

Savannah State College
32.03 N Latitude 81.07 W Longitude 11 Meters AMSL Time Zone -5

April 2002

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

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	29	129	116	190	242	532	604	631	474	455	299	167	25	0	0	0	0	0	3892	
2	0	0	0	0	0	0	32	158	342	528	754	878	861	808	700	545	379	164	29	0	0	0	0	0	6179	
3	0	0	0	0	0	0	41	120	250	561	707	598	439	450	674	570	384	152	28	0	0	0	0	0	4973	
4	0	0	0	0	0	0	29	72	342	494	741	721	588	533	601	377	281	155	20	0	0	0	0	0	4955	
5	0	0	0	0	0	0	36	180	421	630	783	892	923	880	763	601	398	175	28	0	0	0	0	0	6710	
6	0	0	0	0	0	0	40	145	380	594	603	847	961	884	767	612	409	183	30	0	0	0	0	0	6456	
7	0	0	0	0	0	0	37	212	422	591	717	865	790	658	602	599	366	132	29	0	0	0	0	0	6020	
8	0	0	0	0	0	0	34	198	427	635	783	886	770	722	733	610	393	188	21	0	0	0	0	0	6400	
9	0	0	0	0	0	0	51	229	396	629	644	852	736	734	678	454	267	130	28	0	0	0	0	0	5827	
10	0	0	0	0	0	0	9	30	96	100	108	139	198	119	163	171	102	53	10	0	0	0	0	0	1297	
11	0	0	0	0	0	0	8	41	76	113	192	269	252	212	146	160	69	52	17	0	0	0	0	0	1607	
12	0	0	0	0	0	0	12	88	180	162	207	739	646	442	606	380	248	93	24	0	0	0	0	0	3827	
13	0	0	0	0	0	0	32	141	213	316	341	367	434	467	383	259	270	169	30	0	0	0	0	0	3423	
14	0	0	0	0	0	2	57	126	478	574	298	502	906	767	779	604	375	171	51	0	0	0	0	0	5689	
15	0	0	0	0	0	2	22	254	456	565	635	615	654	887	775	609	404	191	34	0	0	0	0	0	6104	
16	0	0	0	0	0	4	53	195	241	646	864	923	936	892	783	621	425	203	33	0	0	0	0	0	6819	
17	0	0	0	0	0	3	54	182	425	697	506	737	877	902	781	607	267	76	25	0	0	0	0	0	6138	
18	0	0	0	0	0	4	63	235	408	625	795	928	936	939	857	586	101	106	28	0	0	0	0	0	6612	
19	0	0	0	0	0	4	59	222	440	626	763	846	895	852	754	529	395	215	61	0	0	0	0	0	6661	
20	0	0	0	0	0	4	63	236	439	625	774	871	772	723	644	543	236	214	39	0	0	0	0	0	6184	
21	0	0	0	0	0	7	67	246	437	557	776	872	785	809	596	592	362	184	39	0	0	0	0	0	6329	
22	0	0	0	0	0	10	78	262	431	570	682	813	775	788	729	565	313	147	29	0	0	0	0	0	6192	
23	0	0	0	0	0	4	66	204	336	432	800	944	960	912	800	637	440	214	41	0	0	0	0	0	6791	
24	0	0	0	0	0	8	65	287	484	675	839	940	965	916	783	651	451	214	42	0	0	0	0	0	7320	
25	0	0	0	0	0	33	208	414	540	630	650	719	827	533	549	370	193	44	0	0	0	0	0	0	5711	
26	0	0	0	0	0	7	110	248	505	692	851	944	854	892	660	413	396	84	11	0	0	0	0	0	6668	
27	0	0	0	0	0	4	50	139	415	599	624	488	342	318	123	130	153	150	29	0	0	0	0	0	3565	
28	0	0	0	0	0	6	73	139	399	640	763	831	847	736	648	549	376	225	44	0	0	0	0	0	6274	
29	0	0	0	0	0	3	34	142	243	591	825	931	953	918	809	650	455	241	39	0	0	0	0	0	6833	
30	0	0	0	0	0	14	112	264	438	439	162	198	539	590	571	139	205	80	24	0	0	0	0	0	3775	
Avg	0	0	0	0	0	3	48	178	355	521	614	721	731	707	630	492	320	157	31	0	0	0	0	0	5508	
S D	0	0	0	0	0	4	25	68	120	172	237	235	219	223	196	164	108	53	11	0	0	0	0	0	1547	
S/A	0	0	0	0	0	1.24	0.52	0.38	0.34	0.33	0.39	0.33	0.3	0.32	0.31	0.33	0.34	0.33	0.36	0	0	0	0	0	0	0.28
Min	0	0	0	0	0	0	8	30	76	100	108	139	198	119	123	130	69	52	10	0	0	0	0	0	1297	
Max	0	0	0	0	0	14	112	287	505	697	864	944	965	939	857	651	455	241	61	0	0	0	0	0	7320	
n	0	0	0	0	0	46	348	360	360	360	360	360	360	360	360	360	360	360	300	0	0	0	0	0	4654	

Daylight Data Recovery: 0.0% missing; 0.0% exceed the 15% QC threshold -- 4654 total daylight measurements.

Instrument: Eppley PSP Serial Number: 28401F3 Calibration Factor: 7.980 $\mu\text{V}/\text{W}/\text{m}^2$ Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

April 2002

Estimated Direct Normal Solar Radiation
 Hourly Integrated and Daily Totals
 Instrument: Calculated
 Watt-Hours per Square Meter

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	0	0	0	0	*	
2	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
3	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
4	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
5	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
6	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
7	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
8	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
9	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
10	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
11	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
12	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
14	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
16	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
24	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
25	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
26	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
Avg	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A	*
SD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0	N/A
Max	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0	N/A
n	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 100.0% missing; 0.0% exceed the 15% QC threshold -- 4654 total daylight measurements.

Instrument: Calculated Serial Number: Estimated Calibration Factor: Global = Diffuse + Direct * COS (Zenith Angle) Calibration Date: N/A

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Savannah State College
32.03 N Latitude 81.07 W Longitude 11 Meters AMSL Time Zone -5

April 2002

Diffuse Solar Radiation (Shadow Band) on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

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	25	97	105	172	221	459	413	372	257	206	138	60	17	0	0	0	0	0	2543
2	0	0	0	0	0	0	26	74	157	262	156	143	195	255	277	199	111	67	20	0	0	0	0	0	1941
3	0	0	0	0	0	0	36	108	213	279	260	411	320	290	272	177	124	70	23	0	0	0	0	0	2584
4	0	0	0	0	0	0	26	64	267	361	558 ?	586 ?	469	432	464 ?	330	232	112	19	0	0	0	0	0	3922
5	0	0	0	0	0	0	31	111	295	545 ?	?	?	?	?	?	527	236	75	21	0	0	0	0	0	1840 ?
6	0	0	0	0	0	0	36	127	344	535	515	603 ?	?	?	?	?	368	132	20	0	0	0	0	0	2680 ?
7	0	0	0	0	0	0	32	196	405	434 ?	588 ?	697 ?	668 ?	518 ?	457 ?	468 ?	343	119	27	0	0	0	0	0	4950 ?
8	0	0	0	0	0	0	31	188	362 ?	?	?	?	468 ?	597 ?	621 ?	?	362	175	20	0	0	0	0	0	2824 ?
9	0	0	0	0	0	0	49	214	380	562 ?	535 ?	?	655	616 ?	610 ?	350 ?	240	117	25	0	0	0	0	0	4355 ?
10	0	0	0	0	0	0	8	28	88	92	99	127	180	110	150	155	94	50	9	0	0	0	0	0	1191
11	0	0	0	0	0	0	7	37	70	104	177	247	231	194	135	146	64	48	15	0	0	0	0	0	1475
12	0	0	0	0	0	0	11	81	166	150	191	600 ?	348 ?	373	475 ?	337	225	85	22	0	0	0	0	0	3063 ?
13	0	0	0	0	0	0	29	128	193	287	313	333	395	422	347	238	248	123	27	0	0	0	0	0	3083
14	0	0	0	0	0	2	52	110	279 ?	406 ?	273	372	704 ?	606 ?	?	502 ?	360	161	50	0	0	0	0	0	3877 ?
15	0	0	0	0	0	2	20	132 ?	390 ?	526 ?	548 ?	580	438 ?	?	?	?	392 ?	186	36	0	0	0	0	0	3248 ?
16	0	0	0	0	0	4	47	134 ?	238	480 ?	?	?	?	?	?	?	365 ?	183	38	0	0	0	0	0	1488 ?
17	0	0	0	0	0	4 ?	51	139 ?	401	?	326 ?	437 ?	679 ?	?	?	537 ?	160 ?	69	23	0	0	0	0	0	2827 ?
18	0	0	0	0	0	4	57	182 ?	373	550 ?	?	?	?	?	?	502 ?	95	98	27	0	0	0	0	0	1889 ?
19	0	0	0	0	0	4	54	212	426	577 ?	?	705 ?	?	?	?	430 ?	383	207	69	0	0	0	0	0	3066 ?
20	0	0	0	0	0	3	60	223	434	562 ?	?	?	544 ?	593 ?	393 ?	475 ?	218	149 ?	36	0	0	0	0	0	3690 ?
21	0	0	0	0	0	6	67	231	427	544	?	?	670 ?	578 ?	505 ?	519 ?	317	176	38	0	0	0	0	0	4078 ?
22	0	0	0	0	0	11 ?	73	238 ?	393	541	583 ?	655 ?	659 ?	559 ?	569 ?	507 ?	281	138	27	0	0	0	0	0	5237 ?
23	0	0	0	0	0	3	60	187	313	401	552 ?	?	?	?	?	?	372 ?	193	44	0	0	0	0	0	2124 ?
24	0	0	0	0	0	8 ?	65	208 ?	417 ?	?	?	?	?	?	?	?	365 ?	198	44	0	0	0	0	0	1306 ?
25	0	0	0	0	0	0	29	189	339	504	547 ?	560 ?	582 ?	502 ?	375 ?	448 ?	338	182	43	0	0	0	0	0	4639 ?
26	0	0	0	0	0	6	62 ?	220	412 ?	?	?	?	667 ?	?	473 ?	383	341 ?	77	10	0	0	0	0	0	2651 ?
27	0	0	0	0	0	3	45	127	391	493 ?	495 ?	445	314	293	113	119	140	137	27	0	0	0	0	0	3143
28	0	0	0	0	0	5	66	125	394	?	?	639 ?	633 ?	483 ?	470 ?	465 ?	338 ?	170 ?	43	0	0	0	0	0	3831 ?
29	0	0	0	0	0	3	31	129	225	428 ?	?	?	?	?	?	?	356 ?	187 ?	39	0	0	0	0	0	1398 ?
30	0	0	0	0	0	13	108	254	401	402	147	182	497	459 ?	441 ?	129	188	74	22	0	0	0	0	0	3316

Avg	0	0	0	0	0	3	43	150	310	408	373	462	488	434	390	354	260	127	29	0	0	0	0	0	2942 ?
S D	0	0	0	0	0	3	22	62	112	155	179	187	171	151	154	150	105	51	13	0	0	0	0	0	1111
S/A	0	0	0	0	0	1.25	0.51	0.41	0.36	0.38	0.48	0.4	0.35	0.35	0.39	0.42	0.41	0.4	0.45	0	0	0	0	0	0.38
Min	0	0	0	0	0	0	7	28	70	92	99	127	180	110	113	119	64	48	9	0	0	0	0	0	1191
Max	0	0	0	0	0	13	108	254	434	577	588	705	704	616	621	537	392	207	69	0	0	0	0	0	5237
n	0	0	0	0	0	43	343	322	314	221	187	158	177	164	168	208	308	338	298	0	0	0	0	0	3259

Daylight Data Recovery: 0.0% missing; 30.0% exceed the 15% QC threshold -- 4654 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17862F3 Calibration Factor: 7.530 μV/W/m² Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.