

June 2011

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	28	125	301	508	614	770	894	941	821	803	657	451	212	56	51	0	0	0	0	7232	
2	0	0	0	0	0	29	119	334	496	657	684	868	901	848	744	538	260	136	73	13	0	0	0	0	6700	
3	0	0	0	0	0	20	177	326	481	695	835	886	941	927	826	670	487	271	96	10	0	0	0	0	7649	
4	0	0	0	0	0	36	174	341	537	704	833	912	924	874	791	665	484	283	100	15	0	0	0	0	7672	
5	0	0	0	0	0	19	127	332	535	703	828	904	943	844	804	542	392	166	74	17	0	0	0	0	7232	
6	0	0	0	0	0	21	121	327	511	698	811	952	902	746	619	728	440	256	110	6	40	0	0	0	0	7246
7	0	0	0	0	0	34	171	349	527	692	824	920	941	827	734	636	294	59 ?	45	11	0	0	0	0	7066	
8	0	0	0	0	0	32	161	302	506	678	819	911	921	899	803	657	344	188	117	16	0	0	0	0	7355	
9	0	0	0	0	0	28	128	295	497	643	748	615	809	746	707	460	173	57 ?	2 ?	1	0	0	0	0	0	5909
10	0	0	0	0	0	29	145	313	497	664	704	828	913	917	788	666	485	296	105	18	0	0	0	0	0	7367
11	0	0	0	0	0	35	163	328	511	572	483	853	905	868	707	639	482	292	66	2	0	0	0	0	0	6905
12	0	0	0	0	0	24	152	329	497	537	728	765	779	347	175 ?	430	242	261	88	26	0	0	0	0	0	5379
13	0	0	0	0	0	6	37	210	346	591	890	725	883	915	813	687	514	309	110	14	0	0	0	0	0	7049
14	0	0	0	0	0	29	162	313	553	734	666	707	775	852	683	451	424	256	99	19	0	0	0	0	0	6722
15	0	0	0	0	0	33	172	322	538	719	795	749	610	347	486	132	163	164	59	9	0	0	0	0	0	5297
16	0	0	0	0	0	12	36	82	125	143	477	632	782	762	351	625	518	334	123	10	0	0	0	0	0	5012
17	0	0	0	0	0	35	123	201	517	534	588	844	548	470	475	497	526	316	107	10	0	0	0	0	0	5792
18	0	0	0	0	0	34	92	129	311	611	750	651	585	257	168 ?	474	283	223	81	12	0	0	0	0	0	4662
19	0	0	0	0	0	24	90	225	233	204	360	476	129	345	688	615	497	315	110	37	0	0	0	0	0	4348
20	0	0	0	0	0	18	103	198	471	573	297	135	206	447	366	223	211	162	88	9	0	0	0	0	0	3505
21	0	0	0	0	0	27	130	292	378	599	724	607	730	527	375	608	325	143	77	18	0	0	0	0	0	5560
22	0	0	0	0	0	20	39 ?	114	395	487	808	777	904	703	421	363	252	174	88	19	0	0	0	0	0	5563
23	0	0	0	0	0	4	73	132	199	221	267	341	455	493	415	392	463	318	196	44	0	0	0	0	0	4014
24	0	0	0	0	0	26	65	178	434	593	474	620	695	802	677	550	319	313	135	17	0	0	0	0	0	5899
25	0	0	0	0	0	24	103	223	242	628	657	624	729	812	703	548	420	298	124	19	0	0	0	0	0	6152
26	0	0	0	0	0	37	108	183	328	376	182 ?	614	771	261	472	589	373	144	112	37	0	0	0	0	0	4587
27	0	0	0	0	0	22	137	292	418	564	546	755	781	677	530	556	396	219	52	20	0	0	0	0	0	5966
28	0	0	0	0	0	28	158	321	441	590	720	825	673	453 ?	? 66 ?	120	76	55	16	0	0	0	0	0	0	4541 ?
29	0	0	0	0	0	16	74	357	466	691	865	815	950	949	851	712	534	338	136	10	0	0	0	0	0	7764
30	0	0	0	0	0	24	129	295	521	737	871	953	976	936	807	707	531	335	124	9	0	0	0	0	0	7956
Avg	0	0	0	0	0	25	120	265	434	582	667	739	767	689	613	536	380	230	94	17	0	0	0	0	0	6137
S D	0	0	0	0	0	8	42	80	114	155	195	187	212	227	202	167	124	86	36	12	0	0	0	0	0	1251
S/A	0	0	0	0	0	0.33	0.35	0.3	0.26	0.27	0.29	0.25	0.28	0.33	0.33	0.31	0.33	0.37	0.38	0.67	0	0	0	0	0	0.2
Min	0	0	0	0	0	4	36	82	125	143	182	135	129	257	168	66	120	57	2	1	0	0	0	0	0	3505
Max	0	0	0	0	0	37	177	357	553	737	890	953	976	949	851	728	534	338	196	51	0	0	0	0	0	7956
n	0	0	0	0	0	330	353	358	360	360	355	360	360	353	341	351	358	348	349	251	0	0	0	0	0	5187

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.4% exceed the 15% QC threshold -- 5262 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 2011

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	*	
2	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
3	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
4	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
5	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
6	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
7	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
8	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
9	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
10	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
12	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
14	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
16	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
24	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
25	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
26	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
Avg	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	N/A	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A	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	N/A	
Max	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	N/A	N/A	N/A	N/A	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% untested; 0.0% exceed the 15% QC threshold -- 5262 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 2011

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	34	95 ?	310 ?	?	638 ?	665 ?	?	?	?	?	460 ?	123 ?	61	72 ?	0	0	0	0	0	2459 ?		
2	0	0	0	0	0	35	131	353 ?	?	?	697 ?	?	?	?	596 ?	362 ?	285	146	77	13	0	0	0	0	2694 ?		
3	0	0	0	0	0	22	122 ?	?	415 ?	?	?	?	?	?	?	?	?	302 ?	106	10	0	0	0	0	977 ?		
4	0	0	0	0	0	51	?	?	?	?	?	?	?	?	?	?	?	282 ?	112	15	0	0	0	0	460 ?		
5	0	0	0	0	0	21	117	383 ?	?	?	?	?	?	781 ?	?	357 ?	371 ?	180	79	17	0	0	0	0	2307 ?		
6	0	0	0	0	0	23	116	?	?	?	?	?	535 ?	477 ?	357 ?	?	340 ?	292	103	6	0	0	0	0	2249 ?		
7	0	0	0	0	0	46	?	?	?	?	?	?	?	526 ?	668 ?	538 ?	160 ?	58 ?	48	11	0	0	0	0	2055 ?		
8	0	0	0	0	0	34	174	300 ?	?	?	?	?	?	?	?	?	309 ?	206	127	17	0	0	0	0	1166 ?		
9	0	0	0	0	0	31	145	278 ?	?	?	689 ?	426 ?	436 ?	508 ?	405 ?	384 ?	187	50 ?	1 ?	1	0	0	0	0	3541 ?		
10	0	0	0	0	0	32	163	334 ?	?	?	380 ?	?	?	?	?	?	?	512 ?	294 ?	117	19	0	0	0	0	1852 ?	
11	0	0	0	0	0	38	154	?	?	471 ?	342 ?	725 ?	761 ?	666 ?	513 ?	546 ?	?	287 ?	75	1	0	0	0	0	4581 ?		
12	0	0	0	0	0	26	174	?	?	510 ?	586 ?	577 ?	563 ?	318	188	378 ?	102 ?	171 ?	98	29	0	0	0	0	3720 ?		
13	0	0	0	0	0	6	39	214	311 ?	502 ?	?	579 ?	592 ?	?	?	?	?	?	115	15	0	0	0	0	2373 ?		
14	0	0	0	0	0	29	166 ?	?	?	?	489 ?	519 ?	515 ?	649 ?	510 ?	485	412 ?	260	111	20	0	0	0	0	4167 ?		
15	0	0	0	0	0	43	155 ?	?	?	?	?	719 ?	654	330	496	148	175	178	63	9	0	0	0	0	2969 ?		
16	0	0	0	0	0	12	38	88	134	154	473	446 ?	479 ?	598 ?	293	538 ?	?	?	119	10	0	0	0	0	3381 ?		
17	0	0	0	0	0	47	138	222	?	491 ?	552 ?	747 ?	437 ?	469	517	424 ?	?	221 ?	121	11	0	0	0	0	4398 ?		
18	0	0	0	0	0	41	96	140	317	540 ?	?	710	651	245	140	450 ?	308	249	91	12	0	0	0	0	3991 ?		
19	0	0	0	0	0	26	96	247	249	222	294	527	140	375	557 ?	398 ?	?	308 ?	112	39	0	0	0	0	0	3590 ?	
20	0	0	0	0	0	20	110	190	334 ?	565 ?	324	148	225	487	400	239	230	177	97	9	0	0	0	0	3556		
21	0	0	0	0	0	30	148	330	379 ?	556 ?	621 ?	410 ?	655 ?	435 ?	327	507 ?	235 ?	152	82	19	0	0	0	0	4888 ?		
22	0	0	0	0	0	21	35	123	389 ?	481 ?	?	681 ?	?	487 ?	456	394	246	165	95	21	0	0	0	0	3594 ?		
23	0	0	0	0	0	4	78	144	213	240	291	369	497	537	452	390	460 ?	249 ?	116 ?	57 ?	0	0	0	0	0	4097 ?	
24	0	0	0	0	0	31	69	171	344 ?	519 ?	463	553 ?	477 ?	665 ?	604 ?	379 ?	300 ?	324 ?	119 ?	17	0	0	0	0	0	5035 ?	
25	0	0	0	0	0	27	109	240	261	485 ?	597 ?	532 ?	618 ?	573 ?	559 ?	367 ?	398 ?	200 ?	140	20	0	0	0	0	0	5126 ?	
26	0	0	0	0	0	43	114	196	352	408	182	587 ?	688 ?	283	512	316 ?	286 ?	156	123	39	0	0	0	0	0	4287 ?	
27	0	0	0	0	0	25	116	309 ?	400 ?	562 ?	590	676 ?	639 ?	446 ?	487 ?	458 ?	447	252	57	21	0	0	0	0	0	5484 ?	
28	0	0	0	0	0	31	147 ?	347 ?	409 ?	591 ?	688 ?	687 ?	484 ?	237 ?	?	56 ?	129	82	59	16	0	0	0	0	0	3961 ?	
29	0	0	0	0	0	18	78	300 ?	343 ?	?	?	579 ?	?	?	?	?	?	?	116 ?	10	0	0	0	0	0	1444 ?	
30	0	0	0	0	0	35	144 ?	?	?	?	?	?	?	?	?	?	?	?	136	9	0	0	0	0	0	324 ?	
Avg	0	0	0	0	0	29	117	249	323	467	496	560	529	481	452	386	303	206	96	19	0	0	0	0	0	3158 ?	
S D	0	0	0	0	0	11	40	85	79	136	161	148	153	147	136	123	117	78	31	15	0	0	0	0	0	1411	
S/A	0	0	0	0	0	0.39	0.34	0.34	0.25	0.29	0.32	0.27	0.29	0.31	0.3	0.32	0.39	0.38	0.32	0.81	0	0	0	0	0	0	0.45
Min	0	0	0	0	0	4	35	88	134	154	182	148	140	237	140	56	102	50	1	1	0	0	0	0	0	324	
Max	0	0	0	0	0	51	174	383	415	638	697	747	761	781	668	546	512	324	140	72	0	0	0	0	0	5484	
n	0	0	0	0	0	318	297	184	131	122	129	132	122	150	155	132	185	224	326	244	0	0	0	0	0	2877	

Daylight Data Recovery: 0.0% missing; 0.0% untested; 45.3% exceed the 15% QC threshold -- 5262 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.