

June 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	20	65	99	261	484	708	467	?	97 ?	?	?	80 ?	74	60	29	0	0	0	0	2443 ?
2	0	0	0	0	0	13	59 ?	124	200	479	538	830	751	769	554	532	228	39 ?	52 ?	16	0	0	0	0	5184
3	0	0	0	0	0	37	170	329	422	327	715	650	681	575	844	439	521	294	107	15	0	0	0	0	6126
4	0	0	0	0	0	22	78	288	537	593	662	1005	1002	834	628	679	456	180	40	10	0	0	0	0	7013
5	0	0	0	0	0	40	92	228	266	280	729	921	999	853	734	523	482	314	118	8	0	0	0	0	6588
6	0	0	0	0	0	17	25	36 ?	126	146	316	213	168	116 ?	?	55 ?	56 ?	69	108	24	0	0	0	0	1475 ?
7	0	0	0	0	0	13	102	363	630	763	831	857	862	839	657	652	487	278	125	12	0	0	0	0	7472
8	0	0	0	0	0	41	195	398	598	773	903	984	1009	965	867	716	531	332	122	8	0	0	0	0	8441
9	0	0	0	0	0	36	192	353	570	747	906	956	997	893	487	285	353	371	67	12	0	0	0	0	7226
10	0	0	0	0	0	34	157	277 ?	544	752	695	724	914	833	625	740	519	150	88	8	0	0	0	0	7060
11	0	0	0	0	0	35	180	371	571	744	789	887	819	756	643	626	368	255	82	14	0	0	0	0	7140
12	0	0	0	0	0	33	67	95	237	199	447	150 ?	593	454	658	633	413	220	32	8	0	0	0	0	4237
13	0	0	0	0	0	19	87	300	248	197	764 ?	722	802	660	278	212	489	343	114	19	0	0	0	0	5253
14	0	0	0	0	0	11	49	90	154	346	371	359	330	487	312	224	124	65	137	16	0	0	0	0	3074
15	0	0	0	0	0	12	81	141	196	300	411	713	630	840	749	613	442	205	119	15	0	0	0	0	5467
16	0	0	0	0	0	14	143	367	567	680	699	839	524	544	490	301	161 ?	134	90	18	0	0	0	0	5571
17	0	0	0	0	0	20	100	199	321	581	842	996	1038	908	885	614	567	359	138	9	0	0	0	0	7577
18	0	0	0	0	0	38	158	354	578	489	516	912	1016	859	719	527	350	256	36	3	0	0	0	0	6814
19	0	0	0	0	0	31	159	343	537	677	809	940	887	699	497	219	286	233	92	19	0	0	0	0	6428
20	0	0	0	0	0	27	169	357	553	723	851	870	752	794	632	570	447	262	122	17	0	0	0	0	7145
21	0	0	0	0	0	33	173	368	567	747	882	972	1003	873	817	729	539	338	132	12	0	0	0	0	8184
22	0	0	0	0	0	35	183	384	581	756	901	978	1006	969	855	709	539	339	138	13	0	0	0	0	8386
23	0	0	0	0	0	37	169	283	438	725	912	973	786	968	795	661	308	315	134	9	0	0	0	0	7511
24	0	0	0	0	0	40	164	367	560	673	559	806	488	683	587	418	307	297	138	24	0	0	0	0	6113
25	0	0	0	0	0	22	217	365	501	741	728	839	889	601	826	506	85 ?	?	7 ?	2	0	0	0	0	6329 ?
26	0	0	0	0	0	25	81	226	336	452	401	542	518	227	370	538	342	110 ?	4 ?	2	0	0	0	0	4174
27	0	0	0	0	0	29	93	138	205	214	469	179	294	461	800	690	349	276	75	1	0	0	0	0	4273
28	0	0	0	0	0	5	17 ?	35 ?	62	105	180	214	229	383	482	420	323	171	56	13	0	0	0	0	2696 ?
29	0	0	0	0	0	21	75	122	404	530	530	639	996	950	823	666	487	289	116	22	0	0	0	0	6671
30	0	0	0	0	0	24	142	315	513	667	480	834	913	840	819	609	454	279	96	13	0	0	0	0	6998
Avg	0	0	0	0	0	26	121	257	409	530	651	732	755	691	658	521	370	236	92	13	0	0	0	0	5969
S D	0	0	0	0	0	10	56	118	173	221	203	269	262	248	173	184	150	98	40	7	0	0	0	0	1820
S/A	0	0	0	0	0	0.39	0.46	0.46	0.42	0.42	0.31	0.37	0.35	0.36	0.26	0.35	0.41	0.41	0.44	0.52	0	0	0	0	0.3
Min	0	0	0	0	0	5	17	35	62	105	180	150	168	97	278	55	56	39	4	1	0	0	0	0	1475
Max	0	0	0	0	0	41	217	398	630	773	912	1005	1038	969	885	740	567	371	138	29	0	0	0	0	8441
n	0	0	0	0	0	330	347	337	360	360	355	351	348	350	336	340	338	334	334	254	0	0	0	0	5075

Daylight Data Recovery: 0.0% missing; 3.6% exceed the 15% QC threshold -- 5264 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25821F3 Calibration Factor: 9.020 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

June 2002

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	33	140	337	195	0	0	0	0	0	0	1	0	0	0	0	0	708
2	0	0	0	0	0	1	1	1	3	137	198	397	303	397	217	226	57	0	1	1	0	0	0	0	1939
3	0	0	0	0	0	62	313	392	160	36	230	243	297	240	619	197	576	434	195	0	0	0	0	0	3993
4	0	0	0	0	0	19	30	268	606	440	426	775	731	621	386	609	413	117	0	0	0	0	0	0	5440
5	0	0	0	0	0	54	11	81	44	2	313	748	877	642	263	167	555	571	269	0	0	0	0	0	4596
6	0	0	0	0	0	1	0	0	1	1	4	1	1	0	0	0	0	1	13	0	0	0	0	0	22
7	0	0	0	0	0	0	2	289	752	616	664	592	581	648	474	630	613	532	379	0	0	0	0	0	6772
8	0	0	0	0	0	212	561	735	828	881	901	914	922	905	882	843	800	706	383	0	0	0	0	0	10472
9	0	0	0	0	0	135	374	510	674	771	748	740	690	621	252	102	337	499	53	0	0	0	0	0	6507
10	0	0	0	0	0	76	375	503 ?	647	699	475	463	684	598	440	695	622	114	171	0	0	0	0	0	6563
11	0	0	0	0	0	137	457	621	712	744	648	663	566	534	432	529	289	283	77	0	0	0	0	0	6692
12	0	0	0	0	0	78	37	2	22	3	71	0	92	49	250	478	336	165	0	0	0	0	0	0	1582
13	0	0	0	0	0	0	31	320	6	1	324	255	425	259	13	2	413	557	204	0	0	0	0	0	2810
14	0	0	0	0	0	0	0	1	1	20	9	6	2	9	2	1	0	0	120	0	0	0	0	0	172
15	0	0	0	0	0	0	24	30	12	68	77	346	223	508	541	538	443	161	288	0	0	0	0	0	3260
16	0	0	0	0	0	16	234	487	618	544	327	434	94	51	57	7	0	5	3	0	0	0	0	0	2878
17	0	0	0	0	0	2	28	82	130	348	602	768	853	750	855	612	722	717	442	0	0	0	0	0	6912
18	0	0	0	0	0	166	484	615	565	194	138	552	593	447	537	389	210	240	9	0	0	0	0	0	5138
19	0	0	0	0	0	69	271	433	524	482	537	692	538	333	196	93	207	161	52	0	0	0	0	0	4587
20	0	0	0	0	0	26	366	526	663	702	695	575	386	546	421	394	383	271	236	0	0	0	0	0	6188
21	0	0	0	0	0	120	426	620	731	810	835	855	871	682	703	779	757	661	369	0	0	0	0	0	9218
22	0	0	0	0	0	162	497	699	794	837	886	896	899	886	812	765	763	674	415	0	0	0	0	0	9985
23	0	0	0	0	0	147	419	316	409	611	824	725	418	525	482	583	224	635	430	0	0	0	0	0	6747
24	0	0	0	0	0	148	464	637	708	581	290	479	138	249	300	218	141	319	221	0	0	0	0	0	4891
25	0	0	0	0	0	6	323	503	564	664	416	588	590	295	517	277	0	0	0	0	0	0	0	0	4742
26	0	0	0	0	0	0	3	19	62	166	70	97	96	1	23	160	192	61	0	0	0	0	0	0	950
27	0	0	0	0	0	7	7	1	9	4	107	3	8	97	441	483	60	156	79	0	0	0	0	0	1461
28	0	0	0	0	0	0	0	0	1	1	4	6	4	71	159	203	138	64	0	0	0	0	0	0	652
29	0	0	0	0	0	0	1	2	189	277	205	290	696	715	654	585	509	356	159	0	0	0	0	0	4638
30	0	0	0	0	0	44	230	389	530	535	191	521	625	560	635	492	464	370	154	0	0	0	0	0	5742
Avg	0	0	0	0	0	56	199	303	367	377	385	461	440	408	385	369	341	294	157	0	0	0	0	0	4542
S D	0	0	0	0	0	66	203	261	316	313	287	294	315	282	264	265	257	248	154	0	0	0	0	0	2848
S/A	0	0	0	0	0	1.17	1.02	0.86	0.86	0.83	0.74	0.64	0.72	0.69	0.69	0.72	0.76	0.84	0.98	4.34	0	0	0	0	0.63
Min	0	0	0	0	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Max	0	0	0	0	0	212	561	735	828	881	901	914	922	905	882	843	800	717	442	1	0	0	0	0	10472
n	0	0	0	0	0	330	360	350	360	360	360	360	360	360	360	360	360	360	360	254	0	0	0	0	5254

Daylight Data Recovery: 0.0% missing; 0.2% exceed the 15% QC threshold -- 5264 total daylight measurements.

Instrument: Eppley NIP Serial Number: 17664E6 Calibration Factor: 8.480 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.

June 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	21	69	105	253	388	429	301	69 ?	87	56 ?	?	77 ?	78	62	29	0	0	0	0	2025 ?
2	0	0	0	0	0	13	50	131	209	381	369	463	470	409	379	382	201	35 ?	49 ?	17	0	0	0	0	3557
3	0	0	0	0	0	35	103	180	347	313	517	428	408	367	338	307	220	144	74	16	0	0	0	0	3796
4	0	0	0	0	0	21	75	175	180	270	295	294	313	266	312	261	236	141	43	10	0	0	0	0	2893
5	0	0	0	0	0	43	94	201	249	298	434	211	162	245	495	403	174	111	68	8	0	0	0	0	3196
6	0	0	0	0	0	17	26	33	134	155	332	227	178	116 ?	?	48	50	74	97 ?	25	0	0	0	0	1511 ?
7	0	0	0	0	0	14	106	232	174	282	249	304	301	240	257	207	154	96	53	13	0	0	0	0	2683
8	0	0	0	0	0	29	73	91	99	108	123	132	129	130	125	115	93	76	49	9	0	0	0	0	1380
9	0	0	0	0	0	28	115	147	168	171	268	282	344	326	284	220	183	197	59	13	0	0	0	0	2806
10	0	0	0	0	0	27	92	120 ?	167	231	284	294	266	297	259	261	183	107	61	9	0	0	0	0	2659
11	0	0	0	0	0	28	83	115	144	184	228	266	283	268	285	252	212	156	72	14	0	0	0	0	2591
12	0	0	0	0	0	27	66	100	233	209	328	98	489	418	442	294	225	152	32	8	0	0	0	0	3121
13	0	0	0	0	0	20	82	186	257	210	311	456	397	409	278	222	260	138	71	18	0	0	0	0	3314
14	0	0	0	0	0	11	51	94	161	343	379	369	350	499	330	235	131	68	114	17	0	0	0	0	3151
15	0	0	0	0	0	13	70	131	197	251	348	393	413	373	294	224	191	145	67	16	0	0	0	0	3126
16	0	0	0	0	0	14	78	156	185	255	409	416	446	506	455	311	106	130	94	19	0	0	0	0	3581
17	0	0	0	0	0	22	91	178	260	315	311	262	218	204	160	168	162	92	50	10	0	0	0	0	2502
18	0	0	0	0	0	30	74	107	234	336	404	399	454	444	266	244	251	165	37	3	0	0	0	0	3448
19	0	0	0	0	0	28	101	163	223	313	337	311	383	402	344	152	190	171	88	20	0	0	0	0	3226
20	0	0	0	0	0	26	96	151	173	212	264	346	402	308	295	293	253	164	82	18	0	0	0	0	3083
21	0	0	0	0	0	27	86	121	143	152	171	183	181	232	226	176	123	94	62	13	0	0	0	0	1991
22	0	0	0	0	0	30	80	104	119	138	143	149	156	159	176	160	116	88	58	14	0	0	0	0	1687
23	0	0	0	0	0	29	83	159	182	261	212	301	387	505	372	240	193	81	51	10	0	0	0	0	3067
24	0	0	0	0	0	29	73	110	148	248	324	370	371	460	342	268	247	185	99	26	0	0	0	0	3300
25	0	0	0	0	0	25	136	164	173	245	361	298	341	341	391	305	68 ?	?	8 ?	2	0	0	0	0	2859 ?
26	0	0	0	0	0	26	85	227	312	331	360	465	434	241	366	432	239	61	3 ?	1	0	0	0	0	3584
27	0	0	0	0	0	33	97	147	210	222	385	188	303	369	418	338	320	231	46	1	0	0	0	0	3308
28	0	0	0	0	0	5	16 ?	27	64	110	187	208	237	325	349	281	250	149	59	13	0	0	0	0	2282
29	0	0	0	0	0	24	78	129	320	342	367	379	346	301	285	257	212	162	89	23	0	0	0	0	3314
30	0	0	0	0	0	23	100	170	219	289	331	365	334	338	298	266	207	147	71	13	0	0	0	0	3172
Avg	0	0	0	0	0	24	81	138	198	252	315	305	319	319	306	253	184	126	62	14	0	0	0	0	2874
S D	0	0	0	0	0	8	24	47	64	77	91	100	110	115	97	83	65	46	25	7	0	0	0	0	634
S/A	0	0	0	0	0	0.33	0.3	0.34	0.32	0.31	0.29	0.33	0.35	0.36	0.32	0.33	0.35	0.37	0.4	0.52	0	0	0	0	0.22
Min	0	0	0	0	0	5	16	27	64	108	123	98	69	87	56	48	50	35	3	1	0	0	0	0	1380
Max	0	0	0	0	0	43	136	232	347	388	517	465	489	506	495	432	320	231	114	29	0	0	0	0	3796
n	0	0	0	0	0	321	356	350	360	360	359	358	351	355	338	347	351	339	337	253	0	0	0	0	5135

Daylight Data Recovery: 0.0% missing; 2.5% exceed the 15% QC threshold -- 5264 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17860F3 Calibration Factor: 7.010 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.