

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

November 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	8	114	220	442	590	443	538	578	402	313	123	13	0	0	0	0	0	0	3785
2	0	0	0	0	0	0	7	80	271	441	571	645	646	587	470	304	121	13	0	0	0	0	0	0	4155
3	0	0	0	0	0	0	1	34	180	258	316	361	375	533	409	249	73	10	0	0	0	0	0	0	2801
4	0	0	0	0	0	0	5	34	58	57	114	96	82	83	73	41	24	2	0	0	0	0	0	0	669
5	0	0	0	0	0	0	2	13	35	79	89	153	281	126	109	153	69	13	0	0	0	0	0	0	1121
6	0	0	0	0	0	0	1	17	49 ?	92	210	402	568	573	473	311	122	17	0	0	0	0	0	0	2836
7	0	0	0	0	0	0	5	80	263	438	565	638	642	582	459	290	105	8	0	0	0	0	0	0	4076
8	0	0	0	0	0	0	5	97	231	430	547	617	623	566	456	288	106	9	0	0	0	0	0	0	3973
9	0	0	0	0	0	0	4	45	202	397	529	507	335	151	123	84	45	2	0	0	0	0	0	0	2425
10	0	0	0	0	0	0	5	63	151	171	233	91	324	340	318	220	91	10	0	0	0	0	0	0	2016
11	0	0	0	0	0	0	6	55	216	308	520	513	587	487	302	243 ?	100	10	0	0	0	0	0	0	3347
12	0	0	0	0	0	0	0	30	110	131	176	246	205	71	57	29 ?	19	5	0	0	0	0	0	0	1080
13	0	0	0	0	0	0	2	43	240	406	458	517	490	382	418	262	114	13	0	0	0	0	0	0	3344
14	0	0	0	0	0	0	2	51	287 ?	420	549	619	625	561	440	232	100	6	0	0	0	0	0	0	3891
15	0	0	0	0	0	0	1	39	76	158	502	430	415	517	415	219	62	5	0	0	0	0	0	0	2841
16	0	0	0	0	0	0	2	40	55	57	65 ?	?	93	?	39 ?	34	14	2	0	0	0	0	0	0	401 ?
17	0	0	0	0	0	0	0	4	32 ?	56 ?	62 ?	89 ?	83	140	60	60	40	8	0	0	0	0	0	0	633 ?
18	0	0	0	0	0	0	2	36	234	406	529	601	617	564	447	277	97	3	0	0	0	0	0	0	3814
19	0	0	0	0	0	0	*	*	*	*	*	*	593	541	421	261	81	3	0	0	0	0	0	0	1900 *
20	0	0	0	0	0	0	0	24	162	349	383	401	523	449	376	199	79	13	0	0	0	0	0	0	2958
21	0	0	0	0	0	0	0	10	61	65	143	194	245	304	326	236	75	6	0	0	0	0	0	0	1666
22	0	0	0	0	0	0	0	23	164	363	497	575	603	554	444	272	97	7	0	0	0	0	0	0	3599
23	0	0	0	0	0	0	0	34	219	391	519	588	601	549	437	267	91	4	0	0	0	0	0	0	3702
24	0	0	0	0	0	0	0	25	220	376	507	577	586	530	423	254	86	3	0	0	0	0	0	0	3587
25	0	0	0	0	0	0	0	33	201	298	474	547	455	421	427	250	81	3	0	0	0	0	0	0	3191
26	0	0	0	0	0	0	0	43	206	338	459	495	506	402	307	179	90	3	0	0	0	0	0	0	3027
27	0	0	0	0	0	0	0	37	143	330	468	537	554	461	370	228	74	6	0	0	0	0	0	0	3207
28	0	0	0	0	0	0	0	26	190	358	492	493	559	477	392	247	75	7	0	0	0	0	0	0	3316
29	0	0	0	0	0	0	0	25	196	365	493	568	585	535	429	260	88	1	0	0	0	0	0	0	3544
30	0	0	0	0	0	0	0	14	55	94	159	265	324	334	342	231	83	5	0	0	0	0	0	0	1907
Avg	0	0	0	0	0	0	2	40	163	278	387	436	455	428	339	216	81	7	0	0	0	0	0	0	2790
S D	0	0	0	0	0	0	2	26	79	143	180	180	178	166	142	84	29	4	0	0	0	0	0	0	1126
S/A	0	0	0	0	0	0	1.19	0.64	0.48	0.51	0.47	0.41	0.39	0.39	0.42	0.39	0.36	0.61	0	0	0	0	0	0	0.4
Min	0	0	0	0	0	0	0	4	32	56	62	89	82	71	39	29	14	1	0	0	0	0	0	0	401
Max	0	0	0	0	0	0	8	114	287	442	590	645	646	587	473	313	123	17	0	0	0	0	0	0	4155
n	0	0	0	0	0	0	49	342	326	342	329	329	357	348	351	345	358	127	0	0	0	0	0	0	3540

Daylight Data Recovery: 1.6% missing; 2.9% exceed the 15% QC threshold -- 3774 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.

November 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	0	*	
2	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
3	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
4	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
5	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
6	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
7	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
8	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
9	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
10	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
11	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
12	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
13	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
14	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
15	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
16	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
17	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
20	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
21	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
22	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
23	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
24	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
25	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
26	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
27	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
28	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
29	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
30	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
Avg	0	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	0	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	0	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	0	N/A
Max	0	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	0	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 -- 3774 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.

November 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	10 ?	89	149 ?	?	?	254 ?	284 ?	498 ?	196 ?	?	132	14	0	0	0	0	0	0	1625 ?
2	0	0	0	0	0	0	8 ?	72	190 ?	?	?	?	?	?	?	?	130	13	0	0	0	0	0	0	414 ?
3	0	0	0	0	0	0	2	36	181	241	317	360	372	376 ?	378 ?	232	74	10	0	0	0	0	0	0	2579 ?
4	0	0	0	0	0	0	6 ?	35	60	57	117	99	85	85	75	41	22	2	0	0	0	0	0	0	684
5	0	0	0	0	0	0	2	13	32	81	92	157	281	130	112	155	69	13	0	0	0	0	0	0	1138
6	0	0	0	0	0	0	1	18	40	95	215	352	463 ?	?	?	?	114	18	0	0	0	0	0	0	1315 ?
7	0	0	0	0	0	0	4	54	?	?	?	?	?	?	?	?	112	9	0	0	0	0	0	0	179 ?
8	0	0	0	0	0	0	6 ?	56	169 ?	?	?	?	?	?	?	?	111	9	0	0	0	0	0	0	351 ?
9	0	0	0	0	0	0	5 ?	42	177	304 ?	?	390 ?	338	157	127	88	45	2	0	0	0	0	0	0	1676 ?
10	0	0	0	0	0	0	6 ?	62	141	173	234	94	274	256 ?	215 ?	203 ?	93	10	0	0	0	0	0	0	1760 ?
11	0	0	0	0	0	0	5	53	206 ?	229 ?	?	335 ?	?	363 ?	235 ?	177 ?	92	12	0	0	0	0	0	0	1707 ?
12	0	0	0	0	0	0	0	30	111	133	168	247	206	72	59	24	20	5	0	0	0	0	0	0	1072
13	0	0	0	0	0	0	2	42	172 ?	?	340 ?	304 ?	383 ?	131 ?	273 ?	191 ?	92 ?	13	0	0	0	0	0	0	1942 ?
14	0	0	0	0	0	0	2	38	146 ?	?	?	?	?	?	281 ?	158 ?	100	6	0	0	0	0	0	0	730 ?
15	0	0	0	0	0	0	2 ?	39	76	160	430 ?	403 ?	214 ?	385 ?	?	197 ?	60	5	0	0	0	0	0	0	1972 ?
16	0	0	0	0	0	0	2	40	56	58	43	31 ?	89	35 ?	33 ?	33	14	2	0	0	0	0	0	0	438 ?
17	0	0	0	0	0	0	0	4	27 ?	45	40	59	81	141	61	60	40	8	0	0	0	0	0	0	567
18	0	0	0	0	0	0	2	28	157 ?	?	?	?	?	?	?	?	96	4	0	0	0	0	0	0	287 ?
19	0	0	0	0	0	0	*	*	*	*	*	*	?	?	?	199 ?	78	3	0	0	0	0	0	0	281 ?*
20	0	0	0	0	0	0	0	23	126 ?	338 ?	373	404	491 ?	376 ?	298 ?	182	76	12	0	0	0	0	0	0	2700 ?
21	0	0	0	0	0	0	?	11	61	66	146	198	243	296	318	215 ?	70	6	0	0	0	0	0	0	1629
22	0	0	0	0	0	0	0	18	124 ?	?	?	?	?	?	?	191 ?	93	7	0	0	0	0	0	0	433 ?
23	0	0	0	0	0	0	0	19	149 ?	?	?	?	?	?	?	193 ?	86	3	0	0	0	0	0	0	451 ?
24	0	0	0	0	0	0	0	21	125 ?	286 ?	?	?	?	?	?	190 ?	81	3	0	0	0	0	0	0	706 ?
25	0	0	0	0	0	0	0	36	150 ?	287 ?	?	?	368 ?	315 ?	?	180 ?	76	3	0	0	0	0	0	0	1414 ?
26	0	0	0	0	0	0	0	24	126	255 ?	?	450 ?	393 ?	328 ?	281 ?	175	64	3	0	0	0	0	0	0	2099 ?
27	0	0	0	0	0	0	0	34	146 ?	?	?	?	?	344 ?	375 ?	185 ?	70	5	0	0	0	0	0	0	1159 ?
28	0	0	0	0	0	0	0	17	144 ?	?	?	382 ?	?	437 ?	398 ?	187 ?	69	6	0	0	0	0	0	0	1639 ?
29	0	0	0	0	0	0	0	15	127 ?	?	?	?	?	?	?	179 ?	81	0	0	0	0	0	0	0	403 ?
30	0	0	0	0	0	0	0	14	56	96	159	256	299	287	225 ?	200 ?	78	5	0	0	0	0	0	0	1673 ?

Avg	0	0	0	0	0	0	2	34	122	171	206	265	286	264	219	160	78	7	0	0	0	0	0	0	1198 ?
S D	0	0	0	0	0	0	3	20	51	100	126	132	124	136	118	61	29	4	0	0	0	0	0	0	719
S/A	0	0	0	0	0	0	1.24	0.58	0.42	0.59	0.61	0.5	0.43	0.52	0.54	0.38	0.37	0.64	0	0	0	0	0	0	0.6
Min	0	0	0	0	0	0	0	4	27	45	40	31	81	35	33	24	14	0	0	0	0	0	0	0	179
Max	0	0	0	0	0	0	10	89	206	338	430	450	491	498	398	232	132	18	0	0	0	0	0	0	2700
n	0	0	0	0	0	0	41	339	235	167	132	156	148	141	131	179	352	127	0	0	0	0	0	0	2138

Daylight Data Recovery: 1.6% missing; 41.2% exceed the 15% QC threshold -- 3774 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.