

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Savannah State College - December 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	0	28	199	377	515	591	604	550	439	272	92	1	0	0	0	0	0	0	3668
2	0	0	0	0	0	0	0	41	221	359	486	568	575	520	410	247	79	0	0	0	0	0	0	0	3507
3	0	0	0	0	0	0	0	26	160	355	446	541	532	465	383	258	86	1	0	0	0	0	0	0	3253
4	0	0	0	0	0	0	0	23	117	339	460	529	565	521	262	160	79	1	0	0	0	0	0	0	3054
5	0	0	0	0	0	0	0	12	32	98	213	509	561	410	414	251	81	1	0	0	0	0	0	0	2581
6	0	0	0	0	0	0	0	26	43	57	53	130	137	140	339	239	89	2	0	0	0	0	0	0	1255
7	0	0	0	0	0	0	0	23	189	370	511	585	595	544	433	260	88	1	0	0	0	0	0	0	3599
8	0	0	0	0	0	0	0	22	124	382	461	548	571	512	400	246	65	1	0	0	0	0	0	0	3333
9	0	0	0	0	0	0	0	15	149	335	477	542	555	512	381	273	77	2	0	0	0	0	0	0	3318
10	0	0	0	0	0	0	0	18	115	257	391	488	542	350	228	199	43	2	0	0	0	0	0	0	2634
11	0	0	0	0	0	0	0	24	178	339	482	555	561	503	409	250	75	1	0	0	0	0	0	0	3378
12	0	0	0	0	0	0	0	29	161	311	355	381	340	260	177	134	46	1	0	0	0	0	0	0	2195
13	0	0	0	0	0	0	0	17	119	101	297	154	180	173	116	85	19	0	0	0	0	0	0	0	1261
14	0	0	0	0	0	0	0	18	163	308	369	563	577	532	428	263	92	2	0	0	0	0	0	0	3314
15	0	0	0	0	0	0	0	18	108	263	435	525	543	520	407	225	62	1	0	0	0	0	0	0	3108
16	0	0	0	0	0	0	0	10	94	190	265	430	437	373	316	272	86	3	0	0	0	0	0	0	2477
17	0	0	0	0	0	0	0	17	129	216	327	389	374	328	219	131	50	1	0	0	0	0	0	0	2181
18	0	0	0	0	0	0	0	8	42	111	242	217	113	62	88	52	23	1	0	0	0	0	0	0	959
19	0	0	0	0	0	0	0	7	28	84	187	174	218	155	122	89	43	1	0	0	0	0	0	0	1108
20	0	0	0	0	0	0	0	8	31	131	264	325	335	355	152	95	45	2	0	0	0	0	0	0	1743
21	0	0	0	0	0	0	0	1	14	45	94	65	31	28	140	133	65	3	0	0	0	0	0	0	621
22	0	0	0	0	0	0	0	8	21	38	111	90	128	160	58	39	16	1	0	0	0	0	0	0	671
23	0	0	0	0	0	0	0	14	88	150	217	259	325	407	226	137	70	3	0	0	0	0	0	0	1896
24	0	0	0	0	0	0	0	15	147	324	473	557	574	536	434	275	103	4	0	0	0	0	0	0	3443
25	0	0	0	0	0	0	0	11	139	315	463	549	565	550	439	281	104	4	0	0	0	0	0	0	3420
26	0	0	0	0	0	0	0	32	146	357	469	548	561	519	362	288	110	4	0	0	0	0	0	0	3395
27	0	0	0	0	0	0	0	14	146	324	474	558	579	547	414	280	109	4	0	0	0	0	0	0	3450
28	0	0	0	0	0	0	0	10	137	316	465	553	579	499	393	270	76	4	0	0	0	0	0	0	3301
29	0	0	0	0	0	0	0	12	141	316	463	545	568	537	440	283	107	3	0	0	0	0	0	0	3415
30	0	0	0	0	0	0	0	13	109	248	430	544	569	531	409	265	110	7	0	0	0	0	0	0	3235
31	0	0	0	0	0	0	0	18	155	225	373	584	403	340	166	152	40	4	0	0	0	0	0	0	2460
Avg	0	0	0	0	0	0	0	17	118	247	363	439	445	401	310	207	72	2	0	0	0	0	0	0	2620
S D	0	0	0	0	0	0	0	9	55	111	131	167	173	160	125	77	27	2	0	0	0	0	0	0	952
S/A	0	0	0	0	0	0	0	0.49	0.47	0.45	0.36	0.38	0.39	0.4	0.4	0.37	0.38	0.71	0	0	0	0	0	0	0.36
Min	0	0	0	0	0	0	0	1	14	38	53	65	31	28	58	39	16	0	0	0	0	0	0	0	621
Max	0	0	0	0	0	0	0	41	221	382	515	591	604	550	440	288	110	7	0	0	0	0	0	0	3668

Daylight Data Recovery: 0% missing; 1% exceed the 15% QC threshold -- 3755 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: 5/19/1998

**Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Savannah State College - December 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	0	114	639	824	904	935	936	907	856	720	431	6	0	0	0	0	0	0	7272
2	0	0	0	0	0	0	0	225	754	778	836	883	881	849	789	646	369	4	0	0	0	0	0	0	7015
3	0	0	0	0	0	0	0	88	435	709	661	769	715	653	714	688	404	3	0	0	0	0	0	0	5839
4	0	0	0	0	0	0	0	63	283	714	794	793	834	748	238	71	199	2	0	0	0	0	0	0	4739
5	0	0	0	0	0	0	0	11	5	10	20	633	838	227	736	653	334	3	0	0	0	0	0	0	3471
6	0	0	0	0	0	0	0	68	9	4	3	6	7	10	483	519	354	16	0	0	0	0	0	0	1480
7	0	0	0	0	0	0	0	115	653	848	932	954	952	930	880	724	436	7	0	0	0	0	0	0	7430
8	0	0	0	0	0	0	0	88	331	928	803	856	880	659	735	596	204	0	0	0	0	0	0	0	6079
9	0	0	0	0	0	0	0	11	386	702	811	835	835	820	658	498	199	5	0	0	0	0	0	0	5762
10	0	0	0	0	0	0	0	13	85	382	479	712	753	287	100	345	73	7	0	0	0	0	0	0	3235
11	0	0	0	0	0	0	0	136	627	774	874	886	861	799	737	480	149	2	0	0	0	0	0	0	6325
12	0	0	0	0	0	0	0	29	259	493	220	128	41	24	16	22	9	0	0	0	0	0	0	0	1241
13	0	0	0	0	0	0	0	141	150	9	65	11	16	7	6	7	2	1	0	0	0	0	0	0	414
14	0	0	0	0	0	0	0	72	503	613	577	915	912	887	836	684	408	10	0	0	0	0	0	0	6416
15	0	0	0	0	0	0	0	98	304	555	759	805	801	839	750	438	65	2	0	0	0	0	0	0	5416
16	0	0	0	0	0	0	0	8	30	38	61	246	271	334	469	491	184	25	0	0	0	0	0	0	2157
17	0	0	0	0	0	0	0	10	107	118	155	137	92	101	43	23	19	2	0	0	0	0	0	0	806
18	0	0	0	0	0	0	0	6	6	11	31	14	6	3	3	3	3	1	0	0	0	0	0	0	87
19	0	0	0	0	0	0	0	7	4	5	19	7	16	5	7	9	12	0	0	0	0	0	0	0	92
20	0	0	0	0	0	0	0	5	6	13	35	32	34	91	31	10	12	4	0	0	0	0	0	0	273
21	0	0	0	0	0	0	0	4	1	3	4	2	1	1	33	28	24	4	0	0	0	0	0	0	105
22	0	0	0	0	0	0	0	63	3	3	7	3	5	6	4	4	3	1	0	0	0	0	0	0	101
23	0	0	0	0	0	0	0	11	16	13	19	26	49	169	85	36	73	12	0	0	0	0	0	0	510
24	0	0	0	0	0	0	0	101	555	780	890	923	920	906	848	708	442	32	0	0	0	0	0	0	7106
25	0	0	0	0	0	0	0	35	469	715	830	873	866	878	834	711	448	30	0	0	0	0	0	0	6689
26	0	0	0	0	0	0	0	391	1105	887	883	823	731	825	656	754	496	37	0	0	0	0	0	0	7587
27	0	0	0	0	0	0	0	99	567	796	905	935	937	934	770	714	502	41	0	0	0	0	0	0	7199
28	0	0	0	0	0	0	0	62	498	775	879	915	917	759	649	632	207	18	0	0	0	0	0	0	6312
29	0	0	0	0	0	0	0	94	540	763	873	905	914	912	872	735	456	24	0	0	0	0	0	0	7088
30	0	0	0	0	0	0	0	98	374	574	810	900	902	882	751	645	426	64	0	0	0	0	0	0	6426
31	0	0	0	0	0	0	0	68	178	96	497	821	218	136	19	44	5	1	0	0	0	0	0	0	2082
Avg	0	0	0	0	0	0	0	75	319	449	504	570	553	503	471	408	224	12	0	0	0	0	0	0	4089
S D	0	0	0	0	0	0	0	77	279	353	376	390	397	378	350	300	183	15	0	0	0	0	0	0	2832
S/A	0	0	0	0	0	0	0	1.02	0.87	0.78	0.74	0.68	0.72	0.75	0.74	0.73	0.82	1.29	0	0	0	0	0	0	0.69
Min	0	0	0	0	0	0	0	4	1	3	3	2	1	1	3	3	2	0	0	0	0	0	0	0	87
Max	0	0	0	0	0	0	0	391	1105	928	932	954	952	934	880	754	502	64	0	0	0	0	0	0	7587

Daylight Data Recovery: 2% missing; 0% exceed the 15% QC threshold -- 160065 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 - December 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	0	14	37	48	53	53	54	54	49	40	22	1	0	0	0	0	0	0	425
2	0	0	0	0	0	0	0	16	40	50	61	62	59	57	51	38	19	0	0	0	0	0	0	0	454
3	0	0	0	0	0	0	0	18	50	75	112	102	114	111	64	37	20	0	0	0	0	0	0	0	703
4	0	0	0	0	0	0	0	18	45	56	58	78	80	114	147	140	45	1	0	0	0	0	0	0	781
5	0	0	0	0	0	0	0	11	31	94	203	148	75	291	80	41	27	1	0	0	0	0	0	0	1002
6	0	0	0	0	0	0	0	24	41	56	51	126	133	134	127	77	31	2	0	0	0	0	0	0	803
7	0	0	0	0	0	0	0	12	36	44	48	49	46	44	38	28	18	0	0	0	0	0	0	0	363
8	0	0	0	0	0	0	0	14	47	56	63	68	65	158	69	56	28	1	0	0	0	0	0	0	625
9	0	0	0	0	0	0	0	15	53	67	77	76	76	72	82	115	41	1	0	0	0	0	0	0	676
10	0	0	0	0	0	0	0	19	93	107	161	90	112	191	183	94	31	2	0	0	0	0	0	0	1082
11	0	0	0	0	0	0	0	14	39	49	55	63	69	76	80	95	47	1	0	0	0	0	0	0	588
12	0	0	0	0	0	0	0	27	97	130	249	311	316	247	170	127	44	1	0	0	0	0	0	0	1719
13	0	0	0	0	0	0	0	14	91	98	265	148	172	169	113	82	18	0	0	0	0	0	0	0	1171
14	0	0	0	0	0	0	0	12	51	83	88	59	59	59	55	45	25	1	0	0	0	0	0	0	538
15	0	0	0	0	0	0	0	11	42	63	65	82	89	74	72	83	49	1	0	0	0	0	0	0	632
16	0	0	0	0	0	0	0	10	88	177	235	295	284	196	112	112	61	2	0	0	0	0	0	0	1571
17	0	0	0	0	0	0	0	16	107	175	252	314	322	274	200	124	47	1	0	0	0	0	0	0	1831
18	0	0	0	0	0	0	0	7	41	107	227	209	110	61	87	51	22	1	0	0	0	0	0	0	923
19	0	0	0	0	0	0	0	7	27	82	177	170	209	152	119	85	41	1	0	0	0	0	0	0	1072
20	0	0	0	0	0	0	0	7	30	126	247	308	316	306	137	92	44	2	0	0	0	0	0	0	1615
21	0	0	0	0	0	0	0	1	13	45	92	63	31	28	127	124	60	2	0	0	0	0	0	0	587
22	0	0	0	0	0	0	0	7	21	37	108	89	125	157	56	38	15	1	0	0	0	0	0	0	654
23	0	0	0	0	0	0	0	14	85	145	207	245	298	316	184	127	54	3	0	0	0	0	0	0	1678
24	0	0	0	0	0	0	0	8	33	46	52	55	54	53	52	44	28	2	0	0	0	0	0	0	426
25	0	0	0	0	0	0	0	8	42	60	71	74	75	81	62	48	28	2	0	0	0	0	0	0	551
26	0	0	0	0	0	0	0	9	41	47	52	101	147	79	68	40	24	2	0	0	0	0	0	0	612
27	0	0	0	0	0	0	0	7	31	43	48	49	48	47	62	46	23	2	0	0	0	0	0	0	405
28	0	0	0	0	0	0	0	7	32	43	50	54	60	90	97	61	37	3	0	0	0	0	0	0	535
29	0	0	0	0	0	0	0	6	32	46	51	52	49	47	41	38	25	2	0	0	0	0	0	0	390
30	0	0	0	0	0	0	0	7	33	43	47	53	56	56	64	49	33	5	0	0	0	0	0	0	448
31	0	0	0	0	0	0	0	15	122	191	133	135	279	266	157	136	40	4	0	0	0	0	0	0	1480
Avg	0	0	0	0	0	0	0	12	51	80	118	122	128	131	97	75	34	2	0	0	0	0	0	0	850
S D	0	0	0	0	0	0	0	5	27	44	77	85	94	87	46	35	13	1	0	0	0	0	0	0	445
S/A	0	0	0	0	0	0	0	0.45	0.54	0.54	0.65	0.7	0.73	0.67	0.48	0.48	0.37	0.63	0	0	0	0	0	0	0.52
Min	0	0	0	0	0	0	0	1	13	37	47	49	31	28	38	28	15	0	0	0	0	0	0	0	363
Max	0	0	0	0	0	0	0	27	122	191	265	314	322	316	200	140	61	5	0	0	0	0	0	0	1831

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 3755 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: 5/19/1998