

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

May 2001

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	10	89	301	501	715	865	959	980	937	824	662	453	230	42	0	0	0	0	0	7568	
2	0	0	0	0	0	14	90	242	476	709	855	848	982	838	774	669	444	241	60	0	0	0	0	0	7243	
3	0	0	0	0	0	13	103	341 ?	442	608	836	934	997	971	818	665	472	252	64	1	0	0	0	0	7516	
4	0	0	0	0	0	13	140	292	526	468	758	884	1011	930	819	642	459	235	52	0	0	0	0	0	7229	
5	0	0	0	0	0	11	74	233	510	733	858	930	959	961	849	669	485	247	51	0	0	0	0	0	7570	
6	0	0	0	0	0	16	112	310	521	714	847	931	954	905	796	630	431	217	50	0	0	0	0	0	7432	
7	0	0	0	0	0	5	35	149	260	211	522	871	858	808	755	642	434	219	53	3	0	0	0	0	5825	
8	0	0	0	0	0	13	103	325	542	740	886	974	999	952	842	679	478	244	60	0	0	0	0	0	7837	
9	0	0	0	0	0	16	101	312	498	533	802	634	527	864	704	645	447	223	54	2	0	0	0	0	6359	
10	0	0	0	0	0	15	101	295	499	693	839	846	573	527	389	267	276	215	57	2	0	0	0	0	5594	
11	0	0	0	0	0	17	101	266	518	689	834	912	675	875	728	627	445	182	23	3	0	0	0	0	6894	
12	0	0	0	0	0	16	106	303	514	686	834	768	470	269	434	352	177	135	37	4	0	0	0	0	5106	
13	0	0	0	0	0	13	111	311	518	695	843	946	866	792	682	486	376	198	65	5	0	0	0	0	6906	
14	0	0	0	0	0	15	103	172	476	740	827	852	481	628	783	343	383	236	58	4	0	0	0	0	6102	
15	0	0	0	0	0	18	111	324	522	710	813	933	968	811	784	646	460	246	62	3	0	0	0	0	7411	
16	0	0	0	0	0	17	120	330	539	724	854	914	887	898	696	527	452	227	55	4	0	0	0	0	7244	
17	0	0	0	0	0	17	114	313	504	682	833	902	976	877	663	546	449	240	59	4	0	0	0	0	7179	
18	0	0	0	0	0	16	121	288	479	623	790	861	831	860	677	530	438	233	63	5	0	0	0	0	6814	
19	0	0	0	0	0	20	122	325	527	709	845	917	928	960	814	645	470	250	917	49	2	0	0	0	0	7584
20	0	0	0	0	0	11	148	158	380	369	321	313	188	728	511	149	125	118	64	8	0	0	0	0	3592	
21	0	0	0	0	0	12	133	322	526	620	862	939	958	888	821	639	406	229	88	7	0	0	0	0	7450	
22	0	0	0	0	0	16	115	217	486	723	841	915	965	870	542	424	237	86	19	4	0	0	0	0	6461	
23	0	0	0	0	0	22	130	332	554	751	890	980	1000	966	869	695	515	282	83	8	0	0	0	0	8076	
24	0	0	0	0	0	24	142	354	565	742	878	963	981	921	857	676	467	258	79	9	0	0	0	0	7916	
25	0	0	0	0	0	19	69	136	247	343	346	557	781	816	726	570	367	52	34	9	0	0	0	0	5071	
26	0	0	0	0	0	9	104	221	283	621	828	956	965	643	294	149	128	59	25	13	0	0	0	0	5298	
27	0	0	0	0	0	24	150	328	532	697	713	475	767	337	449	550	312	241	69	4	0	0	0	0	5647	
28	0	0	0	0	0	22	116	276	515	706	838	899	943	832	791	678	462	180	42	0	0	0	0	0	7300	
29	0	0	0	0	0	10	36	53	74	58	149	235	101	89	694	573	410	121	36	8	0	0	0	0	2647	
30	0	0	0	0	0	26	113	335	531	684	872	797	1003	565	744	644	458	253	71	9	0	0	0	0	7105	
31	0	0	0	0	0	15	118	301	511	698	840	895	809	767	616	633	446	246	71	6	0	0	0	0	6971	
Avg	0	0	0	0	0	16	107	273	470	626	772	830	819	777	701	557	399	206	55	4	0	0	0	0	6611	
S D	0	0	0	0	0	5	27	73	109	167	181	189	241	217	150	154	104	61	17	3	0	0	0	0	1260	
S/A	0	0	0	0	0	0.31	0.25	0.27	0.23	0.27	0.23	0.23	0.29	0.28	0.21	0.28	0.26	0.29	0.3	0.82	0	0	0	0	0.19	
Min	0	0	0	0	0	5	35	53	74	58	149	235	101	89	294	149	125	52	19	0	0	0	0	0	2647	
Max	0	0	0	0	0	26	150	354	565	751	890	980	1011	971	869	695	515	282	88	13	0	0	0	0	8076	
n	0	0	0	0	0	210	372	364	372	372	372	372	372	372	372	372	372	372	372	372	71	0	0	0	5109	

Daylight Data Recovery: 0.0% missing; 0.2% exceed the 15% QC threshold -- 5117 total daylight measurements.

Instrument: Eppley PSP Serial Number: 28401F3 Calibration Factor: 7.980 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.

May 2001

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	*	
2	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
3	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
4	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
5	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
6	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
7	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
8	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
9	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
10	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
12	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
14	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
16	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
24	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
25	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
26	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
31	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
Avg	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	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	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	0
Min	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	N/A	N/A	0	0	0	0	0	N/A	N/A
Max	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	N/A	N/A	0	0	0	0	0	N/A	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	0

Daylight Data Recovery: 100.0% missing; 0.0% exceed the 15% QC threshold -- 5117 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

May 2001

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	9	81	273 ?	438 ?	506 ?	?	?	?	?	?	?	401 ?	224	43	0	0	0	0	0	1975 ?	
2	0	0	0	0	0	15	83	257 ?	454	557 ?	?	748 ?	?	777 ?	709 ?	?	354 ?	207 ?	60	0	0	0	0	0	4221 ?	
3	0	0	0	0	0	12	99	284 ?	357 ?	487 ?	575 ?	781 ?	?	?	?	?	?	225 ?	67	1	0	0	0	0	2887 ?	
4	0	0	0	0	0	12	87	356 ?	422 ?	372 ?	502 ?	609 ?	?	?	?	?	386 ?	219	54	0	0	0	0	0	3018 ?	
5	0	0	0	0	0	10	68	219	?	?	?	?	802 ?	?	?	?	?	194 ?	51	0	0	0	0	0	1344 ?	
6	0	0	0	0	0	14	103	299	435 ?	?	?	?	?	?	?	538 ?	423	209	48	0	0	0	0	0	2070 ?	
7	0	0	0	0	0	5	32	137	238	193	481	746 ?	754 ?	681 ?	604 ?	?	420	212	52	3	0	0	0	0	4557 ?	
8	0	0	0	0	0	11	102	303	417 ?	?	?	?	?	?	?	?	?	236	62	1	0	0	0	0	1131 ?	
9	0	0	0	0	0	15	105	301	436 ?	351 ?	451 ?	375 ?	343 ?	529 ?	574 ?	?	409 ?	220	53	3	0	0	0	0	4161 ?	
10	0	0	0	0	0	14	97	289	476	?	?	465 ?	327 ?	420	360	242	255	208	55	2	0	0	0	0	3209 ?	
11	0	0	0	0	0	15	97	261	446 ?	?	?	?	524 ?	?	604 ?	?	374 ?	177	22	3	0	0	0	0	2523 ?	
12	0	0	0	0	0	15	104	300	461 ?	?	?	488 ?	454	253	396	332	162	121	35	4	0	0	0	0	3125 ?	
13	0	0	0	0	0	12	107	303	453 ?	?	?	?	690 ?	531 ?	481 ?	272 ?	361	187	62	5	0	0	0	0	3463 ?	
14	0	0	0	0	0	15	95	155	381 ?	?	658 ?	494 ?	363	540	?	296	373	229	55	4	0	0	0	0	3658 ?	
15	0	0	0	0	0	18	105	350 ?	465 ?	?	541 ?	717 ?	?	479 ?	467 ?	?	412 ?	242	61	4	0	0	0	0	3860 ?	
16	0	0	0	0	0	17	120	327	?	?	?	?	698 ?	780 ?	633 ?	439 ?	412 ?	222	53	4	0	0	0	0	3704 ?	
17	0	0	0	0	0	16	111	305	495	597 ?	?	743 ?	?	600 ?	439 ?	367 ?	414 ?	234	57	4	0	0	0	0	4382 ?	
18	0	0	0	0	0	15	110	280 ?	467	582	674 ?	698 ?	643 ?	?	508 ?	505	430	226	61	5	0	0	0	0	5205 ?	
19	0	0	0	0	0	19	123	318	466 ?	?	?	?	763 ?	?	?	544 ?	421 ?	245	48	2	0	0	0	0	2949 ?	
20	0	0	0	0	0	10	112	133	331	340	297	291	174	565 ?	233 ?	136	114	109	60	7	0	0	0	0	2912	
21	0	0	0	0	0	11	127	316	374 ?	421 ?	?	?	?	657 ?	?	511 ?	364 ?	222	86	6	0	0	0	0	3094 ?	
22	0	0	0	0	0	15	113	204	460	?	?	?	?	659 ?	474	401	220	79	18	4	0	0	0	0	2647 ?	
23	0	0	0	0	0	20	128	321	?	?	?	?	?	?	?	?	?	241 ?	87	8	0	0	0	0	806 ?	
24	0	0	0	0	0	23	146	325 ?	?	?	?	?	?	?	?	?	433 ?	259	82	9	0	0	0	0	1276 ?	
25	0	0	0	0	0	17	62	124	226	316	318	521	736	782 ?	699	550	351	48	31	8	0	0	0	0	4788	
26	0	0	0	0	0	8	95	204	260	564 ?	?	?	?	518 ?	274	137	115	52	24	15 ?	0	0	0	0	2266 ?	
27	0	0	0	0	0	23	146	324	502 ?	651 ?	594 ?	440	421 ?	321	352	493	295	221	64	4	0	0	0	0	4851 ?	
28	0	0	0	0	0	20	110	263	465 ?	?	?	?	?	568 ?	640 ?	?	418 ?	172	40	0	0	0	0	0	2697 ?	
29	0	0	0	0	0	9	33	49	67	52	134	214	92	83	420 ?	392 ?	339 ?	117	34	7	0	0	0	0	2041 ?	
30	0	0	0	0	0	23	108	271 ?	369 ?	603 ?	?	448 ?	?	400 ?	528 ?	508 ?	442	250	69	8	0	0	0	0	4028 ?	
31	0	0	0	0	0	14	112	291 ?	467 ?	?	?	801 ?	582 ?	578 ?	539 ?	568 ?	444	243	70	6	0	0	0	0	4715 ?	
Avg	0	0	0	0	0	14	101	263	401	439	475	563	523	536	497	402	354	195	54	4	0	0	0	0	3147 ?	
S D	0	0	0	0	0	5	26	75	101	169	166	182	221	178	133	140	97	59	17	3	0	0	0	0	1180	
S/A	0	0	0	0	0	0.32	0.26	0.28	0.25	0.39	0.35	0.32	0.42	0.33	0.27	0.35	0.28	0.3	0.32	0.85	0	0	0	0	0	0.38
Min	0	0	0	0	0	5	32	49	67	52	134	214	92	83	233	136	114	48	18	0	0	0	0	0	806	
Max	0	0	0	0	0	23	146	356	502	651	674	801	802	782	709	568	444	259	87	15	0	0	0	0	5205	
n	0	0	0	0	0	209	369	316	206	110	71	91	113	128	132	142	259	350	372	70	0	0	0	0	2963	

Daylight Data Recovery: 0.0% missing; 42.1% exceed the 15% QC threshold -- 5117 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.