

**June 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	9	52	98	132	193	79	171	270	157	282	223	188	56	36	11	0	0	0	0	1959	
2	0	0	0	0	0	40	143	361	618	779	889	480	891	600	427	381	274	196	79	13	0	0	0	0	6172	
3	0	0	0	0	0	10	34	125	276	203	874	724	1007	997	904	660	473	202	97	15	0	0	0	0	6601	
4	0	0	0	0	0	17	79	195	221	158	156	354	869	950	604	493	398	301	75	11	0	0	0	0	4881	
5	0	0	0	0	0	7	31	181	509	764	896	960	889	875	633	434	147	317	127	4	0	0	0	0	6772	
6	0	0	0	0	0	21	113	111	129	191	257	451	609	159	542	659	400	355	50	4	0	0	0	0	4049	
7	0	0	0	0	0	8	29	49	59	99	117	101	344	368	402	374	110	65	37	16	0	0	0	0	2178	
8	0	0	0	0	0	7	27	47	133	578	912	580	734	731	685	341	342	262	108	6	0	0	0	0	5494	
9	0	0	0	0	0	21	94	313	548	789	606	924	944	748	682	676	559	333	118	15	0	0	0	0	7370	
10	0	0	0	0	0	39	124 ?	396 ?	602 ?	772	911	1004	1017	854	711	526	365	222	124	19	0	0	0	0	7685 ?	
11	0	0	0	0	0	31	162	358	576	722	732	916	867	882	817	692	471	256	103	18	0	0	0	0	7603	
12	0	0	0	0	0	44	159	354	553	735	813	591	707	747	626	536	415	294	66	25	0	0	0	0	6664	
13	0	0	0	0	0	26	163	353	536	704	745	365	929	833	828	541	288	247	148	28	0	0	0	0	6736	
14	0	0	0	0	0	28	157	378 ?	538	733	887	966	880	895	783	603	534	286	108	32	0	0	0	0	7810	
15	0	0	0	0	0	30	160	346	537	542	621	872	779	510	408	589	379	119	88	26	0	0	0	0	6007	
16	0	0	0	0	0	11	62	101	213	90	72	177	374	496	95	269	504	303	139	14	0	0	0	0	2922	
17	0	0	0	0	0	41	169	401	578	762	900	990	1006	928	891	716	520	323	141	17	0	0	0	0	8384	
18	0	0	0	0	0	48	? 582 ?	629 ?	793	923	996	1026	986	882	727	545	347	136	9	0	0	0	0	0	8630 ?	
19	0	0	0	0	0	37	183	372	564	737	827	853	737	588	723	471	396	297	112	30	0	0	0	0	6926	
20	0	0	0	0	0	36	169	332	542	639	806	924	575	939	770	641	416	214	77	14	0	0	0	0	7094	
21	0	0	0	0	0	29	138	303	513	710	785	872	906	564	762	312	533	307	115	15	0	0	0	0	6862	
22	0	0	0	0	0	11	168	290	488	511	481	671	792	594	65	71	118	120	34	13	0	0	0	0	4428	
23	0	0	0	0	0	10	44	161	336	469	701	667	767	665	606	589	460	296	80	10	0	0	0	0	5861	
24	0	0	0	0	0	21	121	270 ?	538	629	810	784	389	595	725	536	349	156	27	3	0	0	0	0	5953	
25	0	0	0	0	0	10	35	136	352	632	452	321	365	714	689	639	493	248	118	17	0	0	0	0	5220	
26	0	0	0	0	0	14	114	107	178	610	307	596	838	527	533	623	373	70	56	27	0	0	0	0	4974	
27	0	0	0	0	0	48	151	150	511	634	576	900	872	617	788	325	478	217	88	10	0	0	0	0	6365	
28	0	0	0	0	0	26	127	312	409	610	611	775	555	618	152	640	177	91	139	8	0	0	0	0	5250	
29	0	0	0	0	0	22	120	407 ?	517	722	878	832	609	881	211	66	176	99	17	6	0	0	0	0	5564	
30	0	0	0	0	0	33	89	169	431	700	562	928	587	702	877	710	534	231	59	11	0	0	0	0	6623	
Avg	0	0	0	0	0	25	111	259	426	574	640	692	738	691	603	502	381	228	90	15	0	0	0	0	5968	
S D	0	0	0	0	0	13	52	133	174	229	278	275	222	220	244	185	138	91	38	8	0	0	0	0	1651	
S/A	0	0	0	0	0	0.54	0.47	0.51	0.41	0.4	0.43	0.4	0.3	0.32	0.4	0.37	0.36	0.4	0.42	0.53	0	0	0	0	0	0.28
Min	0	0	0	0	0	7	27	47	59	90	72	101	270	157	65	66	110	56	17	3	0	0	0	0	1959	
Max	0	0	0	0	0	48	183	582	629	793	923	1004	1026	997	904	727	559	355	148	32	0	0	0	0	8630	
n	0	0	0	0	0	330	338	323	353	360	360	360	360	360	358	360	360	360	359	254	0	0	0	0	5196	

Daylight Data Recovery: 0.0% missing; 1.3% exceed the 15% QC threshold -- 5264 total daylight measurements.

Instrument: Eppley PSP    Serial Number: 25821F3    Calibration Factor: 9.020 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 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	1	2	0	1	1	0	4	1	7	0	0	0	0	0	0	0	18
2	0	0	0	0	0	62	110	476	811	865	679	26	404	210	203	224	127	111	59	0	0	0	0	0	4366
3	0	0	0	0	0	0	0	24	139	18	650	390	825	905	789	525	413	46	63	0	0	0	0	0	4787
4	0	0	0	0	0	0	11	37	13	1	0	16	447	830	304	193	164	377	64	0	0	0	0	0	2456
5	0	0	0	0	0	0	0	9	374	852	899	877	617	650	285	133	0	342	192	0	0	0	0	0	5232
6	0	0	0	0	0	0	4	1	1	3	9	75	196	21	217	574	294	503	31	0	0	0	0	0	1929
7	0	0	0	0	0	0	0	0	0	0	1	0	4	7	17	33	0	0	0	0	0	0	0	0	63
8	0	0	0	0	0	0	0	0	2	282	725	194	361	418	439	91	224	286	175	0	0	0	0	0	3197
9	0	0	0	0	0	0	1	406	764	824	396	634	606	398	417	438	608	486	241	0	0	0	0	0	6219
10	0	0	0	0	0	61	258 ?	764 ?	835	882	907	900	895	686	613	421	261	197	207	0	0	0	0	0	7886
11	0	0	0	0	0	51	422	669	754	702	518	664	601	687	696	670	434	199	57	0	0	0	0	0	7126
12	0	0	0	0	0	121	407	621	731	755	639	297	354	339	239	296	259	295	13	0	0	0	0	0	5367
13	0	0	0	0	0	53	301	440	465	486	385	73	641	539	521	234	23	85	123	0	0	0	0	0	4370
14	0	0	0	0	0	27	253	508 ?	612	731	788	713	610	630	617	580	744	472	110	0	0	0	0	0	7396
15	0	0	0	0	0	62	283	429	554	323	303	516	420	213	98	381	242	1	56	0	0	0	0	0	3883
16	0	0	0	0	0	0	0	0	2	1	1	2	48	100	0	115	556	562	392	0	0	0	0	0	1778
17	0	0	0	0	0	105	485 ?	730	809	871	898	908	912	793	877	770	690	626	406	0	0	0	0	0	9881
18	0	0	0	0	0	287	?	883 ?	922 ?	958 ?	970	970	977	973	940	898	843	746	453	0	0	0	0	0	10822 ?
19	0	0	0	0	0	193	529	681	744	777	705	593	468	311	528	328	336	322	88	0	0	0	0	0	6604
20	0	0	0	0	0	87	329	480	597	437	591	656	282	720	506	486	323	184	4	0	0	0	0	0	5681
21	0	0	0	0	0	52	264	429	550	640	555	529	550	194	471	110	533	417	72	0	0	0	0	0	5367
22	0	0	0	0	0	0	166	172	311	212	130	265	478	270	0	0	0	0	0	0	0	0	0	0	2005
23	0	0	0	0	0	0	0	67	82	82	332	287	386	293	327	427	490	387	66	0	0	0	0	0	3225
24	0	0	0	0	0	0	8	176 ?	655	475	651	531	80	184	425	236	115	7	0	0	0	0	0	0	3544
25	0	0	0	0	0	0	0	9	92	307	10	2	8	274	456	557	462	138	170	0	0	0	0	0	2487
26	0	0	0	0	0	0	28	9	5	273	22	151	472	191	244	520	280	1	2	0	0	0	0	0	2198
27	0	0	0	0	0	62	165	26	494	474	311	570	548	282	554	121	323	237	128	0	0	0	0	0	4295
28	0	0	0	0	0	8	57	219	218	433	292	390	187	315	0	382	9	2	314	0	0	0	0	0	2827
29	0	0	0	0	0	0	52	651 ?	720	799	812	506	307	583	24	0	4	1	0	0	0	0	0	0	4460
30	0	0	0	0	0	9	35	40	203	488	245	666	276	246	728	672	577	251	17	0	0	0	0	0	4451
Avg	0	0	0	0	0	41	144	299	415	465	447	413	432	409	385	347	311	243	117	0	0	0	0	0	4464
S D	0	0	0	0	0	66	171	294	323	326	326	312	270	276	275	245	244	215	130	0	0	0	0	0	2543
S/A	0	0	0	0	0	1.59	1.19	0.98	0.78	0.7	0.73	0.75	0.62	0.68	0.72	0.71	0.78	0.88	1.11	2.82	0	0	0	0	0.57
Min	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	18
Max	0	0	0	0	0	287	529	883	922	958	970	970	977	973	940	898	843	746	453	0	0	0	0	0	10822
n	0	0	0	0	0	330	333	327	355	355	360	360	360	360	358	360	360	360	359	254	0	0	0	0	5192

Daylight Data Recovery: 0.0% missing; 1.4% exceed the 15% QC threshold -- 5264 total daylight measurements.

Instrument: Eppley NIP    Serial Number: 17664E6    Calibration Factor: 8.480  $\mu\text{V}/\text{W}/\text{m}^2$     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 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	8	45	86	116	171	70	153	240	139	247	197	165	49	34	10	0	0	0	0	1731
2	0	0	0	0	0	33	118	146	134	125	294	417	492	377	253	207	199	157	67	12	0	0	0	0	3029
3	0	0	0	0	0	9	29	108	189	179	312	353	216	164	243	282	240	180	80	13	0	0	0	0	2598
4	0	0	0	0	0	15	70	171	193	140	138	308	407	174	353	353	317	159	58	10	0	0	0	0	2866
5	0	0	0	0	0	6	27	164	260	120	112	126	263	260	391	310	131	193	81	3	0	0	0	0	2448
6	0	0	0	0	0	18	98	97	113	167	234	376	423	118	316	239	228	175	38	3	0	0	0	0	2645
7	0	0	0	0	0	7	25	43	52	87	104	89	303	336	349	337	97	58	33	14	0	0	0	0	1935
8	0	0	0	0	0	6	23	41	116	360	281	399	381	340	305	264	225	167	74	6	0	0	0	0	2987
9	0	0	0	0	0	19	83	162	117	185	252	335	362	379	342	371	239	164	73	13	0	0	0	0	3094
10	0	0	0	0	0	29	68 ?	92 ?	90	108	122	158	158	208	192	215	226	152	82	17	0	0	0	0	1917
11	0	0	0	0	0	24	79	104	129	198	289	297	291	247	223	208	226	181	92	16	0	0	0	0	2603
12	0	0	0	0	0	34	87	116	128	171	248	308	368	431	427	317	277	195	57	21	0	0	0	0	3185
13	0	0	0	0	0	23	103	178	271	349	429	292	323	344	408	350	247	196 ?	112	24	0	0	0	0	3649
14	0	0	0	0	0	26	115	164 ?	180	186	210	304	300	320	271	194	126	102	88	28	0	0	0	0	2613
15	0	0	0	0	0	26	100	171	215	314	359	398	381	302	304	327	240	106	75	23	0	0	0	0	3342
16	0	0	0	0	0	9	55	89	188	79	63	157	312	388	84	186	205	104	62	13	0	0	0	0	1995
17	0	0	0	0	0	28	66 ?	86	97	105	117	134	125	185	146	163	134	94	63	15	0	0	0	0	1557
18	0	0	0	0	0	28	59 ?	60	61	71	78	82	87	82	85	79	75	68	47	9	0	0	0	0	971
19	0	0	0	0	0	26	73	98	128	162	222	301	291	297	276	226	219	180	90	26	0	0	0	0	2617
20	0	0	0	0	0	29	94	152	200	316	307	320	307	285	351	310	244	146	67	12	0	0	0	0	3140
21	0	0	0	0	0	26	98	165	208	244	320	393	394	381	372	225	251	159	95	13	0	0	0	0	3343
22	0	0	0	0	0	10	133	238	285	355	353	416	310	330	58	62	104	106	30	12	0	0	0	0	2802
23	0	0	0	0	0	9	38	122	265	375	407	381	384	372	339	277	188	151	64	9	0	0	0	0	3383
24	0	0	0	0	0	18	106	175 ?	175	278	246	292	289	404	366	354	284	139	23	3	0	0	0	0	3153
25	0	0	0	0	0	9	31	124	303	406	393	284	328	449	299	239	240	194	86	15	0	0	0	0	3400
26	0	0	0	0	0	13	99	95	162	405	273	435	394	336	321	249	204	62	49	24	0	0	0	0	3120
27	0	0	0	0	0	45	124	126	228	296	306	373	348	350	325	233	294	136	60	9	0	0	0	0	3253
28	0	0	0	0	0	23	119	243	284	281	365	413	362	318	134	361	157	82	75	8	0	0	0	0	3223
29	0	0	0	0	0	19	106	111 ?	120	125	181	349	310	341	179	59	152	88	15	5	0	0	0	0	2160
30	0	0	0	0	0	30	77	144	309	315	349	297	308	456	258	224	201	129	51	10	0	0	0	0	3157
Avg	0	0	0	0	0	20	78	129	177	222	248	298	315	304	274	247	204	136	64	13	0	0	0	0	2731
S D	0	0	0	0	0	10	33	49	73	106	107	106	87	99	99	85	61	45	23	7	0	0	0	0	642
S/A	0	0	0	0	0	0.5	0.42	0.38	0.41	0.47	0.43	0.35	0.28	0.33	0.36	0.34	0.3	0.33	0.36	0.51	0	0	0	0	0.24
Min	0	0	0	0	0	6	23	41	52	71	63	82	87	82	58	59	75	49	15	3	0	0	0	0	971
Max	0	0	0	0	0	45	133	243	309	406	429	435	492	456	427	371	317	196	112	28	0	0	0	0	3649
n	0	0	0	0	0	330	338	343	360	360	360	360	360	360	358	360	360	357	358	254	0	0	0	0	5218

Daylight Data Recovery: 0.0% missing; 0.9% exceed the 15% QC threshold -- 5264 total daylight measurements.

Instrument: Eppley PSP    Serial Number: 17860F3    Calibration Factor: 7.010 μV/W/m<sup>2</sup>    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.