

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Savannah State College - October 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	16	152	376	603	748	841	838	652	580	435	274	71	0	0	0	0	0	0	5586
2	0	0	0	0	0	0	19	163	370	568	564	622	705	705	300	107	34	30	0	0	0	0	0	0	4188
3	0	0	0	0	0	0	22	136	327	512	678	673	861	678	533	341	153	34	0	0	0	0	0	0	4947
4	0	0	0	0	0	0	8	50	178	292	167	85	168	111	111	94	69	8	0	0	0	0	0	0	1342
5	0	0	0	0	0	0	5	75	122	125	178	243	181	320	214	201	98	32	0	0	0	0	0	0	1796
6	0	0	0	0	0	0	8	69	213	512	700	794	797	748	596	454	240	54	0	0	0	0	0	0	5186
7	0	0	0	0	0	0	19	169	379	565	692	772	658	494	613	361	243	53	0	0	0	0	0	0	5019
8	0	0	0	0	0	0	10	150	425	471	698	737	325	625	601	425	229	49	0	0	0	0	0	0	4744
9	0	0	0	0	0	0	13	151	365	536	690	779	789	681	510	385	204	40	0	0	0	0	0	0	5144
10	0	0	0	0	0	0	16	121	358	510	425	639	589	616	563	401	229	30	0	0	0	0	0	0	4498
11	0	0	0	0	0	0	13	99	174	280	432	382	403	427	393	246	83	14	0	0	0	0	0	0	2947
12	0	0	0	0	0	0	7	101	214	249	187	184	255	254	164	114	78	14	0	0	0	0	0	0	1821
13	0	0	0	0	0	0	12	160	334	332	421	681	498	395	344	190	147	26	0	0	0	0	0	0	3538
14	0	0	0	0	0	0	10	78	197	299	647	738	742	695	493	357	181	29	0	0	0	0	0	0	4468
15	0	0	0	0	0	0	10	134	315	293	342	207	145	125	97	192	83	10	0	0	0	0	0	0	1952
16	0	0	0	0	0	0	5	52	97	180	339	370	348	301	185	134	45	3	0	0	0	0	0	0	2060
17	0	0	0	0	0	0	1	17	39	47	62	93	50	120	122	85	88	20	0	0	0	0	0	0	743
18	0	0	0	0	0	0	10	137	329	505	635	713	726	665	538	375	172	22	0	0	0	0	0	0	4828
19	0	0	0	0	0	0	7	73	233	310	404	249	211	401	231	370	116	16	0	0	0	0	0	0	2621
20	0	0	0	0	0	0	9	79	263	350	402	409	278	324	32	152	79	1	0	0	0	0	0	0	2377
21	0	0	0	0	0	0	0	15	50	57	121	128	157	189	272	179	79	12	0	0	0	0	0	0	1260
22	0	0	0	0	0	0	7	138	274	512	655	738	749	689	566	393	183	18	0	0	0	0	0	0	4921
23	0	0	0	0	0	0	5	135	354	543	682	756	767	706	578	403	187	19	0	0	0	0	0	0	5135
24	0	0	0	0	0	0	4	129	342	528	668	747	757	694	567	393	181	16	0	0	0	0	0	0	5025
25	0	0	0	0	0	0	4	113	350	511	651	734	740	679	554	379	173	15	0	0	0	0	0	0	4903
26	0	0	0	0	0	0	4	66	244	494	634	710	714	655	536	366	160	14	0	0	0	0	0	0	4597
27	0	0	0	0	0	0	4	76	220	476	614	695	698	631	514	343	143	9	0	0	0	0	0	0	4425
28	0	0	0	0	0	0	4	88	306	477	615	695	707	651	528	359	160	11	0	0	0	0	0	0	4600
29	0	0	0	0	0	0	3	79	294	470	477	309	555	628	501	194	114	6	0	0	0	0	0	0	3629
30	0	0	0	0	0	0	1	20	137	374	555	495	361	385	407	305	113	6	0	0	0	0	0	0	3159
31	0	0	0	0	0	0	3	40	253	424	505	301	368	477	524	272	78	6	0	0	0	0	0	0	3252
Avg	0	0	0	0	0	0	8	99	262	400	503	533	521	507	412	290	142	22	0	0	0	0	0	0	3700
S D	0	0	0	0	0	0	6	45	100	151	195	244	249	201	180	115	63	17	0	0	0	0	0	0	1403
S/A	0	0	0	0	0	0	0.67	0.45	0.38	0.38	0.39	0.46	0.48	0.4	0.44	0.4	0.44	0.75	4.73	0	0	0	0	0	0.38
Min	0	0	0	0	0	0	0	15	39	47	62	85	50	111	32	85	34	1	0	0	0	0	0	0	743
Max	0	0	0	0	0	0	22	169	425	603	748	841	861	748	613	454	274	71	0	0	0	0	0	0	5586

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 4250 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 - October 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	11	247	676	866	906	923	733	550	626	616	634	299	0	0	0	0	0	0	7086
2	0	0	0	0	0	0	43	344	618	732	336	304	547	528	85	11	8	43	1	0	0	0	0	0	3601
3	0	0	0	0	0	0	82	283	535	584	555	474	780	544	411	261	75	22	2	0	0	0	0	0	4608
4	0	0	0	0	0	0	11	13	37	52	21	8	12	11	12	13	15	2	2	0	0	0	0	0	209
5	0	0	0	0	0	0	3	25	24	16	19	23	16	35	28	37	26	23	0	0	0	0	0	0	276
6	0	0	0	0	0	0	18	25	35	478	736	802	783	769	669	680	505	168	0	0	0	0	0	0	5668
7	0	0	0	0	0	0	141	484	706	790	790	779	559	226	718	356	375	128	0	0	0	0	0	0	6054
8	0	0	0	0	0	0	11	221	536	445	824	726	52	511	714	643	506	144	2	0	0	0	0	0	5336
9	0	0	0	0	0	0	39	436	683	765	839	873	870	757	587	595	428	100	0	0	0	0	0	0	6972
10	0	0	0	0	0	0	34	296	629	481	216	458	298	583	679	472	357	11	0	0	0	0	0	0	4512
11	0	0	0	0	0	0	19	44	41	47	107	52	56	46	124	32	26	13	0	0	0	0	0	0	608
12	0	0	0	0	0	0	12	69	40	34	19	21	32	30	20	22	20	10	0	0	0	0	0	0	328
13	0	0	0	0	0	0	28	294	403	70	56	478	234	70	88	40	55	19	0	0	0	0	0	0	1834
14	0	0	0	0	0	0	17	34	55	66	641	767	748	687	449	428	298	55	0	0	0	0	0	0	4247
15	0	0	0	0	0	0	24	307	339	39	44	25	15	13	13	69	28	8	0	0	0	0	0	0	924
16	0	0	0	0	0	0	14	16	19	32	28	59	36	45	29	22	11	3	0	0	0	0	0	0	313
17	0	0	0	0	0	0	1	5	8	6	6	8	5	14	18	15	28	22	0	0	0	0	0	0	135
18	0	0	0	0	0	0	39	310	617	749	797	812	809	769	693	607	380	71	0	0	0	0	0	0	6654
19	0	0	0	0	0	0	11	27	82	122	147	43	29	79	48	212	48	20	0	0	0	0	0	0	866
20	0	0	0	0	0	0	16	30	54	176	207	169	53	84	5	29	28	5	0	0	0	0	0	0	855
21	0	0	0	0	0	0	0	5	10	7	14	12	16	22	46	31	28	13	0	0	0	0	0	0	204
22	0	0	0	0	0	0	14	440	13	23	49	247	593	701	648	372	91	11	0	0	0	0	0	0	3202
23	0	0	0	0	0	0	11	52	28	12	0	18	68	129	111	67	62	10	0	0	0	0	0	0	567
24	0	0	0	0	0	0	9	53	26	9	0	0	0	4	16	26	55	36	0	0	0	0	0	0	233
25	0	0	0	0	0	0	11	45	75	14	0	0	0	0	7	20	62	22	0	0	0	0	0	0	258
26	0	0	0	0	0	0	10	788	51	8	647	910	911	899	860	767	532	56	0	0	0	0	0	0	6439
27	0	0	0	0	0	0	33	208	448	787	852	890	881	845	800	687	439	36	0	0	0	0	0	0	6906
28	0	0	0	0	0	0	2	242	956	773	833	866	883	871	823	737	525	45	0	0	0	0	0	0	7557
29	0	0	0	0	0	0	6	61	567	735	481	40	328	741	680	94	149	10	0	0	0	0	0	0	3893
30	0	0	0	0	0	0	3	7	26	187	480	316	141	115	306	309	227	7	0	0	0	0	0	0	2124
31	0	0	0	0	0	0	8	20	362	654	430	30	35	187	707	321	32	5	0	0	0	0	0	0	2790
Avg	0	0	0	0	0	0	22	175	281	315	357	359	339	351	355	277	195	46	0	0	0	0	0	0	3073
S D	0	0	0	0	0	0	27	187	289	325	336	358	350	329	321	267	203	63	1	0	0	0	0	0	2609
S/A	0	0	0	0	0	0	1.24	1.07	1.03	1.03	0.94	1	1.03	0.94	0.9	0.96	1.04	1.37	2.57	0	0	0	0	0	0.85
Min	0	0	0	0	0	0	0	5	8	6	0	0	0	0	5	11	8	2	0	0	0	0	0	0	135
Max	0	0	0	0	0	0	141	788	956	866	906	923	911	899	860	767	634	299	2	0	0	0	0	0	7557

Daylight Data Recovery: 2% missing; 0% exceed the 15% QC threshold -- 152509 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 - October 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	15	84	67	73	84	100	240	228	162	116	54	21	0	0	0	0	0	0	1244
2	0	0	0	0	0	0	15	75	92	122	320	378	261	301	243	101	31	23	0	0	0	0	0	0	1962
3	0	0	0	0	0	0	15	62	84	164	276	294	230	265	259	203	125	31	0	0	0	0	0	0	2007
4	0	0	0	0	0	0	7	47	162	261	152	79	158	102	103	87	64	8	0	0	0	0	0	0	1230
5	0	0	0	0	0	0	5	69	112	116	164	224	169	294	196	182	90	29	0	0	0	0	0	0	1650
6	0	0	0	0	0	0	8	63	197	219	172	165	174	169	163	111	74	27	0	0	0	0	0	0	1543
7	0	0	0	0	0	0	11	50	74	97	130	164	213	330	150	172	123	33	0	0	0	0	0	0	1547
8	0	0	0	0	0	0	10	95	197	197	114	174	284	251	142	106	68	27	0	0	0	0	0	0	1663
9	0	0	0	0	0	0	10	51	80	85	98	105	107	121	133	96	66	24	0	0	0	0	0	0	978
10	0	0	0	0	0	0	14	53	91	235	273	287	357	195	128	170	113	29	0	0	0	0	0	0	1944
11	0	0	0	0	0	0	12	89	157	253	359	342	359	394	315	231	75	13	0	0	0	0	0	0	2599
12	0	0	0	0	0	0	6	83	198	230	174	168	230	233	152	104	72	13	0	0	0	0	0	0	1662
13	0	0	0	0	0	0	10	91	175	292	382	318	317	344	290	171	130	24	0	0	0	0	0	0	2545
14	0	0	0	0	0	0	10	70	175	261	203	161	172	204	210	157	93	22	0	0	0	0	0	0	1739
15	0	0	0	0	0	0	8	64	183	270	311	188	133	116	89	160	75	9	0	0	0	0	0	0	1608
16	0	0	0	0	0	0	5	49	90	162	320	326	321	269	168	124	42	3	0	0	0	0	0	0	1878
17	0	0	0	0	0	0	1	16	36	44	58	87	46	110	111	79	80	19	0	0	0	0	0	0	687
18	0	0	0	0	0	0	7	70	82	89	100	115	123	128	124	101	66	14	0	0	0	0	0	0	1018
19	0	0	0	0	0	0	7	67	201	247	304	218	190	347	203	277	103	15	0	0	0	0	0	0	2179
20	0	0	0	0	0	0	8	73	240	256	265	285	239	266	29	139	71	1	0	0	0	0	0	0	1874
21	0	0	0	0	0	0	0	14	47	54	111	119	145	174	245	165	72	11	0	0	0	0	0	0	1158
22	0	0	0	0	0	0	6	76	? 352	? 399	? ?	? 507	? 318	? 213	? 189	? 227	? 158	? 17	0	0	0	0	0	0	2461 ?
23	0	0	0	0	0	0	4	118	? ?	? ?	? ?	? ?	? ?	? ?	? 358	? 155	? 18	0	0	0	0	0	0	0	653 ?
24	0	0	0	0	0	0	4	121	? ?	? ?	? ?	? ?	? ?	? ?	? ?	? 150	? 14	0	0	0	0	0	0	0	290 ?
25	0	0	0	0	0	0	3	100	305	? ?	? ?	? ?	? ?	? ?	? ?	? 151	? 13	0	0	0	0	0	0	0	572 ?
26	0	0	0	0	0	0	4	102	? ?	? 84	? 70	67	59	53	45	31	5	0	0	0	0	0	0	0	520
27	0	0	0	0	0	0	4	38	55	63	72	73	76	75	67	58	37	5	0	0	0	0	0	0	623
28	0	0	0	0	0	0	4	41	65	76	88	93	86	81	72	57	36	6	0	0	0	0	0	0	705
29	0	0	0	0	0	0	2	68	86	91	178	281	327	147	125	159	74	5	0	0	0	0	0	0	1544
30	0	0	0	0	0	0	1	19	127	274	255	276	262	311	243	184	56	6	0	0	0	0	0	0	2013
31	0	0	0	0	0	0	3	37	118	88	246	281	344	362	142	132	71	6	0	0	0	0	0	0	1830
Avg	0	0	0	0	0	0	7	66	137	175	196	210	213	217	161	147	84	16	0	0	0	0	0	0	1481
S D	0	0	0	0	0	0	4	27	77	93	97	108	93	95	70	67	37	9	0	0	0	0	0	0	622
S/A	0	0	0	0	0	0	0.58	0.4	0.56	0.53	0.49	0.52	0.44	0.44	0.44	0.46	0.44	0.58	4.7	0	0	0	0	0	0.42
Min	0	0	0	0	0	0	0	14	36	44	58	70	46	59	29	45	31	1	0	0	0	0	0	0	290
Max	0	0	0	0	0	0	15	121	352	399	382	507	359	394	315	358	158	33	0	0	0	0	0	0	2599

Daylight Data Recovery: 0% missing; 8% exceed the 15% QC threshold -- 4250 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