

September 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	2	48	200	389	568	702	717	732	577	369	533	261	161	25	0	0	0	0	0	5283
2	0	0	0	0	0	1	38	206	373	525	690	679	667	579	480	434	172	100	29	0	0	0	0	0	4973
3	0	0	0	0	0	2	45	195	374	545	687	731	836	318	61 ?	70	108	23 ?	5	0	0	0	0	0	3999 ?
4	0	0	0	0	0	4	27	143	340	454	697	675	291	217	106	141	67	29	11	0	0	0	0	0	3203
5	0	0	0	0	0	1	13	43	81	91 ?	75 ?	149	153	141	98	71 ?	46 ?	19 ?	6	0	0	0	0	0	987 ?
6	0	0	0	0	0	0	4	33 ?	82	145	77 ?	452	414	171	73 ?	141	65	27	11	0	0	0	0	0	1694 ?
7	0	0	0	0	0	0	18	138	282	107	96	226	197	384	221	306	94	49	15	0	0	0	0	0	2133
8	0	0	0	0	0	0	8	61	182	304	308	287	446	337	231	230	205	101	13	0	0	0	0	0	2714
9	0	0	0	0	0	0	19	84	170	489	512	509	831	402	190	185	180	138	8	0	0	0	0	0	3719
10	0	0	0	0	0	0	17	115	230	365	688	828	840	766	668	470	306	143	13	0	0	0	0	0	5448
11	0	0	0	0	0	0	40	197	369	569	683	424	564	618	315	154	69	65	13	0	0	0	0	0	4081
12	0	0	0	0	0	0	34	175	351	554	721	609	655	454	422	300	193	131	9	0	0	0	0	0	4608
13	0	0	0	0	0	0	44	168	332	567	682	751	774	737	638	503	316	124	9	0	0	0	0	0	5643
14	0	0	0	0	0	0	33	176	363	528	663	755	790	725	520	480	308	106	6	0	0	0	0	0	5452
15	0	0	0	0	0	0	9	38	48	131	89	109 ?	?	62 ?	55 ?	50	39 ?	14 ?	3	0	0	0	0	0	647 ?
16	0	0	0	0	0	0	24	217	392	368	294	315	312	331	227	107	86	47	7	0	0	0	0	0	2727
17	0	0	0	0	0	0	12	80	144	196	329	695	413	622	625	508	254	49	9	0	0	0	0	0	3936
18	0	0	0	0	0	0	35	126	216	319	439	498	454	415	377	320	192	82	11	0	0	0	0	0	3483
19	0	0	0	0	0	0	9	78	108	254	635	615	713	638	515	399	149	36	4	0	0	0	0	0	4154
20	0	0	0	0	0	0	6	22 ?	55	147	301	246	302	491	363	256	209	46	9	0	0	0	0	0	2452
21	0	0	0	0	0	0	3	15 ?	44 ?	51	84	135	228	211	232	200	249	115	20 ?	0	0	0	0	0	1589 ?
22	0	0	0	0	0	0	17	77	292	260	264	354	442	336	357	279	268	74	6	0	0	0	0	0	3024
23	0	0	0	0	0	0	6	20 ?	42	93	328	528	533	723	240	92	73	2 ?	1	0	0	0	0	0	2681
24	0	0	0	0	0	0	7	47	109	150	141	238	257	448	265	115	78	27	5	0	0	0	0	0	1887
25	0	0	0	0	0	0	29	202	219	210	642	649	639	622	583	438	283	102	9	0	0	0	0	0	4628
26	0	0	0	0	0	0	59	105	85	224	383	287	272	470	599	356	153	32	3	0	0	0	0	0	3029
27	0	0	0	0	0	0	5	63	260	449	517	755	741	727	612	453	295	81	5	0	0	0	0	0	4963
28	0	0	0	0	0	0	26	148	304	521	663	573	616	209	442	320	256	51	1	0	0	0	0	0	4132
29	0	0	0	0	0	0	5	61	142	361	368	520	631	597	533	440	251	67	1	0	0	0	0	0	3978
30	0	0	0	0	0	0	9	45	238	356	564	623	463	259	108	271	72 ?	12	1	0	0	0	0	0	3020
Avg	0	0	0	0	0	0	22	109	221	330	444	498	524	453	351	288	177	68	9	0	0	0	0	0	3476
S D	0	0	0	0	0	1	16	66	121	174	232	215	214	202	195	153	92	44	7	0	0	0	0	0	1360
S/A	0	0	0	0	0	2.66	0.72	0.61	0.55	0.53	0.52	0.43	0.41	0.45	0.56	0.53	0.52	0.65	0.76	0	0	0	0	0	0.39
Min	0	0	0	0	0	0	3	15	42	51	75	109	153	62	55	50	39	2	1	0	0	0	0	0	647
Max	0	0	0	0	0	4	59	217	392	569	721	828	840	766	668	533	316	161	29	0	0	0	0	0	5643
n	0	0	0	0	0	5	317	329	352	353	353	350	347	350	341	352	346	333	169	0	0	0	0	0	4297

Daylight Data Recovery: 0.0% missing; 0.0% untested; 3.5% exceed the 15% QC threshold -- 4455 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 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	?	?	188 ?	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
2	0	0	0	0	0	?	158 ?	?	*	*	*	*	*	*	*	*	*	*	*	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	*
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	158	188	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
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
Min	0	0	0	0	0	0	158	188	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	
Max	0	0	0	0	0	0	158	188	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	
n	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 95.0% missing; 0.0% untested; 4.8% exceed the 15% QC threshold -- 4455 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.

September 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	?	?	?	?	?	?	?	?	?	?	?	?	?	?	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	?	?	?	193?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?	
5	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	?	
6	0	0	0	0	0	0	?	?	?	?	?	198?	?	?	?	?	?	?	?	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	193	N/A	N/A	198	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	193	N/A	N/A	198	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	193	N/A	N/A	198	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	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 0.0% missing; 0.0% untested; 99.8% exceed the 15% QC threshold -- 4455 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17860F3 Calibration Factor: 7.010 $\mu\text{V}/\text{W}/\text{m}^2$ 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.