

July 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	19	114	274	466	378	?	217 ?	542	828	708	658	475	292	116	12	0	0	0	0	5100 ?	
2	0	0	0	0	0	19	124	324	491	670	802	881	905	841	737	564	431	208	99	26	0	0	0	0	7121	
3	0	0	0	0	0	24	131	280	479	657	757	784	850	733	743	621	194	93	38	26	0	0	0	0	6410	
4	0	0	0	0	0	19	92 ?	265	459	677	806	789	712	716	764	633	470	292	116	14	0	0	0	0	6825	
5	0	0	0	0	0	18	111	292	540	165	612	121 ?	245 ?	?	141	481	245 ?	89	48	7	0	0	0	0	3115 ?	
6	0	0	0	0	0	19	94	177	482	649	789	877	848	733	764	559	537	83	24 ?	18	0	0	0	0	6653	
7	0	0	0	0	0	19	114	310	483	654	699	765	883	844	769	627	499	316	129	22	0	0	0	0	7133	
8	0	0	0	0	0	17	110	278	484	643	776	858	904	870	690	563	373	163	51	12	0	0	0	0	6793	
9	0	0	0	0	0	11	65	80	285	527	337	531	779	747	577	393	403	166	81	13	0	0	0	0	4994	
10	0	0	0	0	0	3	28	40 ?	48	103	211	363	477	391	474	544	373	259	105	19	0	0	0	0	3438	
11	0	0	0	0	0	12	75	224	270	246	353	418	374	188	121	125	119	79	45	6	0	0	0	0	2654	
12	0	0	0	0	0	25	73	129	183	318	521	381	280	149	189	174	139	68	19	1	0	0	0	0	2649	
13	0	0	0	0	0	2	16	37 ?	117	116	122	160	215	340	169	215	116	94	71	6	0	0	0	0	1796	
14	0	0	0	0	0	5	54	164	271	503	425	592	674	582	447	108 ?	?	?	11 ?	7	0	0	0	0	3844 ?	
15	0	0	0	0	0	18	121	313	497	550	371	628	331	797	457	534	262	114	77	30	0	0	0	0	5100	
16	0	0	0	0	0	19	133	100	232	455	666	875	847	907	704	604	403	221	105	19	0	0	0	0	6292	
17	0	0	0	0	0	21	140	288	450	533	623	777	961	914	823	625	508	265	53	16	0	0	0	0	6997	
18	0	0	0	0	0	19	74	268	454	478	559	829	837	146 ?	119	176	277	246	88	11	0	0	0	0	4580	
19	0	0	0	0	0	12	115	342	438	430	592	625	794	893	759	619	385	?	4 ?	2	0	0	0	0	6011 ?	
20	0	0	0	0	0	9	48	86	165	106	155 ?	341	268	383	301	305	106	174	118	5	0	0	0	0	2571	
21	0	0	0	0	0	8	40	97	255	325	363	559	866	702	642	580	281	286	87	15	0	0	0	0	5106	
22	0	0	0	0	0	27	95	183	300	449	571	763	870	841	747	632	483	280	90	10	0	0	0	0	6343	
23	0	0	0	0	0	3	35	109	235	433	532	770	597	583	483	88 ?	390	295	92	14	0	0	0	0	4659	
24	0	0	0	0	0	15	86	279	220	96 ?	116 ?	?	?	121	333	116	110	154	50	10	0	0	0	0	1707 ?	
25	0	0	0	0	0	17	84	238	327	217	410	306	307	466	482	466	313	128	71	30	0	0	0	0	3864	
26	0	0	0	0	0	14	141	284	435	643	675	847	718	885	793	593	503	313	89	4	0	0	0	0	6936	
27	0	0	0	0	0	7	47	157	424	439	561	634	509	92 ?	238	330	309	250	104	10	0	0	0	0	4111	
28	0	0	0	0	0	16	47	280	453	409	219	530	568	690	608	554	510	287	75	9	0	0	0	0	5255	
29	0	0	0	0	0	10	75	184	408	576	523	712	948	806	658	574	488	330	105	6	0	0	0	0	6404	
30	0	0	0	0	0	9	60	212	276	585	760	791	975	782	746	67	460	273	86	4	0	0	0	0	6086	
31	0	0	0	0	0	17	69	115	186	302	415	769	844	878	363	438	77 ?	29 ?	18	6	0	0	0	0	4525	
Avg	0	0	0	0	0	15	84	207	349	430	511	616	664	628	534	438	341	202	73	13	0	0	0	0	5002	
S D	0	0	0	0	0	7	35	91	134	188	212	230	249	273	234	202	147	92	35	8	0	0	0	0	1671	
S/A	0	0	0	0	0	0.45	0.42	0.44	0.39	0.44	0.41	0.37	0.38	0.43	0.44	0.46	0.43	0.46	0.47	0.64	0	0	0	0	0.33	
Min	0	0	0	0	0	2	16	37	48	96	116	121	215	92	119	67	77	29	4	1	0	0	0	0	1707	
Max	0	0	0	0	0	27	141	342	540	677	806	881	975	914	823	658	537	330	129	30	0	0	0	0	7133	
n	0	0	0	0	0	266	362	364	371	361	347	352	356	343	370	355	345	345	347	244	0	0	0	0	0	5129

Daylight Data Recovery: 0.0% missing; 0.0% untested; 4.1% exceed the 15% QC threshold -- 5346 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.

July 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	*
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	337	456 ?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
5	0	0	0	0	0	*	*	*	*	*	*	*	*	826 *	*	*	?	?	*	*	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	*	*	*	*	*	*	*	*	*	*	*	272 *	*	*	*	?	0	0	0	*
15	0	0	0	0	0	375 ?	?	396 ?	*	*	*	*	*	*	*	*	*	*	*	*	*	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	735 ?	*	?	?	*	*	*	*	*	*	*	*	*	*	*	?	0	0	0	*
20	0	0	0	0	0	?	215 ?	?	?	?	?	?	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	658 ?	?	*	*	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	*
31	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
Avg	0	0	0	0	0	483	335	396	N/A	N/A	N/A	N/A	N/A	826	N/A	N/A	465	N/A	N/A	N/A	0	0	0	0	N/A *
SD	0	0	0	0	0	220	170	0	0	0	0	0	0	0	0	0	273	0	0	0	0	0	0	0	0
S/A	0	0	0	0	0	0.46	0.51	0	0	0	0	0	0	0	0	0	0.59	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	337	215	396	N/A	N/A	N/A	N/A	N/A	826	N/A	N/A	272	N/A	N/A	N/A	0	0	0	0	N/A
Max	0	0	0	0	0	735	456	396	N/A	N/A	N/A	N/A	N/A	826	N/A	N/A	658	N/A	N/A	N/A	0	0	0	0	N/A
n	0	0	0	0	0	17	7	2	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0

Daylight Data Recovery: 94.7% missing; 0.0% untested; 4.5% exceed the 15% QC threshold -- 5346 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.

July 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	*		
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	*		
31	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	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	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	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 -- 5346 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.