

October 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	62	243	450	617	738	800	788	708	568	379	167	26	0	0	0	0	0	0	5548
2	0	0	0	0	0	1	53	218	446	616	734	796	782	706	563	371	171	27	0	0	0	0	0	0	5485
3	0	0	0	0	0	0	54	223	416 ?	592	706	773	761	699 ?	560 ?	?	79 ?	27	0	0	0	0	0	0	4890 ?
4	0	0	0	0	0	0	51	191	363	557	658	573	651	558	578	381 ?	142	22	0	0	0	0	0	0	4725
5	0	0	0	0	0	0	38	183	388 ?	618 ?	679	650	713	636	312	69	2 ?	0	0	0	0	0	0	0	4288
6	0	0	0	0	0	0	15	127	364	620	743	808	797	714	565	375	160	26	0	0	0	0	0	0	5314
7	0	0	0	0	0	0	52	232	444	614	738	796	777	692	548	363	151	22	0	0	0	0	0	0	5430
8	0	0	0	0	0	0	50	225	434	601	723	777	759	673	526	344	140	19	0	0	0	0	0	0	5273
9	0	0	0	0	0	0	43	199	389	565	632	692	644	526	336	206	94	23	0	0	0	0	0	0	4349
10	0	0	0	0	0	0	34	136	277	357	481	671	439	315	207	101	16	1	0	0	0	0	0	0	3035
11	0	0	0	0	0	0	3	36	115	143	81	310	96	14	10	35	44	11	0	0	0	0	0	0	900
12	0	0	0	0	0	0	18	112	198	261 ?	392	314	236	161	241	257	108	10	0	0	0	0	0	0	2306
13	0	0	0	0	0	0	3	7	52	128	151	188	188	196	82	61	27	2	0	0	0	0	0	0	1085
14	0	0	0	0	0	0	46	208	412	577	691	747	731	647	501	317	118	14	0	0	0	0	0	0	5008
15	0	0	0	0	0	0	50	203	410	572	685	741	723	634	491	308	112	13	0	0	0	0	0	0	4942
16	0	0	0	0	0	0	42	209	422	589	705	765	748	659	513	323	117	17	0	0	0	0	0	0	5109
17	0	0	0	0	0	0	41	206	416	583	702	756	742	651	502	312	109	10	0	0	0	0	0	0	5029
18	0	0	0	0	0	0	39	197	403	572	686	739	721	636	488	304	107	8	0	0	0	0	0	0	4901
19	0	0	0	0	0	0	39	198	289	346	631	602	599	600	458	281	95	7	0	0	0	0	0	0	4146
20	0	0	0	0	0	0	41	159	272	518	630	681	666	579	445	269	88	5	0	0	0	0	0	0	4355
21	0	0	0	0	0	0	27	172	363	525	649	667	675	547	465	295	80	0	0	0	0	0	0	0	4464
22	0	0	0	0	0	0	19	175	336	512	587	611	629	383	253	188	84	3	0	0	0	0	0	0	3779
23	0	0	0	0	0	0	11	48	192	397	398	469	616	451	256	217	54	9	0	0	0	0	0	0	3119
24	0	0	0	0	0	0	15	109	258	236	334	525	586	523	227	231	79	6	0	0	0	0	0	0	3128
25	0	0	0	0	0	0	34	140	372	509	651	700	682	596	454	266	79	3	0	0	0	0	0	0	4487
26	0	0	0	0	0	0	34	177	378	541	655	709	686	599	452	263	78	4	0	0	0	0	0	0	4574
27	0	0	0	0	0	0	32	177	383	549	663	716	695	609	460	270	81	4	0	0	0	0	0	0	4638
28	0	0	0	0	0	0	30	168	367	530	644	696	673	588	444	254	69	0	0	0	0	0	0	0	4463
29	0	0	0	0	0	0	30	163	357	521	637	686	662	571	428	242	61	0	0	0	0	0	0	0	4359
30	0	0	0	0	0	0	35	159	346	507	621	673	657	555	427	233	48	0	0	0	0	0	0	0	4262
31	0	0	0	0	0	0	30	153	334	503	617	653	608	556	402	218	64	0	0	0	0	0	0	0	4138
Avg	0	0	0	0	0	0	35	166	343	496	601	654	636	548	412	258	91	10	0	0	0	0	0	0	4243
S/D	0	0	0	0	0	0	15	57	97	139	165	152	172	169	147	94	43	9	0	0	0	0	0	0	1154
S/A	0	0	0	0	0	4.65	0.44	0.34	0.28	0.28	0.27	0.23	0.27	0.31	0.36	0.36	0.47	0.92	0	0	0	0	0	0	0.27
Min	0	0	0	0	0	0	3	7	52	128	81	188	96	14	10	35	2	0	0	0	0	0	0	0	900
Max	0	0	0	0	0	1	62	243	450	620	743	808	797	714	578	381	171	27	0	0	0	0	0	0	5548
n	0	0	0	0	0	5	331	372	363	360	371	372	371	366	366	357	358	141	0	0	0	0	0	0	4133

Daylight Data Recovery: 0.0% missing; 1.5% exceed the 15% QC threshold -- 4197 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18036F3 Calibration Factor: 7.430 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

October 2001

Direct Normal Solar Radiation
 Hourly Integrated and Daily Totals
 Instrument: Eppley NIP
 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	*		
2	0	0	0	0	0	*	*	*	?	?	124 ?	609	648	882 ?	?	?	?	370 ?	0	0	0	0	0	0	2634 *?		
3	0	0	0	0	0	?	*	*	188 ?	196	602	561	493	562 ?	669 ?	?	752 ?	522	0	0	0	0	0	0	4544 *?		
4	0	0	0	0	0	*	*	*	*	*	*	*	?	?	662	528 ?	?	?	0	0	0	0	0	0	1190 *?		
5	0	0	0	0	0	*	*	?	?	333 ?	?	16 ?	?	?	?	?	?	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	715 ?	*	*	?	*	*	*	*	*	*	*	*	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	*	*	*	606 *	?	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	390 ?	*	*	*	*	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	703 **	*	*	*	*	*	*	*	*	*	*	*	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	709	N/A	188	378	363	395	570	611	665	528	752	446	0	0	0	0	0	0	0	N/A	*
SD	0	0	0	0	0	0	8	0	0	209	338	329	110	250	5	0	0	107	0	0	0	0	0	0	0	0	0
StA	0	0	0	0	0	0	0.01	0	0	0.55	0.93	0.83	0.19	0.41	0.01	0	0	0.24	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	703	N/A	188	196	124	16	493	390	662	528	752	370	0	0	0	0	0	0	0	N/A	0
Max	0	0	0	0	0	0	715	N/A	188	606	602	609	648	882	669	528	752	522	0	0	0	0	0	0	0	N/A	0
n	0	0	0	0	0	0	6	0	3	18	18	27	24	18	18	8	2	11	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 86.8% missing; 9.4% exceed the 15% QC threshold -- 4197 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25796E6 Calibration Factor: 8.670 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.

October 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	59	233	392 ?	?	?	?	?	?	?	363 ?	169	29	0	0	0	0	0	0	1244 ?
2	0	0	0	0	0	0	51	175 ?	?	?	?	?	?	?	?	373 ?	165	30	0	0	0	0	0	0	794 ?
3	0	0	0	0	0	0	51	217	396 ?	?	?	?	?	?	?	?	154	27	0	0	0	0	0	0	845 ?
4	0	0	0	0	0	0	45	152	345	545	614 ?	477 ?	481 ?	438 ?	?	?	138	22	0	0	0	0	0	0	3257 ?
5	0	0	0	0	0	0	34	169	379 ?	?	606 ?	471 ?	582 ?	448 ?	282	64	2 ?	0	0	0	0	0	0	0	3039 ?
6	0	0	0	0	0	0	14	118	283 ?	?	?	?	?	?	?	?	161	30	0	0	0	0	0	0	605 ?
7	0	0	0	0	0	0	50	219	373 ?	?	?	?	?	?	?	313 ?	152	26	0	0	0	0	0	0	1132 ?
8	0	0	0	0	0	0	47	220	373 ?	?	?	?	?	?	?	333 ?	139	20	0	0	0	0	0	0	1133 ?
9	0	0	0	0	0	0	39	186	367	515 ?	578 ?	634 ?	620	497	306	184	83	21	0	0	0	0	0	0	4028 ?
10	0	0	0	0	0	0	32	120	230	303	422	463 ?	399	279	182	89	14	1	0	0	0	0	0	0	2536
11	0	0	0	0	0	0	2	32	102	125	71	275	85	13	9	30	40	11	0	0	0	0	0	0	796
12	0	0	0	0	0	0	16	98	175	210	344	278	209	144	227	249	104	11	0	0	0	0	0	0	2064
13	0	0	0	0	0	0	2	7	46	112	133	165	161	171	72	54	25	2	0	0	0	0	0	0	951
14	0	0	0	0	0	0	43	200	374 ?	?	?	?	?	?	?	306 ?	117	16	0	0	0	0	0	0	1056 ?
15	0	0	0	0	0	0	48	200	368 ?	?	?	?	?	?	?	305 ?	113	15	0	0	0	0	0	0	1048 ?
16	0	0	0	0	0	0	39	185	357 ?	?	?	?	?	?	?	237 ?	118	20	0	0	0	0	0	0	956 ?
17	0	0	0	0	0	0	39	183	354 ?	?	?	?	?	?	?	262 ?	110	14	0	0	0	0	0	0	961 ?
18	0	0	0	0	0	0	48	195	364 ?	?	?	?	?	?	?	275 ?	107	11	0	0	0	0	0	0	1001 ?
19	0	0	0	0	0	0	36	184	222 ?	327	522 ?	410 ?	458 ?	534 ?	424 ?	275	93	9	0	0	0	0	0	0	3494 ?
20	0	0	0	0	0	0	39	153	316	474 ?	?	?	?	?	433 ?	268	87	6	0	0	0	0	0	0	1775 ?
21	0	0	0	0	0	0	25	164	355	469 ?	?	297 ?	522 ?	414 ?	381 ?	245 ?	78	0	0	0	0	0	0	0	2951 ?
22	0	0	0	0	0	0	18	163	327	482 ?	496 ?	493 ?	519 ?	340	242	177	82	3	0	0	0	0	0	0	3342 ?
23	0	0	0	0	0	0	10	42	183	323	349	425	508 ?	332 ?	238	186	50	8	0	0	0	0	0	0	2654 ?
24	0	0	0	0	0	0	14	97	227	210	304	471	521 ?	428 ?	213	226	76	6	0	0	0	0	0	0	2791
25	0	0	0	0	0	0	35	143	?	?	?	?	?	?	?	211 ?	78	5	0	0	0	0	0	0	472 ?
26	0	0	0	0	0	0	33	173	360 ?	?	?	?	?	?	?	236 ?	76	5	0	0	0	0	0	0	883 ?
27	0	0	0	0	0	0	31	164	?	?	?	?	?	?	?	203 ?	80	6	0	0	0	0	0	0	484 ?
28	0	0	0	0	0	0	29	164	345 ?	?	?	?	?	?	?	209 ?	70	2	0	0	0	0	0	0	819 ?
29	0	0	0	0	0	0	33	159	335 ?	?	?	?	?	?	377 ?	207 ?	62	0	0	0	0	0	0	0	1174 ?
30	0	0	0	0	0	0	34	157	340 ?	?	?	?	?	?	?	197 ?	48	1	0	0	0	0	0	0	777 ?
31	0	0	0	0	0	0	27	147	329	?	?	?	542 ?	?	385 ?	198	62	0	0	0	0	0	0	0	1691 ?
Avg	0	0	0	0	0	0	33	156	308	341	404	405	431	337	269	224	92	11	0	0	0	0	0	0	1637 ?
S D	0	0	0	0	0	0	15	54	91	154	184	128	170	158	127	87	44	10	0	0	0	0	0	0	1047
S/A	0	0	0	0	0	0	0.44	0.35	0.3	0.45	0.46	0.32	0.39	0.47	0.47	0.39	0.48	0.87	0	0	0	0	0	0	0.64
Min	0	0	0	0	0	0	2	7	46	112	71	165	85	13	9	30	2	0	0	0	0	0	0	0	472
Max	0	0	0	0	0	0	59	233	396	545	614	634	620	534	433	373	169	30	0	0	0	0	0	0	4028
n	0	0	0	0	0	5	331	357	230	112	96	96	94	102	137	245	368	141	0	0	0	0	0	0	2321

Daylight Data Recovery: 0.0% missing; 44.7% exceed the 15% QC threshold -- 4197 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18039F3 Calibration Factor: 7.470 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.