

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

July 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	18	96	248	426	607	735	837	897	870	777	616	417	257	90	9	0	0	0	0	6901
2	0	0	0	0	0	18	97	259	419	557	628	800	774	764	711	578	424	253	79	6	0	0	0	0	6367
3	0	0	0	0	0	10	70	240	418	631	661	849	897	882	494	635	366	40	4 ?	2	0	0	0	0	6199
4	0	0	0	0	0	16	83	261	444	672	813	836	875	792	683	627	448	260	92	11	0	0	0	0	6912
5	0	0	0	0	0	12	89	227	453	636	762	874	841	647	456	569	429	241	86	12	0	0	0	0	6335
6	0	0	0	0	0	1	40	120	186	464	542	552	698	672	742	357	343	63	21	2	0	0	0	0	4803
7	0	0	0	0	0	4	37	176	429	227	423	347	240	255	447	482	430	156	51	12	0	0	0	0	3716
8	0	0	0	0	0	17	58	177	138	685	569	429	542	870	734	454	303	244	79	8	0	0	0	0	5309
9	0	0	0	0	0	10	111	183	526	588	820	873	908	948	824	568	437	293	50	6	0	0	0	0	7145
10	0	0	0	0	0	19	126	322	509	692	840	846	908	873	714	610	433	322	117	15	0	0	0	0	7344
11	0	0	0	0	0	16	117	307	459	679	812	845	707	582	750	441	323	116 ?	1 ?	0	0	0	0	0	6155
12	0	0	0	0	0	9	36	90	241	361	221	223	290	301	299	513	208	211	46	2	0	0	0	0	3052
13	0	0	0	0	0	12	78	197	257	549	754	892	836	769	650	226	123	111	48	7	0	0	0	0	5509
14	0	0	0	0	0	11	57	200	476	623	798	721	769	862	819	445	126	229	62	7	0	0	0	0	6206
15	0	0	0	0	0	15	104	285	479	660	758	725	662	709	557	500	525	288	100	11	0	0	0	0	6377
16	0	0	0	0	0	16	98	278	473	650	793	841	822	875	752	680	478	274	91	14	0	0	0	0	7136
17	0	0	0	0	0	11	93	264	460	637	749	849	550	401	665	390	309	224	87	12	0	0	0	0	5701
18	0	0	0	0	0	12	80	230	421	585	657	842	861	868	755	608	416	244	92	15	0	0	0	0	6686
19	0	0	0	0	0	13	102	284	479	658	791	894	927	915	826	688	503	289	97	11	0	0	0	0	7476
20	0	0	0	0	0	10	101	270	386	626	795	893	870	844	702	641	468	233	58	3	0	0	0	0	6900
21	0	0	0	0	0	8	39	110	228	477	669	725	799	883	685	654	377	161	25	0	0	0	0	0	5839
22	0	0	0	0	0	10	82	270	471	644	716	863	916	674	522	269	96	50 ?	60	13	0	0	0	0	5656
23	0	0	0	0	0	10	76	254	454	604	668	680	661	397	280	145	192	50	3 ?	0	0	0	0	0	4475
24	0	0	0	0	0	5	37	82	200	258	366	665	760	863	342	130	59 ?	?	17	5	0	0	0	0	3789 ?
25	0	0	0	0	0	11	86	284	474	660	807	931	853	876	731	652	475	86 ?	39	7	0	0	0	0	6971
26	0	0	0	0	0	9	86	273	474	655	768	727	869	792	649	496	196	128	36	5	0	0	0	0	6162
27	0	0	0	0	0	13	98	281	468	657	826	711	402	414	679	667	487	285	114	10	0	0	0	0	6110
28	0	0	0	0	0	8	91	281	481	662	809	896	546	733	733	547	398	272	95	11	0	0	0	0	6562
29	0	0	0	0	0	9	95	283	481	659	805	903	941	896	658	608	465	294	89	8	0	0	0	0	7191
30	0	0	0	0	0	8	93	284	485	667	811	902	910	859	781	665	480	268	86	5	0	0	0	0	7305
31	0	0	0	0	0	10	89	279	481	592	812	900	930	896	804	657	473	234	14	2	0	0	0	0	7173
Avg	0	0	0	0	0	11	82	235	412	591	709	770	757	741	652	520	361	206	62	7	0	0	0	0	6112
S D	0	0	0	0	0	4	24	64	107	117	148	172	189	195	153	156	134	86	35	5	0	0	0	0	1139
S/A	0	0	0	0	0	0.38	0.3	0.27	0.26	0.2	0.21	0.22	0.25	0.26	0.23	0.3	0.37	0.42	0.55	0.62	0	0	0	0	0.19
Min	0	0	0	0	0	1	36	82	138	227	221	223	240	255	280	130	59	40	1	0	0	0	0	0	3052
Max	0	0	0	0	0	19	126	322	526	692	840	931	941	948	826	688	525	322	117	15	0	0	0	0	7476
n	0	0	0	0	0	195	372	372	372	372	372	372	370	372	372	372	364	338	344	163	0	0	0	0	5122

Daylight Data Recovery: 0.0% missing; 1.4% exceed the 15% QC threshold -- 5194 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.

July 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	*	
2	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	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	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	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	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 -- 5194 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

July 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	22	98	273	409 ?	?	?	?	?	?	?	?	425 ?	272 ?	104	10	0	0	0	0	1614 ?	
2	0	0	0	0	0	22	98	264	386 ?	?	585 ?	?	594 ?	?	?	?	407 ?	287	89	7	0	0	0	0	2738 ?	
3	0	0	0	0	0	13	76	270	419 ?	?	708 ?	?	?	?	455 ?	?	222 ?	40	9	2	0	0	0	0	2214 ?	
4	0	0	0	0	0	21	91	263 ?	374 ?	?	?	?	?	432 ?	512 ?	?	?	265 ?	106	12	0	0	0	0	2075 ?	
5	0	0	0	0	0	15	98	255	?	?	?	?	?	516 ?	424 ?	526 ?	?	276	97	14	0	0	0	0	2222 ?	
6	0	0	0	0	0	0	43	130	205	517	569	554 ?	725 ?	694 ?	631 ?	363	202 ?	67	23	2	0	0	0	0	4725 ?	
7	0	0	0	0	0	4	41	134 ?	405 ?	248	364 ?	346	270	284	504	486 ?	393 ?	177	57	13	0	0	0	0	3727 ?	
8	0	0	0	0	0	21	63	125 ?	156	215 ?	150 ?	480	427 ?	558 ?	534 ?	473 ?	342	198 ?	81	9	0	0	0	0	3832 ?	
9	0	0	0	0	0	12	112	161 ?	302 ?	284 ?	?	?	690 ?	?	?	345 ?	394 ?	210 ?	58	7	0	0	0	0	2575 ?	
10	0	0	0	0	0	25	137	?	?	?	?	665 ?	?	?	364 ?	?	432 ?	?	117	17	0	0	0	0	1757 ?	
11	0	0	0	0	0	19	135	317 ?	363 ?	?	?	739 ?	571 ?	375 ?	605 ?	355 ?	298 ?	113 ?	1 ?	0	0	0	0	0	3891 ?	
12	0	0	0	0	0	11	40	99	262	375	245	246	323	337	335	386 ?	238	228	45	2	0	0	0	0	3170	
13	0	0	0	0	0	14	83	125 ?	278	363 ?	508 ?	703 ?	?	684 ?	307 ?	247	137	124	46	7	0	0	0	0	3628 ?	
14	0	0	0	0	0	13	63	205	393 ?	509 ?	?	638 ?	575 ?	?	?	200 ?	139	196 ?	70	8	0	0	0	0	3011 ?	
15	0	0	0	0	0	17	117	260 ?	?	?	534 ?	562 ?	496 ?	452 ?	404 ?	214 ?	?	260 ?	116	12	0	0	0	0	3444 ?	
16	0	0	0	0	0	18	111	263 ?	?	?	?	?	690 ?	?	605 ?	?	?	256 ?	105	15	0	0	0	0	2063 ?	
17	0	0	0	0	0	13	104	255 ?	?	?	?	?	432 ?	388	441 ?	401	347	253	98	14	0	0	0	0	2744 ?	
18	0	0	0	0	0	15	90	236 ?	391 ?	?	631 ?	?	?	?	?	?	402 ?	278	103	17	0	0	0	0	2164 ?	
19	0	0	0	0	0	17	117	269 ?	?	?	?	?	?	?	?	?	?	249 ?	113	13	0	0	0	0	778 ?	
20	0	0	0	0	0	14	116	279 ?	421 ?	?	?	?	?	?	573 ?	?	?	206 ?	62	3	0	0	0	0	1674 ?	
21	0	0	0	0	0	10	43	121	252	436 ?	547 ?	616 ?	679 ?	?	629 ?	?	318 ?	183	28	0	0	0	0	0	3863 ?	
22	0	0	0	0	0	13	92	252 ?	?	?	303 ?	?	?	639 ?	422 ?	248	101	40 ?	66	14	0	0	0	0	2191 ?	
23	0	0	0	0	0	11	85	266	376 ?	502 ?	525 ?	604 ?	646 ?	442	262	164	195	51	5 ?	0	0	0	0	0	4135 ?	
24	0	0	0	0	0	5	41	89	222	285	401	570 ?	621 ?	?	185 ?	145	43	22	19	5	0	0	0	0	2654 ?	
25	0	0	0	0	0	15	101	231 ?	?	?	?	?	?	?	586 ?	?	?	76	45	6	0	0	0	0	1059 ?	
26	0	0	0	0	0	9	96	240 ?	?	?	?	606 ?	?	440 ?	503 ?	424 ?	203	149	39	4	0	0	0	0	2714 ?	
27	0	0	0	0	0	16	111	260 ?	?	?	?	638 ?	185 ?	449	653 ?	?	?	?	106 ?	11	0	0	0	0	2430 ?	
28	0	0	0	0	0	8	104	244 ?	?	?	?	?	453 ?	520 ?	457 ?	357 ?	295 ?	242 ?	110	13	0	0	0	0	2803 ?	
29	0	0	0	0	0	12	110	230 ?	?	?	?	?	?	?	582 ?	299 ?	387 ?	239 ?	107	11	0	0	0	0	1977 ?	
30	0	0	0	0	0	11	108	230 ?	?	?	?	?	?	?	?	?	?	251 ?	102	6	0	0	0	0	708 ?	
31	0	0	0	0	0	11	103	234 ?	?	477 ?	?	?	?	?	?	?	?	171 ?	16	2	0	0	0	0	1013 ?	
Avg	0	0	0	0	0	14	91	219	330	383	467	569	523	481	477	331	282	185	69	8	0	0	0	0	2568 ?	
S D	0	0	0	0	0	5	28	63	85	112	162	134	163	122	127	114	117	84	38	5	0	0	0	0	1020	
S/A	0	0	0	0	0	0.39	0.3	0.29	0.26	0.29	0.35	0.23	0.31	0.25	0.27	0.35	0.42	0.45	0.55	0.63	0	0	0	0	0	0.4
Min	0	0	0	0	0	0	40	89	156	215	150	246	185	284	185	145	43	22	1	0	0	0	0	0	708	
Max	0	0	0	0	0	25	137	317	421	517	708	739	725	694	653	526	432	287	117	17	0	0	0	0	4725	
n	0	0	0	0	0	175	371	228	116	73	79	85	99	100	122	120	159	257	351	163	0	0	0	0	0	2530

Daylight Data Recovery: 0.0% missing; 51.3% exceed the 15% QC threshold -- 5194 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.