

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

December 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	0	0	32	172	214	136	168	316	445	386	212	71	5	0	0	0	0	0	0	2157
2	0	0	0	0	0	0	0	24	179	323	446	422	485	381	208	64	2	0	0	0	0	0	0	0	2814
3	0	0	0	0	0	0	0	26	161	325	447	523	542	492	388	236	73	4	0	0	0	0	0	0	3216
4	0	0	0	0	0	0	0	29	169	249	289	518	541	493	347	201	65	7	0	0	0	0	0	0	2910
5	0	0	0	0	0	0	0	26	168	328	456	540	553	462	389	239	76	4	0	0	0	0	0	0	3241
6	0	0	0	0	0	0	0	22	124	229	436	360	344	364	334	111	84	4	0	0	0	0	0	0	2413
7	0	0	0	0	0	0	0	22	158	344	439	501	535	371	425	135	58	2	0	0	0	0	0	0	2992
8	0	0	0	0	0	0	0	25	121	329	436	403	244	75	108	55	26	3	0	0	0	0	0	0	1826
9	0	0	0	0	0	0	0	19	163	306	429	432	376	421	269	180	76	2	0	0	0	0	0	0	2673
10	0	0	0	0	0	0	0	5	38	105	115	102	80	54	80	61	23	5	0	0	0	0	0	0	668
11	0	0	0	0	0	0	0	16	49	107	136	109	121	107	91	56	11	4	0	0	0	0	0	0	807
12	0	0	0	0	0	0	0	8	52	56	80	130	97	98	69	92	27	2	0	0	0	0	0	0	711
13	0	0	0	0	0	0	0	13	47	145	174	167	230	303	347	193	73	8	0	0	0	0	0	0	1700
14	0	0	0	0	0	0	0	12	44	99	254	453	339	400	271	183	60	5	0	0	0	0	0	0	2121
15	0	0	0	0	0	0	0	12	119	297	426	501	536	492	415	252	78	1	0	0	0	0	0	0	3129
16	0	0	0	0	0	0	0	37	117	257	383	527	336	207	220	144	71	5	0	0	0	0	0	0	2305
17	0	0	0	0	0	0	0	28	123	263	401	492	523	456	397	171	42	13	0	0	0	0	0	0	2909
18	0	0	0	0	0	0	0	15	138	320	462	540	558	511	424	260	69	11	0	0	0	0	0	0	3307
19	0	0	0	0	0	0	0	29	137	300	414	524	521	512	419	206	71	8	0	0	0	0	0	0	3141
20	0	0	0	0	0	0	0	15	139	324	466	546	570	520	431	262	90	9	0	0	0	0	0	0	3371
21	0	0	0	0	0	0	0	14	138	322	464	544	568	513	429	259	86	5	0	0	0	0	0	0	3343
22	0	0	0	0	0	0	0	15	133	313	454	532	554	505	435	249	69	13	0	0	0	0	0	0	3271
23	0	0	0	0	0	0	0	12	108	236	247	201	246	173	170	107	24	4	0	0	0	0	0	0	1529
24	0	0	0	0	0	0	0	8	133	322	473	555	579	532	450	284	96	13	0	0	0	0	0	0	3445
25	0	0	0	0	0	0	0	11	59	114	142	146	177	146	57	50	22	4	0	0	0	0	0	0	928
26	0	0	0	0	0	0	0	13	135	324	472	556	575	545	460	293	110	14	0	0	0	0	0	0	3497
27	0	0	0	0	0	0	0	14	130	314	463	540	554	514	421	261	87	10	0	0	0	0	0	0	3308
28	0	0	0	0	0	0	0	33	125	316	443	531	530	516	423	157	48	5	0	0	0	0	0	0	3127
29	0	0	0	0	0	0	0	13	78	267	358	525	547	519	448	278	101	13	0	0	0	0	0	0	3148
30	0	0	0	0	0	0	0	19	97	285	436	511	470	407	327	216	98	12	0	0	0	0	0	0	2877
31	0	0	0	0	0	0	0	13	69	162	194	212	250	244	197	118	49	11	0	0	0	0	0	0	1519
Avg	0	0	0	0	0	0	0	19	117	255	354	413	416	380	320	185	64	7	0	0	0	0	0	0	2529
S D	0	0	0	0	0	0	0	8	42	86	132	163	164	159	131	75	26	4	0	0	0	0	0	0	894
S/A	0	0	0	0	0	0	0	0.44	0.36	0.34	0.37	0.39	0.39	0.42	0.41	0.4	0.4	0.6	0	0	0	0	0	0	0.35
Min	0	0	0	0	0	0	0	5	38	56	80	102	80	54	57	50	11	1	0	0	0	0	0	0	668
Max	0	0	0	0	0	0	0	37	179	344	473	556	579	545	460	293	110	14	0	0	0	0	0	0	3497
n	0	0	0	0	0	0	0	271	372	371	372	372	372	372	372	372	372	372	116	0	0	0	0	0	3734

Daylight Data Recovery: 0.0% missing; 0.0% exceed the 15% QC threshold -- 3735 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.

December 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	0	0	0	*	
2	0	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	0	*	
4	0	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	0	*	
6	0	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	0	*	
8	0	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	0	*	
10	0	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	0	*	
12	0	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	0	*	
14	0	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	0	*	
16	0	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	0	*	
18	0	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	0	*	
20	0	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	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	*	
31	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	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	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 -- 3735 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.

December 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	0	0	28	158	206	125	156	249	300 ?	372	181	69	5	0	0	0	0	0	0	1849 ?
2	0	0	0	0	0	0	0	19	179 ?	300	407 ?	390	422 ?	361	268	182	62	2	0	0	0	0	0	0	2591 ?
3	0	0	0	0	0	0	0	21	155	312	421 ?	?	?	444 ?	375	223	75	3	0	0	0	0	0	0	2029 ?
4	0	0	0	0	0	0	0	22	160	223 ?	279	267 ?	?	?	315	189	51	7	0	0	0	0	0	0	1514 ?
5	0	0	0	0	0	0	0	20	152	315 ?	?	?	?	384 ?	369 ?	212 ?	79	3	0	0	0	0	0	0	1533 ?
6	0	0	0	0	0	0	0	22	119	161 ?	382 ?	348	325	328	291 ?	104	80	3	0	0	0	0	0	0	2163 ?
7	0	0	0	0	0	0	0	19	145	331 ?	406 ?	?	?	279 ?	221 ?	127	57	2	0	0	0	0	0	0	1587 ?
8	0	0	0	0	0	0	0	25	111	277	390 ?	363	212	73	103	51	25	3	0	0	0	0	0	0	1634
9	0	0	0	0	0	0	0	17	144	308 ?	389 ?	328 ?	354	339 ?	246	161	74	2	0	0	0	0	0	0	2363 ?
10	0	0	0	0	0	0	0	5	35	101	111	95	74	50	74	56	22	5	0	0	0	0	0	0	625
11	0	0	0	0	0	0	0	15	46	103	125	100	112	99	84	52	11	4	0	0	0	0	0	0	752
12	0	0	0	0	0	0	0	7	48	51	74	120	90	92	64	86	26	4	0	0	0	0	0	0	662
13	0	0	0	0	0	0	0	13	47	142	167	153	221	288	298 ?	187	69	8	0	0	0	0	0	0	1591
14	0	0	0	0	0	0	0	11	41	93	241	422	320	381	266	178	58	5	0	0	0	0	0	0	2018
15	0	0	0	0	0	0	0	11	116	283	414 ?	461 ?	?	?	?	202 ?	79	1	0	0	0	0	0	0	1566 ?
16	0	0	0	0	0	0	0	38	112	231	348	?	303	199	215	141	66	5	0	0	0	0	0	0	1657 ?
17	0	0	0	0	0	0	0	24	110	239	378	459 ?	461 ?	420 ?	384 ?	151	39	12	0	0	0	0	0	0	2676 ?
18	0	0	0	0	0	0	0	13	128	242 ?	?	?	?	?	?	203 ?	69	10	0	0	0	0	0	0	665 ?
19	0	0	0	0	0	0	0	27	123	234 ?	360 ?	?	420 ?	?	?	158 ?	69	8	0	0	0	0	0	0	1399 ?
20	0	0	0	0	0	0	0	13	127	234 ?	?	?	?	?	?	205 ?	93	8	0	0	0	0	0	0	681 ?
21	0	0	0	0	0	0	0	12	128	234 ?	?	?	?	?	?	211 ?	90	5	0	0	0	0	0	0	679 ?
22	0	0	0	0	0	0	0	13	123	243 ?	?	?	?	?	?	217 ?	70	12	0	0	0	0	0	0	677 ?
23	0	0	0	0	0	0	0	12	99	227	237	192	239	167	164	102	23	4	0	0	0	0	0	0	1464
24	0	0	0	0	0	0	0	7	117	233 ?	?	?	?	?	?	205 ?	96	13	0	0	0	0	0	0	671 ?
25	0	0	0	0	0	0	0	11	56	104	134	135	162	136	53	46	21	4	0	0	0	0	0	0	861
26	0	0	0	0	0	0	0	10	125	?	?	?	?	?	?	?	111	13	0	0	0	0	0	0	259 ?
27	0	0	0	0	0	0	0	11	119	234 ?	?	?	?	?	358 ?	214 ?	83	9	0	0	0	0	0	0	1029 ?
28	0	0	0	0	0	0	0	29	104	186 ?	?	?	453 ?	?	?	116	46	4	0	0	0	0	0	0	939 ?
29	0	0	0	0	0	0	0	13	73	131 ?	233 ?	?	?	?	359 ?	213 ?	102	12	0	0	0	0	0	0	1136 ?
30	0	0	0	0	0	0	0	16	88	260 ?	376 ?	472 ?	446	382	307	203	93	12	0	0	0	0	0	0	2655 ?
31	0	0	0	0	0	0	0	13	67	159	187	203	241	237	194	115	46	11	0	0	0	0	0	0	1472
Avg	0	0	0	0	0	0	0	17	108	213	281	274	283	261	245	156	63	6	0	0	0	0	0	0	1400 ?
S D	0	0	0	0	0	0	0	7	39	75	120	138	127	127	112	57	27	4	0	0	0	0	0	0	673
S/A	0	0	0	0	0	0	0	0.45	0.36	0.35	0.43	0.5	0.45	0.49	0.46	0.37	0.42	0.59	0	0	0	0	0	0	0.48
Min	0	0	0	0	0	0	0	5	35	51	74	95	74	50	53	46	11	1	0	0	0	0	0	0	259
Max	0	0	0	0	0	0	0	38	179	331	421	472	461	444	384	223	111	13	0	0	0	0	0	0	2676
n	0	0	0	0	0	0	0	269	360	258	202	163	181	189	215	296	371	116	0	0	0	0	0	0	2628

Daylight Data Recovery: 0.0% missing; 29.6% exceed the 15% QC threshold -- 3735 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.