

October 2012

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	8	33	50	63	72	75	92 ?	71 ?	80 ?	?	24 ?	13	3	0	0	0	0	0	584 ?
2	0	0	0	0	0	0	5	61	108	290	232	560	642	650	559	402	182	57	0	0	0	0	0	0	3748
3	0	0	0	0	0	0	13	84	190	344 ?	613 ?	675	710	339	401	212	121	16	0	0	0	0	0	0	3717
4	0	0	0	0	0	0	8	68	145	401	509	630 ?	754 ?	647 ?	525	380	279 ?	33	0	0	0	0	0	0	4379 ?
5	0	0	0	0	0	0	21	132	321	473 ?	700 ?	737	710	649	502	393	211	62	0	0	0	0	0	0	4911
6	0	0	0	0	0	0	13	53 ?	99	77 ?	65	78	152	253	91	107	82	25	0	0	0	0	0	0	1097
7	0	0	0	0	0	0	5	26	56	43 ?	67	83	60 ?	89	67	88	158	36	0	0	0	0	0	0	781 ?
8	0	0	0	0	0	0	4	31	82	92	101	87	98 ?	79	79	68	48	20	0	0	0	0	0	0	789
9	0	0	0	0	0	0	5	27	49	118	168	255 ?	?	259 ?	?	?	129	46	0	0	0	0	0	0	1056 ?
10	0	0	0	0	0	0	15	79	139	96	108	124	186	99 ?	163 ?	111 ?	46	30	0	0	0	0	0	0	1196 ?
11	0	0	0	0	0	0	27	139	315	538 ?	631	704	708	649	532	377	208	38	0	0	0	0	0	0	4865
12	0	0	0	0	0	0	17	132	304	471	599	677	685	633	520	357	181	32	0	0	0	0	0	0	4607
13	0	0	0	0	0	0	14	128	316	481	605	676	687	643	464 ?	354	177 ?	49	0	0	0	0	0	0	4596
14	0	0	0	0	0	0	15	99	309	493 ?	550 ?	658 ?	578	485	461	347 ?	?	35	0	0	0	0	0	0	4028 ?
15	0	0	0	0	0	0	1	9	88 ?	179	425	317	624	479	345	219	174	26	0	0	0	0	0	0	2887
16	0	0	0	0	0	0	11	116	281	468	604	679	686	634	525	361	163	32	0	0	0	0	0	0	4559
17	0	0	0	0	0	0	6	72	306	435	575	647	658	610	485	340 ?	154 ?	48	0	0	0	0	0	0	4334
18	0	0	0	0	0	0	4	34	72	440	598	652	673	589 ?	477	74 ?	10 ?	6	0	0	0	0	0	0	3627 ?
19	0	0	0	0	0	0	9	96	291	468	600	662	666	605	482	323	142	18	0	0	0	0	0	0	4361
20	0	0	0	0	0	0	8	41	105	188	162	170	177	229	163	107	57	17	0	0	0	0	0	0	1423
21	0	0	0	0	0	0	10	60	181	440	572	647	651	599	484	329	148	22	0	0	0	0	0	0	4143
22	0	0	0	0	0	0	8	86	263	426	552	621	626	573	461	351 ?	74 ?	17	0	0	0	0	0	0	4057 ?
23	0	0	0	0	0	0	8	93	262	395	550	596	601	517	428 ?	280 ?	117	12	0	0	0	0	0	0	3858
24	0	0	0	0	0	0	6	63	211	411	531	603	612	564	449	323 ?	64 ?	15	0	0	0	0	0	0	3852
25	0	0	0	0	0	0	5	92	268	423	547	614	624	570	453	296	126	17	0	0	0	0	0	0	4035
26	0	0	0	0	0	0	6	93	243	409	548	647	591	278 ?	240 ?	211 ?	70	11	0	0	0	0	0	0	3346 ?
27	0	0	0	0	0	0	4	37	68	71	118	76	133	75 ?	37 ?	?	11 ?	2	0	0	0	0	0	0	634 ?
28	0	0	0	0	0	0	1	8 ?	27 ?	51	83	84	73	57 ?	34 ?	27 ?	23	3	0	0	0	0	0	0	471 ?
29	0	0	0	0	0	0	1	7 ?	25	40	55	58	60	59	47	36	17	3	0	0	0	0	0	0	408
30	0	0	0	0	0	0	2	15	60	125	144	220	172	127	129	89	25	6	0	0	0	0	0	0	1115
31	0	0	0	0	0	0	4	13	41	69	82	124	113	93	76	55	34	5	0	0	0	0	0	0	710
Avg	0	0	0	0	0	0	8	65	170	291	380	433	460	394	325	236	109	24	0	0	0	0	0	0	2844 ?
S D	0	0	0	0	0	0	6	41	107	178	237	265	267	237	194	132	72	16	1	0	0	0	0	0	1667
S/A	0	0	0	0	0	0	0.7	0.62	0.63	0.61	0.63	0.61	0.58	0.6	0.6	0.56	0.68	0.68	5.57	0	0	0	0	0	0.59
Min	0	0	0	0	0	0	1	7	25	40	55	58	60	57	34	27	10	2	0	0	0	0	0	0	408
Max	0	0	0	0	0	0	27	139	321	538	700	737	754	650	559	402	279	62	3	0	0	0	0	0	4911
n	0	0	0	0	0	0	165	359	356	331	355	351	325	317	307	291	300	261	1	0	0	0	0	0	3720

Daylight Data Recovery: 0.0% missing; 0.0% untested; 10.4% exceed the 15% QC threshold -- 4150 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25821F3 Calibration Factor: 9.020 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.

**October 2012**

**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	0	*	*	*	*	*	?	?	?	?	?	?	910 ?	0	0	0	0	0	0	?	
3	0	0	0	0	0	0	?	88 ?	250	548 ?	965 ?	?	?	?	?	?	?	771	0	0	0	0	0	0	2622 ?	
4	0	0	0	0	0	0	?	?	203 ?	528	485	604 ?	813 ?	?	?	874 ?	808 ?	520	0	0	0	0	0	0	4836 ?	
5	0	0	0	0	0	0	*	314 ?	?	?	1010 ?	1022 ?	?	?	?	?	?	783 ?	0	0	0	0	0	0	3129 ?	
6	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	*
8	0	0	0	0	0	0	*	*	*	*	*	*	?	*	*	*	*	*	*	0	0	0	0	0	0	*
9	0	0	0	0	0	0	*	*	*	?	170 ?	324 ?	?	337 ?	?	?	445	177	0	0	0	0	0	0	1453 *?	
10	0	0	0	0	0	0	*	?	?	0 ?	?	25 ?	167	201 ?	223 ?	168 ?	36 ?	?	0	0	0	0	0	0	820 ?	
11	0	0	0	0	0	0	*	*	809	412 ?	289	765	?	?	?	?	?	664	0	0	0	0	0	0	2938 *?	
12	0	0	0	0	0	0	*	221 ?	485	389	173	340	855	877 ?	?	698	430	164 ?	0	0	0	0	0	0	4631 ?	
13	0	0	0	0	0	0	?	?	63 ?	263 ?	150 ?	409	859	953 ?	?	829 ?	578 ?	282	0	0	0	0	0	0	4387 ?	
14	0	0	0	0	0	0	?	231 ?	682 ?	?	793 ?	974 ?	?	?	?	?	?	447	0	0	0	0	0	0	3127 ?	
15	0	0	0	0	0	0	?	*	*	*	*	*	199 ?	300	179	?	?	?	0	0	0	0	0	0	677 *?	
16	0	0	0	0	0	0	134	?	?	?	?	?	371	635	784	281	36 ?	?	0	0	0	0	0	0	2241 ?	
17	0	0	0	0	0	0	?	?	126 ?	327	494	738	?	?	?	849 ?	539 ?	130 ?	0	0	0	0	0	0	3204 ?	
18	0	0	0	0	0	0	?	?	?	208 ?	291	778	960 ?	?	?	73 ?	*	*	0	0	0	0	0	0	2310 *?	
19	0	0	0	0	0	0	*	*	*	*	?	?	170 ?	327	499	191 ?	?	?	0	0	0	0	0	0	1188 *?	
20	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	?	
21	0	0	0	0	0	0	*	*	?	?	?	?	233 ?	365	514	325 ?	?	?	0	0	0	0	0	0	1437 *?	
22	0	0	0	0	0	0	*	?	401 ?	499 ?	197	585	932 ?	?	?	?	626 ?	414	0	0	0	0	0	0	3654 ?	
23	0	0	0	0	0	0	*	?	201 ?	314	391	761	?	?	?	761 ?	488	144	0	0	0	0	0	0	3060 ?	
24	0	0	0	0	0	0	*	?	395 ?	462	326	598	?	?	?	?	593 ?	397	0	0	0	0	0	0	2771 ?	
25	0	0	0	0	0	0	?	?	355 ?	372	452	737	?	?	?	732 ?	435	84 ?	0	0	0	0	0	0	3169 ?	
26	0	0	0	0	0	0	*	?	358 ?	438	447	683	?	411 ?	461 ?	320 ?	129 ?	?	0	0	0	0	0	0	3248 ?	
27	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	*
29	0	0	0	0	0	0	?	456 ?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
30	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	*	
Avg	0	0	0	0	0	0	134	262	361	366	442	623	556	490	443	508	429	421	0	0	0	0	0	0	3207 *?	
S D	0	0	0	0	0	0	0	135	219	149	278	261	353	268	221	306	242	275	0	0	0	0	0	0	1018	
S/A	0	0	0	0	0	0	0	0.52	0.61	0.41	0.63	0.42	0.63	0.55	0.5	0.6	0.57	0.65	0	0	0	0	0	0	0.32	
Min	0	0	0	0	0	0	134	88	63	0	150	25	167	201	179	73	36	84	0	0	0	0	0	0	820	
Max	0	0	0	0	0	0	134	456	809	548	1010	1022	960	953	784	874	808	910	0	0	0	0	0	0	4836	
n	0	0	0	0	0	0	4	23	91	113	144	150	86	62	56	88	88	102	0	0	0	0	0	0	785	

Daylight Data Recovery: 32.0% missing; 0.0% untested; 43.3% exceed the 15% QC threshold -- 4150 total daylight measurements.

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

October 2012

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	0	0	0	0	*	
2	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	*	
4	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	*	
6	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	*	
8	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	*	
10	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	*	
12	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	*	
14	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	*	
16	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	*	
18	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	*	
20	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	*	
22	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	*	
24	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	*	
26	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	*	
28	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	*	
30	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	*	
Avg	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	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	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	0	0	N/A	0
Max	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	N/A	0	0	0	0	0	0	N/A	0
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 -- 4150 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.