

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Savannah State College - January 2001

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	149	305	457	545	577	538	454	274	107	7	0	0	0	0	0	0	3427
2	0	0	0	0	0	0	0	14	104	269	459	551	583	550	456	299	120	7	0	0	0	0	0	0	3414
3	0	0	0	0	0	0	0	15	151	317	475	553	560	442	339	232	97	6	0	0	0	0	0	0	3190
4	0	0	0	0	0	0	0	11	135	315	469	560	587	555	461	304	126	9	0	0	0	0	0	0	3533
5	0	0	0	0	0	0	0	11	131	309	464	551	577	538	443	290	121	9	0	0	0	0	0	0	3444
6	0	0	0	0	0	0	0	11	134	317	473	560	586	558	465	306	120	4	0	0	0	0	0	0	3533
7	0	0	0	0	0	0	0	17	155	306	407	497	578	511	311	170	96	11	0	0	0	0	0	0	3060
8	0	0	0	0	0	0	0	2	27	66	86	122	116	295	354	252	132	12	0	0	0	0	0	0	1465
9	0	0	0	0	0	0	0	11	104	227	266	311	168	94	206	243	117	10	0	0	0	0	0	0	1758
10	0	0	0	0	0	0	0	11	137	324	480	569	535	414	329	204	98	24	0	0	0	0	0	0	3125
11	0	0	0	0	0	0	0	12	129	254	337	305	538	372	248	171	81	6	0	0	0	0	0	0	2453
12	0	0	0	0	0	0	0	7	127	103	68	306	351	178	36 ?	21	9	1	0	0	0	0	0	0	1208
13	0	0	0	0	0	0	0	11	126	303	455	547	582	533	459	215	61	6	0	0	0	0	0	0	3298
14	0	0	0	0	0	0	0	10	55	136	368	350	352	512	383	196	110	14	0	0	0	0	0	0	2486
15	0	0	0	0	0	0	0	10	108	268	407	483	377	406	258	290	168	7	0	0	0	0	0	0	2780
16	0	0	0	0	0	0	0	6	67	151	285	409	412	450	444	118	12	11	0	0	0	0	0	0	2365
17	0	0	0	0	0	0	0	2	30	66	115	67	43	58	43	52	26	3	0	0	0	0	0	0	505
18	0	0	0	0	0	0	0	8	61	143	173	236	306	391	370	199	96	13	0	0	0	0	0	0	1997
19	0	0	0	0	0	0	0	15	96	188	341	429	531	482	417	282	125	14	0	0	0	0	0	0	2920
20	0	0	0	0	0	0	0	4	43	114	109	116	140	124	433	336	174	28	0	0	0	0	0	0	1620
21	0	0	0	0	0	0	0	17	148	347	498	556	593	596	514	344	142	20	0	0	0	0	0	0	3774
22	0	0	0	0	0	0	0	12	127	347	483	573	619	517	327	205	41	1	0	0	0	0	0	0	3251
23	0	0	0	0	0	0	0	6	70	311	508	612	652	623	534	381	184	30	0	0	0	0	0	0	3913
24	0	0	0	0	0	0	0	14	94	222	225	532	638	560	357	316	187	30	0	0	0	0	0	0	3177
25	0	0	0	0	0	0	0	10	151	355	521	623	661	634	547	386	188	33	0	0	0	0	0	0	4112
26	0	0	0	0	0	0	0	20	158	355	514	618	661	631	540	389	185	34	0	0	0	0	0	0	4106
27	0	0	0	0	0	0	0	16	138	321	493	598	614	579	516	368	158	28	0	0	0	0	0	0	3830
28	0	0	0	0	0	0	0	20	153	342	499	601	638	609	522	376	183	20	0	0	0	0	0	0	3964
29	0	0	0	0	0	0	0	18	151	269	496	597	616	546	412	284	128	27	0	0	0	0	0	0	3543
30	0	0	0	0	0	0	0	1	12	53	92	153	207	369	252	264	150	28	0	0	0	0	0	0	1582
Avg	0	0	0	0	0	0	0	11	109	247	367	451	480	456	381	259	118	15	0	0	0	0	0	0	2894
S D	0	0	0	0	0	0	0	5	43	96	150	168	182	158	129	91	50	10	0	0	0	0	0	0	933
S/A	0	0	0	0	0	0	0	0.45	0.39	0.39	0.41	0.37	0.38	0.35	0.34	0.35	0.43	0.68	0	0	0	0	0	0	0.32
Min	0	0	0	0	0	0	0	1	12	53	68	67	43	58	36	21	9	1	0	0	0	0	0	0	505
Max	0	0	0	0	0	0	0	20	158	355	521	623	661	634	547	389	188	34	0	0	0	0	0	0	4112

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 3708 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/W/m-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 - January 2001**

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	61	61	12	16	5	1	0	18	13	19	6	0	0	0	0	0	0	213
2	0	0	0	0	0	0	0	20	24	10	6	0	0	0	8	8	14	9	0	0	0	0	0	0	99
3	0	0	0	0	0	0	0	41	74	3	3	0	1	18	31	32	35	8	0	0	0	0	0	0	246
4	0	0	0	0	0	0	0	19	48	2	3	0	0	0	6	7	14	6	0	0	0	0	0	0	105
5	0	0	0	0	0	0	0	14	40	1	3	0	0	0	10	12	15	8	0	0	0	0	0	0	105
6	0	0	0	0	0	0	0	12	40	1	2	0	0	0	5	6	8	13	0	0	0	0	0	0	86
7	0	0	0	0	0	0	0	39	73	2	29	24	20	23	28	20	29	8	0	0	0	0	0	0	296
8	0	0	0	0	0	0	0	17	3	4	4	5	4	24	26	34	20	11	0	0	0	0	0	0	153
9	0	0	0	0	0	0	0	11	29	33	22	38	8	3	28	31	23	11	0	0	0	0	0	0	237
10	0	0	0	0	0	0	0	26	37	2	1	0	2	13	31	28	13	23	0	0	0	0	0	0	175
11	0	0	0	0	0	0	0	18	58	10	9	19	9	17	35	38	22	6	0	0	0	0	0	0	240
12	0	0	0	0	0	0	0	9	27	7	5	14	18	6	1	1	2	1	0	0	0	0	0	0	90
13	0	0	0	0	0	0	0	19	35	6	4	0	0	2	8	20	4	3	0	0	0	0	0	0	102
14	0	0	0	0	0	0	0	10	6	24	33	45	36	18	17	30	29	18	0	0	0	0	0	0	268
15	0	0	0	0	0	0	0	14	9	15	3	19	11	27	23	14	35	5	0	0	0	0	0	0	175
16	0	0	0	0	0	0	0	4	8	18	30	34	31	32	33	13	4	7	0	0	0	0	0	0	215
17	0	0	0	0	0	0	0	2	3	9	4	4	3	3	1	2	1	3	0	0	0	0	0	0	36
18	0	0	0	0	0	0	0	6	4	10	5	6	11	42	36	42	33	8	0	0	0	0	0	0	202
19	0	0	0	0	0	0	0	16	10	32	26	24	16	20	23	18	15	13	0	0	0	0	0	0	212
20	0	0	0	0	0	0	0	4	4	21	19	6	6	8	20	10	6	31	0	0	0	0	0	0	135
21	0	0	0	0	0	0	0	32	21	3	0	0	1	0	2	10	23	13	0	0	0	0	0	0	104
22	0	0	0	0	0	0	0	13	23	47	8	7	3	7	28	25	7	18	0	0	0	0	0	0	186
23	0	0	0	0	0	0	0	8	9	7	1	0	0	0	1	3	0	29	0	0	0	0	0	0	59
24	0	0	0	0	0	0	0	18	37	53	31	26	0	6	36	27	6	54	0	0	0	0	0	0	294
25	0	0	0	0	0	0	0	13	22	3	0	0	0	0	1	8	4	20	0	0	0	0	0	0	71
26	0	0	0	0	0	0	0	34	17	2	0	0	0	0	0	3	2	24	0	0	0	0	0	0	83
27	0	0	0	0	0	0	0	44	22	6	1	0	0	0	4	16	14	19	0	0	0	0	0	0	125
28	0	0	0	0	0	0	0	25	19	3	0	0	0	0	1	6	3	19	0	0	0	0	0	0	76
29	0	0	0	0	0	0	0	11	36	53	15	0	0	4	27	34	43	88	0	0	0	0	0	0	311
30	0	0	0	0	0	0	0	4	3	5	7	17	16	35	20	42	45	19	0	0	0	0	0	0	214
Avg	0	0	0	0	0	0	0	19	27	14	10	10	7	10	17	18	16	17	0	0	0	0	0	0	164
S D	0	0	0	0	0	0	0	13	20	15	11	13	9	12	13	12	13	17	0	0	0	0	0	0	77
S/A	0	0	0	0	0	0	0	0.72	0.76	1.12	1.1	1.33	1.44	1.17	0.74	0.67	0.78	1.02	0	0	0	0	0	0	0.47
Min	0	0	0	0	0	0	0	2	3	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	36
Max	0	0	0	0	0	0	0	61	74	53	33	45	36	42	36	42	45	88	0	0	0	0	0	0	311

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 3708 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 - January 2001

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	10	115 ?	204 ?	360 ?	?	?	?	237 ?	219 ?	104	7	0	0	0	0	0	0	1255 ?
2	0	0	0	0	0	0	0	13	100	234 ?	?	?	?	?	?	?	118	7	0	0	0	0	0	0	472 ?
3	0	0	0	0	0	0	0	12	123 ?	?	?	?	492 ?	416	325	215	91	6	0	0	0	0	0	0	1680 ?
4	0	0	0	0	0	0	0	10	128	?	?	?	?	?	?	?	116	9	0	0	0	0	0	0	263 ?
5	0	0	0	0	0	0	0	10	125	?	?	?	?	?	?	?	260 ?	118	9	0	0	0	0	0	522 ?
6	0	0	0	0	0	0	0	10	120	?	?	?	?	?	?	?	?	111	4	0	0	0	0	0	245 ?
7	0	0	0	0	0	0	0	15	125 ?	166 ?	357 ?	371 ?	450 ?	396 ?	267	162	90	11	0	0	0	0	0	0	2410 ?
8	0	0	0	0	0	0	0	2	26	65	84	119	114	282	312	218 ?	128	12	0	0	0	0	0	0	1362
9	0	0	0	0	0	0	0	11	96	203	255	290	163	92	193	200 ?	105	9	0	0	0	0	0	0	1618
10	0	0	0	0	0	0	0	10	124	?	?	?	476 ?	371 ?	299	194	78 ?	7	0	0	0	0	0	0	1560 ?
11	0	0	0	0	0	0	0	11	120	218 ?	289 ?	294	440 ?	288 ?	231	158	76	6	0	0	0	0	0	0	2131
12	0	0	0	0	0	0	0	7	101 ?	100	66	212 ?	318	175	36 ?	21	9	1	0	0	0	0	0	0	1045
13	0	0	0	0	0	0	0	11	120	221 ?	?	?	?	419 ?	364 ?	208	60	6	0	0	0	0	0	0	1408 ?
14	0	0	0	0	0	0	0	9	53	128	345	324	331	439 ?	329 ?	185	103	13	0	0	0	0	0	0	2260
15	0	0	0	0	0	0	0	10	106	230 ?	374 ?	385 ?	328	375	217	222 ?	94 ?	6	0	0	0	0	0	0	2347 ?
16	0	0	0	0	0	0	0	5	65	144	271	372	353	346 ?	360 ?	112	11	11	0	0	0	0	0	0	2050
17	0	0	0	0	0	0	0	2	30	63	113	65	41	56	42	51	25	3	0	0	0	0	0	0	491
18	0	0	0	0	0	0	0	8	60	140	171	233	299	331	333	183	90	12	0	0	0	0	0	0	1860
19	0	0	0	0	0	0	0	14	95	176	303	416	486 ?	447 ?	367 ?	256 ?	122	13	0	0	0	0	0	0	2695
20	0	0	0	0	0	0	0	4	42	106	100	112	136	120	310 ?	259 ?	126 ?	26	0	0	0	0	0	0	1342
21	0	0	0	0	0	0	0	15	128	?	?	494 ?	484 ?	?	?	275 ?	136	19	0	0	0	0	0	0	1552 ?
22	0	0	0	0	0	0	0	11	120	?	?	451 ?	440 ?	225 ?	295	174	39	1	0	0	0	0	0	0	1755 ?
23	0	0	0	0	0	0	0	6	68	194 ?	?	?	?	?	?	?	128 ?	28	0	0	0	0	0	0	425 ?
24	0	0	0	0	0	0	0	14	86	202	210	325 ?	528 ?	392 ?	294	262 ?	136 ?	29	0	0	0	0	0	0	2478 ?
25	0	0	0	0	0	0	0	10	131	?	?	?	?	?	?	?	141 ?	32	0	0	0	0	0	0	313 ?
26	0	0	0	0	0	0	0	17	131 ?	?	?	?	?	?	?	?	149 ?	32	0	0	0	0	0	0	330 ?
27	0	0	0	0	0	0	0	15	133	276 ?	?	?	?	?	?	263 ?	154	26	0	0	0	0	0	0	867 ?
28	0	0	0	0	0	0	0	18	142	?	?	?	?	?	?	?	151 ?	19	0	0	0	0	0	0	330 ?
29	0	0	0	0	0	0	0	17	144	256	402 ?	?	528 ?	478 ?	334 ?	254	117	24	0	0	0	0	0	0	2554 ?
30	0	0	0	0	0	0	0	1	11	51	89	143	197	347	242	246	138	26	0	0	0	0	0	0	1491
Avg	0	0	0	0	0	0	0	10	99	169	237	288	348	316	269	200	102	14	0	0	0	0	0	0	1370
S/D	0	0	0	0	0	0	0	4	37	65	114	125	149	123	91	65	39	10	0	0	0	0	0	0	779
S/A	0	0	0	0	0	0	0	0.43	0.37	0.38	0.48	0.43	0.43	0.39	0.34	0.32	0.38	0.69	0	0	0	0	0	0	0.57
Min	0	0	0	0	0	0	0	1	11	51	66	65	41	56	36	21	9	1	0	0	0	0	0	0	245
Max	0	0	0	0	0	0	0	18	144	276	402	494	528	478	367	275	154	32	0	0	0	0	0	0	2695

Daylight Data Recovery: 0% missing; 39% exceed the 15% QC threshold -- 3708 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