	0	0	0	0	5128
8	0	0	0	0	0	0	44	141	190	230	254	459	500	488	511	591	350	155	10	0	0	0	0	0	3924
9	0	0	0	0	0	0	43	209	440	637	585	859	338	407	493	568	250	112	12	0	0	0	0	0	4954
10	0	0	0	0	0	0	32	197	387	581	748	842	864	820	711	522	314	120	9	0	0	0	0	0	6148
11	0	0	0	0	0	0	37	204	414	603	728	731	900	849	739	566	363	148	10	0	0	0	0	0	6293
12	0	0	0	0	0	0	15	147	498	531	675	845	806	838	746	525	276	102	8	0	0	0	0	0	6012
13	0	0	0	0	0	0	37	199	432	507	627	851	551	777	575	440	346	136	9	0	0	0	0	0	5487
14	0	0	0	0	0	0	16	133	319	584	512	450	589	493	496	329	108	80	13	0	0	0	0	0	4121
15	0	0	0	0	0	0	3	18	43	86	95	99	120	84	55	28	20	12	2	0	0	0	0	0	664
16	0	0	0	0	0	0	36	219	442	632	784	875	897	846	726	550	344	126	4	0	0	0	0	0	6481
17	0	0	0	0	0	0	35	202	416	609	723	767	862	814	618	521	320	112	7	0	0	0	0	0	6006
18	0	0	0	0	0	0	11	149	404	575	390	415	742	580	534	295	75	24	2	0	0	0	0	0	4196
19	0	0	0	0	0	0	4	17	32	66	102	60	131	139	147	85	125	53	2	0	0	0	0	0	965
20	0	0	0	0	0	0	1	18	37	64	134	169	386	191	204	43	70	50	5	0	0	0	0	0	1371
21	0	0	0	0	0	0	8	36	170	213	496	588	476	344	261	266	219	118	2	0	0	0	0	0	3198
22	0	0	0	0	0	0	11	107	252	378	725	835	873	844	640	458	311	88	1	0	0	0	0	0	5523
23	0	0	0	0	0	0	42	217	435	625	774	861	836	824	694	524	308	97	2	0	0	0	0	0	6240
24	0	0	0	0	0	0	3	73	166	397	365	241	178	147	224	262	148	93	2	0	0	0	0	0	2299
25	0	0	0	0	0	0	14	154	408	579	659	786	706	692	538	245	286	84	0	0	0	0	0	0	5152
26	0	0	0	0	0	0	25	184	362	439	675	703	509	315	110	81	54	12	0	0	0	0	0	0	3468
27	0	0	0	0	0	0	4	25	18	82	176	226	295	222	298	189	102	33	0	0	0	0	0	0	1670
28	0	0	0	0	0	0	4	10	12	58	167	312	212	227	433	535	169	57	0	0	0	0	0	0	2198
29	0	0	0	0	0	0	14	111	223	407	651	543	742	716	538	276	65	48	3	0	0	0	0	0	4337
30	0	0	0	0	0	0	19	159	388	579	723	821	838	720	464	345	159	52	0	0	0	0	0	0	5268
Avg	0	0	0	0	0	0	26	147	311	456	571	645	649	606	525	395	234	94	7	0	0	0	0	0	4666
S D	0	0	0	0	0	0	18	76	155	205	237	269	266	272	214	186	121	50	7	0	0	0	0	0	1866
S/A	0	0	0	0	0	0	0.69	0.52	0.5	0.45	0.41	0.42	0.41	0.45	0.41	0.47	0.52	0.53	1.02	0	0	0	0	0	0.4
Min	0	0	0	0	0	0	1	10	12	58	95	60	120	84	55	28	20	12	0	0	0	0	0	0	664
Max	0	0	0	0	0	0	60	273	498	679	837	932	962	917	806	632	422	186	27	0	0	0	0	0	7179

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 4465 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 - September 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	95	5	2	0	0	0	0	0	602	859	740	476	102	0	0	0	0	0	2882
2	0	0	0	0	0	0	178	542	743	840	893	918	936	921	877	809	702	465	83	0	0	0	0	0	8907
3	0	0	0	0	0	0	169	439	563	540	786	871	878	824	758	697	321	143	43	0	0	0	0	0	7033
4	0	0	0	0	0	0	179	311	541	731	844	797	882	864	691	465	473	452	91	0	0	0	0	0	7323
5	0	0	0	0	0	0	117	425	639	737	784	798	806	760	645	606	450	87	8	0	0	0	0	0	6863
6	0	0	0	0	0	0	30	83	48	303	343	441	297	268	326	470	388	159	14	0	0	0	0	0	3173
7	0	0	0	0	0	0	39	163	340	441	459	484	490	492	448	126	17	7	3	0	0	0	0	0	3507
8	0	0	0	0	0	0	38	52	42	40	34	67	52	63	170	481	510	393	22	0	0	0	0	0	1964
9	0	0	0	0	0	0	148	494	698	672	442	753	138	207	393	692	264	140	18	0	0	0	0	0	5059
10	0	0	0	0	0	0	41	170	421	491	671	724	728	705	672	559	396	186	89	0	0	0	0	0	5854
11	0	0	0	0	0	0	73	347	575	650	632	593	845	851	819	737	627	386	39	0	0	0	0	0	7174
12	0	0	0	0	0	0	29	175	647	494	472	746	486	674	606	525	262	130	9	0	0	0	0	0	5256
13	0	0	0	0	0	0	70	352	615	505	345	659	315	651	508	482	594	383	32	0	0	0	0	0	5507
14	0	0	0	0	0	0	30	111	221	613	187	78	223	153	275	94	23	47	25	0	0	0	0	0	2081
15	0	0	0	0	0	0	3	7	9	14	13	12	14	10	7	5	6	2	0	0	0	0	0	0	107
16	0	0	0	0	0	0	150	574	784	858	909	931	936	918	871	787	669	394	20	0	0	0	0	0	8801
17	0	0	0	0	0	0	100	425	644	725	627	518	739	678	509	512	478	213	10	0	0	0	0	0	6180
18	0	0	0	0	0	0	10	68	420	471	107	88	385	148	219	96	21	14	5	0	0	0	0	0	2054
19	0	0	0	0	0	0	6	7	8	11	15	7	18	18	22	16	40	26	5	0	0	0	0	0	199
20	0	0	0	0	0	0	1	6	8	11	19	23	53	27	30	9	19	35	11	0	0	0	0	0	252
21	0	0	0	0	0	0	12	14	44	37	66	135	172	86	92	109	52	69	6	0	0	0	0	0	895
22	0	0	0	0	0	0	20	47	61	78	40	82	79	127	320	557	601	269	22	0	0	0	0	0	2304
23	0	0	0	0	0	0	242	646	805	872	916	931	758	854	854	762	582	277	3	0	0	0	0	0	8503
24	0	0	0	0	0	0	3	20	38	90	57	28	19	18	31	42	45	125	1	0	0	0	0	0	518
25	0	0	0	0	0	0	16	244	551	727	629	631	445	546	474	183	497	248	86	0	0	0	0	0	5277
26	0	0	0	0	0	0	15	196	449	315	414	416	144	32	14	15	15	7	1	0	0	0	0	0	2032
27	0	0	0	0	0	0	4	9	4	12	22	28	37	29	40	30	22	11	0	0	0	0	0	0	249
28	0	0	0	0	0	0	13	3	3	8	23	27	22	33	225	504	126	105	0	0	0	0	0	0	1092
29	0	0	0	0	0	0	36	45	73	246	574	311	619	658	469	230	22	52	25	0	0	0	0	0	3359
30	0	0	0	0	0	0	77	361	689	795	854	909	908	716	254	226	89	55	9	0	0	0	0	0	5942
Avg	0	0	0	0	0	0	65	211	356	411	406	434	414	411	407	390	302	179	26	0	0	0	0	0	4012
S D	0	0	0	0	0	0	65	199	293	309	329	348	343	346	283	284	255	155	31	0	0	0	0	0	2789
S/A	0	0	0	0	0	0	1.01	0.94	0.82	0.75	0.81	0.8	0.83	0.84	0.7	0.73	0.84	0.87	1.18	0	0	0	0	0	0.7
Min	0	0	0	0	0	0	1	3	2	0	0	0	0	0	7	5	5	6	0	0	0	0	0	0	107
Max	0	0	0	0	0	0	242	646	805	872	916	931	936	921	877	859	740	476	102	0	0	0	0	0	8907

Daylight Data Recovery: 2% missing; 0% exceed the 15% QC threshold -- 148259 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 - September 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	46	228 ?	?	?	?	?	?	?	82 ?	67	64	46	12	0	0	0	0	0	544 ?
2	0	0	0	0	0	0	28	64	76	81	86	89	85	87	86	77	67	47	10	0	0	0	0	0	883
3	0	0	0	0	0	0	30	145 ?	158	194	144	123	123	151	160	171	148	74	12	0	0	0	0	0	1633
4	0	0	0	0	0	0	39	81	125	133	121	140	106	114	154	177	109	58	10	0	0	0	0	0	1368
5	0	0	0	0	0	0	30	81	109	128	149	168	171	183	211	175	152	76	8	0	0	0	0	0	1640
6	0	0	0	0	0	0	21	120	204	303	373	393	425	391	354	218	160	88	13	0	0	0	0	0	3063
7	0	0	0	0	0	0	31	119	204	270	324	351	357	345	305	109	71	17	0	0	0	0	0	0	2503
8	0	0	0	0	0	0	41	125	169	203	227	400	453	434	382	290	125	53	7	0	0	0	0	0	2911
9	0	0	0	0	0	0	24	56	91	190	233	201	216	230	197	135	121	75	11	0	0	0	0	0	1779
10	0	0	0	0	0	0	30	144	173	249	216	213	216	218	199	171	136	72	8	0	0	0	0	0	2046
11	0	0	0	0	0	0	29	96	128	171	231	215	151	126	117	110	86	53	7	0	0	0	0	0	1520
12	0	0	0	0	0	0	14	89	176	206	300	199	377	267	294	207	161	75	7	0	0	0	0	0	2372
13	0	0	0	0	0	0	27	95	129	183	354	285	274	230	196	145	89	45	6	0	0	0	0	0	2058
14	0	0	0	0	0	0	14	99	200	182	367	382	393	363	294	272	97	71	12	0	0	0	0	0	2748
15	0	0	0	0	0	0	2	16	39	77	85	89	107	75	49	25	18	11	1	0	0	0	0	0	596
16	0	0	0	0	0	0	17	50	62	72	77	82	82	82	79	63	37	3	0	0	0	0	0	0	789
17	0	0	0	0	0	0	23	77	104	137	236	327	220	252	236	219	122	63	7	0	0	0	0	0	2025
18	0	0	0	0	0	0	10	127	200	274	310	340	410	458	370	234	66	22	2	0	0	0	0	0	2823
19	0	0	0	0	0	0	4	15	29	59	91	54	116	124	131	76	110	47	2	0	0	0	0	0	858
20	0	0	0	0	0	0	1	16	33	57	120	150	341	169	183	38	62	43	5	0	0	0	0	0	1216
21	0	0	0	0	0	0	7	32	150	189	424	453	330	273	194	201	185	86	2	0	0	0	0	0	2526
22	0	0	0	0	0	0	10	93	224	329	533 ?	683 ?	?	669 ?	284 ?	144	74	36	1	0	0	0	0	0	3081 ?
23	0	0	0	0	0	0	14	40	57	71	79	88	195	137	89	92	82	43	2	0	0	0	0	0	989
24	0	0	0	0	0	0	2	67	148	341	322	218	162	132	203	238	131	70	2	0	0	0	0	0	2036
25	0	0	0	0	0	0	13	85	149	120	187	266	333	262	207	147	96	37	1	0	0	0	0	0	1902
26	0	0	0	0	0	0	24	124	155	241	363	362	389	290	100	73	48	11	0	0	0	0	0	0	2179
27	0	0	0	0	0	0	4	22	17	74	159	203	264	199	270	172	94	31	1	0	0	0	0	0	1510
28	0	0	0	0	0	0	4	9	11	53	149	291	194	201	282	260	121	40	1	0	0	0	0	0	1615
29	0	0	0	0	0	0	12	98	189	252	226	292	232	203	217	146	56	16 ?	0 ?	0	0	0	0	0	1941
30	0	0	0	0	0	0	17	57	77	90	94	88	93	161	290	223	127	45	0	0	0	0	0	0	1362
Avg	0	0	0	0	0	0	19	82	124	170	227	246	243	235	207	156	101	50	5	0	0	0	0	0	1817
S D	0	0	0	0	0	0	12	48	62	86	118	139	116	130	90	70	39	22	4	0	0	0	0	0	720
S/A	0	0	0	0	0	0	0.64	0.58	0.51	0.5	0.52	0.56	0.47	0.55	0.43	0.45	0.38	0.44	0.87	0	0	0	0	0	0.4
Min	0	0	0	0	0	0	1	9	11	53	77	54	82	75	49	25	18	11	0	0	0	0	0	0	544
Max	0	0	0	0	0	0	46	228	224	341	533	683	453	669	382	290	185	88	13	0	0	0	0	0	3081

Daylight Data Recovery: 0% missing; 3% exceed the 15% QC threshold -- 4465 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