

September 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	20	56	83	198	306	478	683	608	551	383	176	184	13	0	0	0	0	0	3738
2	0	0	0	0	0	2	31	153	201	330	474	574	497	519	628	465	205	141	18	0	0	0	0	0	4237
3	0	0	0	0	0	0	30	105	164	257	412	451	249	474	115 ?	126 ?	175	68	7	0	0	0	0	0	2634
4	0	0	0	0	0	3	17	138	268	298	229	294	354	221	180	303	244	85	12	0	0	0	0	0	2645
5	0	0	0	0	0	0	5	26 ?	115	467	260	363 ?	385	447	566	529	342	66	18	0	0	0	0	0	3587
6	0	0	0	0	0	0	16	50 ?	60 ?	174	163	443	476	448	350	274	296	149	19	0	0	0	0	0	2917
7	0	0	0	0	0	0	25	139	398	566	647	728	771	676	473	372	225	119	9	0	0	0	0	0	5149
8	0	0	0	0	0	0	38	108	239	216	257	643	477	174	190	106	52	23	16	0	0	0	0	0	2539
9	0	0	0	0	0	0	23	102	154	361	619	802	673	509	746	542	317	172	13	0	0	0	0	0	5034
10	0	0	0	0	0	0	40	213	397	481	706	752	766	664	594	457	380	161	8	0	0	0	0	0	5620
11	0	0	0	0	0	0	58	208	404	586	725	809	614	447	614	448	265	141	6	0	0	0	0	0	5326
12	0	0	0	0	0	0	38	204	392	565	713	423	499	447	771	299	123	68	11	0	0	0	0	0	4554
13	0	0	0	0	0	0	41	183	398	583	723	810	832	776	601	338	207	96	14	0	0	0	0	0	5602
14	0	0	0	0	0	0	18	254 ?	388	560	702	796	806	455	514	336	316	114	6	0	0	0	0	0	5265
15	0	0	0	0	0	0	13	81	214 ?	198	263	187	355	508	360	448	178	77	11	0	0	0	0	0	2893
16	0	0	0	0	0	0	8	?	?	195	345	524	403	318	345	344	142	61	12	0	0	0	0	0	2697 ?
17	0	0	0	0	0	0	26	154	348	374	342	281	112	94	67 ?	73	39	11 ?	2	0	0	0	0	0	1924
18	0	0	0	0	0	0	4	?	51	83	64 ?	64 ?	153	164	201	135	81	28	2	0	0	0	0	0	1029 ?
19	0	0	0	0	0	0	14	234	436	581	708	804	810	759	649	487	300	107	4	0	0	0	0	0	5892
20	0	0	0	0	0	0	31	125 ?	241	407	348	480	782	732	567	374	255	97	3	0	0	0	0	0	4443
21	0	0	0	0	0	0	32	177	360	494	676	705	775	722	595	398	256	88	4	0	0	0	0	0	5283
22	0	0	0	0	0	0	29	184	352	469	670	696	641	310	136	339	211	88	6	0	0	0	0	0	4131
23	0	0	0	0	0	0	37	178	393	574	713	794	808	762	645	480	283	93	1	0	0	0	0	0	5764
24	0	0	0	0	0	0	26	205 ?	381	559	693	777	798	753	637	473	280	84	0	0	0	0	0	0	5665
25	0	0	0	0	0	0	29	186 ?	232 ?	468 ?	590 ?	459	217	102 ?	?	39 ?	39	44	10	0	0	0	0	0	2415 ?
26	0	0	0	0	0	0	18	173	329	483	598	661	719	672	540	418	235	66	1	0	0	0	0	0	4913
27	0	0	0	0	0	0	33	127	335	483	580	597	489	463	295	178	118	31	0	0	0	0	0	0	3728
28	0	0	0	0	0	0	17	74	232	187	150	153	193	204	207	127 ?	131	40	7	0	0	0	0	0	1721
29	0	0	0	0	0	0	3	35	207	145	288 ?	?	676 ?	529 ?	519 ?	370	264 ?	55	12	0	0	0	0	0	3104 ?
30	0	0	0	0	0	0	21	158	332	521	634	713 ?	723 ?	616	390	346 ?	271 ?	23 ?	0	0	0	0	0	0	4749 ?
Avg	0	0	0	0	0	0	25	144	280	395	487	561	558	486	450	334	214	86	8	0	0	0	0	0	3973
S D	0	0	0	0	0	1	13	61	115	161	214	226	210	203	142	91	46	6	0	0	0	0	0	0	1388
S/A	0	0	0	0	0	3.72	0.51	0.43	0.41	0.41	0.44	0.39	0.41	0.43	0.45	0.43	0.43	0.54	0.7	0	0	0	0	0	0.35
Min	0	0	0	0	0	0	3	26	51	83	64	64	112	94	67	39	39	11	0	0	0	0	0	0	1029
Max	0	0	0	0	0	3	58	254	436	586	725	810	832	776	771	542	380	184	19	0	0	0	0	0	5892
n	0	0	0	0	0	4	315	293	325	346	345	333	345	349	337	340	338	350	164	0	0	0	0	0	4185

Daylight Data Recovery: 0.0% missing; 0.0% untested; 5.8% exceed the 15% QC threshold -- 4444 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.

September 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	*
2	0	0	0	0	0	?	705 ?	?	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
3	0	0	0	0	0	?	?	?	?	*	*	*	*	*	*	119 ?	202 ?	*	?	0	0	0	0	0	*
4	0	0	0	0	0	?	?	?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
5	0	0	0	0	0	0	653 **?	*	*	*	*	?	?	*	*	*	*	*	*	0	0	0	0	0	*
6	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	224 ?	322	0	0	0	0	*
7	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	?	?	0	0	0	0	*
8	0	0	0	0	0	0	?	?	?	?	?	?	?	*	*	?	?	?	?	0	0	0	0	0	?
9	0	0	0	0	0	0	*	?	247 ?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?
10	0	0	0	0	0	0	388 *	?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?
11	0	0	0	0	0	0	554 ?	?	?	?	?	?	?	?	*	*	?	?	?	0	0	0	0	0	?
12	0	0	0	0	0	0	542 **?	?	?	?	?	?	?	?	*	*	?	?	?	0	0	0	0	0	?
13	0	0	0	0	0	0	521 ?	?	?	?	?	?	?	?	*	?	?	?	?	0	0	0	0	0	?
14	0	0	0	0	0	0	373	?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?
15	0	0	0	0	0	0	?	98 ?	471 ?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?
16	0	0	0	0	0	0	579	?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?
17	0	0	0	0	0	0	*	*	*	*	?	?	?	?	*	*	*	*	*	0	0	0	0	0	*
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
19	0	0	0	0	0	0	?	?	616	857	644	714	896	?	?	?	?	792 ?	588	0	0	0	0	0	5108 ?
20	0	0	0	0	0	0	429 ?	?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?
21	0	0	0	0	0	0	167 ?	?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?
22	0	0	0	0	0	0	761 ?	?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?
23	0	0	0	0	0	0	89 ?	288	556	678	356	662	964 ?	907 ?	?	?	757	347	90	0	0	0	0	0	5694 ?
24	0	0	0	0	0	0	*	281 ?	775	789 ?	588	815	929 ?	?	?	?	?	674 ?	410	0	0	0	0	0	5261 ?
25	0	0	0	0	0	0	?	322 ?	363 ?	?	?	?	?	?	*	*	*	*	0	0	0	0	0	0	?
26	0	0	0	0	0	0	?	471 ?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?
27	0	0	0	0	0	0	106 **?	388 ?	?	?	?	?	?	?	?	?	?	759 ?	701	0	0	0	0	0	?
28	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	188 ?	93	32	0	0	0	0	0	312 *
29	0	0	0	0	0	0	?	?	453 ?	216	342 ?	?	791 ?	?	792 ?	692 ?	677 ?	320	169	0	0	0	0	0	4452 ?
30	0	0	0	0	0	0	*	*	489 ?	740 ?	668	826 ?	879 ?	?	?	913 ?	?	340 ?	136	0	0	0	0	0	4990 **?

Avg	0	0	0	0	0	0	451	308	496	656	520	754	892	907	792	575	456	444	306	0	0	0	0	0	5129 **?
S D	0	0	0	0	0	0	220	125	159	254	159	80	65	0	0	410	303	262	244	0	0	0	0	0	515
S/A	0	0	0	0	0	0	0.49	0.41	0.32	0.39	0.31	0.11	0.07	0	0	0.71	0.67	0.59	0.8	0	0	0	0	0	0.1
Min	0	0	0	0	0	0	89	98	247	216	342	662	791	907	792	119	188	93	32	0	0	0	0	0	4452
Max	0	0	0	0	0	0	761	471	775	857	668	826	964	907	792	913	757	792	701	0	0	0	0	0	5694
n	0	0	0	0	0	0	58	44	59	40	55	45	33	3	2	10	31	65	24	0	0	0	0	0	285

Daylight Data Recovery: 31.0% missing; 0.0% untested; 58.3% exceed the 15% QC threshold -- 4444 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.

September 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	*	
2	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
3	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
4	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
5	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
6	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
7	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
8	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
9	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
10	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
11	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
12	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
13	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
14	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
15	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
16	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
17	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
20	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
21	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
22	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
23	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
24	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
25	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
26	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
27	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
28	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
29	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
30	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	N/A	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	N/A	0	0	0	0	0	0	N/A
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	N/A	0	0	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 -- 4444 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.