

January 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	0	16	122	299	445	503	515	514	409	180	65	10	0	0	0	0	0	0	3078
2	0	0	0	0	0	0	0	1	12	22	26	49	49	25	25	15	8	1	0	0	0	0	0	0	233
3	0	0	0	0	0	0	0	1	7	29	92	138	119	65	57	75	40	12	0	0	0	0	0	0	635
4	0	0	0	0	0	0	0	15	126	308	462	549	570	545	459	305	120	17	0	0	0	0	0	0	3477
5	0	0	0	0	0	0	0	36	182 ?	366	455	483	549	423	324	263	122	20	0	0	0	0	0	0	3223
6	0	0	0	0	0	0	0	0	10	42	139	256	452	521	391	260	93	16	0	0	0	0	0	0	2180
7	0	0	0	0	0	0	0	18	103	307	330	535	447	347	336	227	58	16	0	0	0	0	0	0	2724
8	0	0	0	0	0	0	0	16	133	317	471	559	586	556	464	317	131	20	0	0	0	0	0	0	3571
9	0	0	0	0	0	0	0	17	128	305	453	543	564	538	445	304	124	19	0	0	0	0	0	0	3440
10	0	0	0	0	0	0	0	20	138	310	448	541	567	535	446	301	129	22	0	0	0	0	0	0	3457
11	0	0	0	0	0	0	0	26	107	285	445	476	234	320	250	143	80	24	0	0	0	0	0	0	2391
12	0	0	0	0	0	0	0	15	53	114	165	360	346	276	149	157	72	11	0	0	0	0	0	0	1717
13	0	0	0	0	0	0	0	20	139	326	480	572	599	566	448	327	135	36	0	0	0	0	0	0	3648
14	0	0	0	0	0	0	0	5	69	76	77	83	79	55	59	39	22	4	0	0	0	0	0	0	568
15	0	0	0	0	0	0	0	14	63	134	387	573	606	573	470	345	153	29	0	0	0	0	0	0	3348
16	0	0	0	0	0	0	0	29	151	317	467	563	587	514	419	373	156	32	0	0	0	0	0	0	3609
17	0	0	0	0	0	0	0	18	127	329	464	571	592	579	403	249	97	16	0	0	0	0	0	0	3445
18	0	0	0	0	0	0	0	24	118	296	441	535	328	435	434	316	136	27	0	0	0	0	0	0	3089
19	0	0	0	0	0	0	0	20	86	295	392	502	567	539	342	257	139	48	0	0	0	0	0	0	3185
20	0	0	0	0	0	0	0	15	71	192	270	504	459	439	289	188	76	22	0	0	0	0	0	0	2525
21	0	0	0	0	0	0	0	6	17	46	91	160	102	30	157	200	57	31	0	0	0	0	0	0	898
22	0	0	0	0	0	0	0	23	144	305	477	583	610	577	504	342	158	33	0	0	0	0	0	0	3756
23	0	0	0	0	0	0	0	20	108	242	258	391	497	434	440	336	154	14	0	0	0	0	0	0	2894
24	0	0	0	0	0	0	0	17	91	268	311	212	387	525	392	335	137	36	0	0	0	0	0	0	2711
25	0	0	0	0	0	0	0	5	25	27	78	82	129	103	100	53	19	20	0	0	0	0	0	0	640
26	0	0	0	0	0	0	0	10	35	51	90	150	173	149	143	86	41	9	0	0	0	0	0	0	938
27	0	0	0	0	0	0	0	11	39	109	152	186	226	358	291	206	115	24	0	0	0	0	0	0	1717
28	0	0	0	0	0	0	0	8	93	325	447	565	594	573	377	222	91	33	0	0	0	0	0	0	3327
29	0	0	0	0	0	0	0	19	80	191	408	486	601	606	504	356	170	37	0	0	0	0	0	0	3457
30	0	0	0	0	0	0	0	17	81	181	248	410	604	571	415	340	183	41	0	0	0	0	0	0	3091
31	0	0	0	0	0	0	0	20	90	181	344	496	625	606	477	376	188	38	0	0	0	0	0	0	3440
Avg	0	0	0	0	0	0	0	16	89	213	316	407	431	416	336	242	106	23	0	0	0	0	0	0	2594
S D	0	0	0	0	0	0	0	8	47	115	156	181	194	192	146	106	50	11	0	0	0	0	0	0	1100
S/A	0	0	0	0	0	0	0	0.53	0.53	0.54	0.49	0.44	0.45	0.46	0.43	0.44	0.47	0.49	0	0	0	0	0	0	0.42
Min	0	0	0	0	0	0	0	0	7	22	26	49	49	25	25	15	8	1	0	0	0	0	0	0	233
Max	0	0	0	0	0	0	0	36	182	366	480	583	625	606	504	376	188	48	0	0	0	0	0	0	3756
n	0	0	0	0	0	0	0	229	365	371	372	372	372	372	372	372	372	372	247	0	0	0	0	0	3816

Daylight Data Recovery: 0.0% missing; 0.2% exceed the 15% QC threshold -- 3824 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.

January 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	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 -- 3824 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

January 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	0	13	109	222 ?	?	?	495 ?	?	324 ?	174	63	10	0	0	0	0	0	0	1410 ?
2	0	0	0	0	0	0	0	1	11	20	24	45	46	23	23	14	8	1	0	0	0	0	0	0	217
3	0	0	0	0	0	0	0	1	7	28	85	131	114	61	54	71	38	12	0	0	0	0	0	0	601
4	0	0	0	0	0	0	0	12	110	219 ?	?	?	?	?	?	?	122	16	0	0	0	0	0	0	480 ?
5	0	0	0	0	0	0	0	21	67 ?	?	?	465 ?	493 ?	385	307	237 ?	120	19	0	0	0	0	0	0	2114 ?
6	0	0	0	0	0	0	0	0	9	39	133	247	286 ?	?	277 ?	180 ?	90	15	0	0	0	0	0	0	1275 ?
7	0	0	0	0	0	0	0	15	93	250 ?	231 ?	?	374 ?	304	272	186	56	16	0	0	0	0	0	0	1796 ?
8	0	0	0	0	0	0	0	12	114	?	?	?	?	?	?	?	124	19	0	0	0	0	0	0	269 ?
9	0	0	0	0	0	0	0	13	110	219 ?	?	?	?	?	?	221 ?	123	18	0	0	0	0	0	0	705 ?
10	0	0	0	0	0	0	0	16	80 ?	297 ?	?	?	?	?	?	212 ?	127	21	0	0	0	0	0	0	753 ?
11	0	0	0	0	0	0	0	23	102	265 ?	350 ?	418 ?	221	297	238	141	77	23	0	0	0	0	0	0	2156 ?
12	0	0	0	0	0	0	0	14	49	109	158	341	340	271	137	154	67	10	0	0	0	0	0	0	1650
13	0	0	0	0	0	0	0	18	121	?	?	?	?	?	?	?	134	34	0	0	0	0	0	0	306 ?
14	0	0	0	0	0	0	0	4	67	69	71	77	72	51	54	37	21	4	0	0	0	0	0	0	527
15	0	0	0	0	0	0	0	13	60	131	327 ?	?	?	?	?	?	132 ?	27	0	0	0	0	0	0	691 ?
16	0	0	0	0	0	0	0	24	85 ?	227 ?	?	?	?	424 ?	349 ?	268 ?	124 ?	31	0	0	0	0	0	0	1534 ?
17	0	0	0	0	0	0	0	17	105	206	384 ?	?	?	?	361 ?	232	94	15	0	0	0	0	0	0	1415 ?
18	0	0	0	0	0	0	0	22	119	285 ?	396 ?	421 ?	309	334 ?	449 ?	307 ?	132	25	0	0	0	0	0	0	2799 ?
19	0	0	0	0	0	0	0	19	83	254 ?	371	461 ?	507 ?	501 ?	330	232	133	40	0	0	0	0	0	0	2930 ?
20	0	0	0	0	0	0	0	15	70	188	256	416 ?	335 ?	282 ?	247	179	72	21	0	0	0	0	0	0	2080 ?
21	0	0	0	0	0	0	0	7	15	43	85	148	93	28	148	160	53	26	0	0	0	0	0	0	806
22	0	0	0	0	0	0	0	19	124	189 ?	384 ?	?	?	?	?	?	155	31	0	0	0	0	0	0	903 ?
23	0	0	0	0	0	0	0	19	92	232	247	355	439 ?	349 ?	420 ?	326 ?	152	13	0	0	0	0	0	0	2644 ?
24	0	0	0	0	0	0	0	17	86	230 ?	288	196	327	427 ?	341 ?	258 ?	133	33	0	0	0	0	0	0	2335 ?
25	0	0	0	0	0	0	0	5	23	25	71	75	118	94	92	49	18	19	0	0	0	0	0	0	588
26	0	0	0	0	0	0	0	9	32	47	83	138	159	138	132	80	38	8	0	0	0	0	0	0	864
27	0	0	0	0	0	0	0	10	36	100	139	171	209	348	273	203	112	22	0	0	0	0	0	0	1623
28	0	0	0	0	0	0	0	8	73	358 ?	413 ?	?	?	444 ?	293 ?	180	83	30	0	0	0	0	0	0	1881 ?
29	0	0	0	0	0	0	0	19	73	188	355	479 ?	?	?	?	338 ?	166	35	0	0	0	0	0	0	1653 ?
30	0	0	0	0	0	0	0	16	77	174	230	374	509 ?	488 ?	359 ?	308 ?	159 ?	39	0	0	0	0	0	0	2734 ?
31	0	0	0	0	0	0	0	21	88	179	297	450 ?	?	?	401 ?	?	166 ?	37	0	0	0	0	0	0	1638 ?
Avg	0	0	0	0	0	0	0	14	74	171	234	285	287	276	256	190	100	22	0	0	0	0	0	0	1399 ?
S D	0	0	0	0	0	0	0	7	36	94	127	154	158	162	125	90	46	10	0	0	0	0	0	0	812
S/A	0	0	0	0	0	0	0	0.49	0.48	0.55	0.54	0.54	0.55	0.58	0.49	0.47	0.46	0.48	0	0	0	0	0	0	0.58
Min	0	0	0	0	0	0	0	0	7	20	24	45	46	23	23	14	8	1	0	0	0	0	0	0	217
Max	0	0	0	0	0	0	0	24	124	358	413	479	509	501	449	338	166	40	0	0	0	0	0	0	2930
n	0	0	0	0	0	0	0	226	347	245	222	189	172	176	213	215	359	246	0	0	0	0	0	0	2620

Daylight Data Recovery: 0.0% missing; 31.5% exceed the 15% QC threshold -- 3824 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.