

March 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	0	1	39	201	375	597	695	734	708	611	463	283	93	3	0	0	0	0	0	4803	
2	0	0	0	0	0	0	3	62	245	432	587	691	731	704	609	461	282	94	5	0	0	0	0	0	4908	
3	0	0	0	0	0	0	4	71	262	448	607	691	736	709	563	396	195	67	7	0	0	0	0	0	4757	
4	0	0	0	0	0	0	3	73	257	320	507	630	551	511	571	299	113	68	8	0	0	0	0	0	3913	
5	0	0	0	0	0	0	1	20	67	136	124	193	238	242	134	105	95	22	3	0	0	0	0	0	1382	
6	0	0	0	0	0	0	0	3 ?	?	?	?	?	?	?	?	?	?	2 ?	1	0	0	0	0	0	7 ?	
7	0	0	0	0	0	0	1	9	45	99	166	317	737	690	588	407	204	71	6	0	0	0	0	0	3340	
8	0	0	0	0	0	0	5	98	180	177	359	632	721	687	596	258	230	61	6	0	0	0	0	0	4010	
9	0	0	0	0	0	0	2	13	49	68	117	224	217	95	73	72	94	23	3	0	0	0	0	0	1050	
10	0	0	0	0	0	0	10	57	63	107	109	74 ?	69 ?	157	120	92	129	31	4	0	0	0	0	0	1022	
11	0	0	0	0	0	0	3	17	65	126	198	238	183	290	370	452	261	112	12	0	0	0	0	0	2326	
12	0	0	0	0	0	0	7	101	286	472	625	721	758	718	619	462	303	113	13	0	0	0	0	0	5198	
13	0	0	0	0	0	0	7	98	292	486	646	749	785	759	661	515	286	104	12	0	0	0	0	0	5400	
14	0	0	0	0	0	0	1	25	46	145	184	130	130	121	72 ?	92	62	23	6	0	0	0	0	0	1037	
15	0	0	0	0	0	0	2	58	51	68	154	242	371	310	63 ?	44 ?	42	25	2	0	0	0	0	0	1431 ?	
16	0	0	0	0	0	0	2	17 ?	48	110	98	125	129	99	65	86	63	19	4	0	0	0	0	0	865	
17	0	0	0	0	0	0	18	116	323	513	664	760	791	756	665	513	330	125	17	0	0	0	0	0	5591	
18	0	0	0	0	0	0	3	18	104	319	529	514	743	529	514	335	187	72	11	0	0	0	0	0	3877	
19	0	0	0	0	0	0	6	70	169	365	676	776	805	781	682	488	287	89	11	0	0	0	0	0	5205	
20	0	0	0	0	0	0	15	60	143	220	362	658	738	615	640	326	313	121	17	0	0	0	0	0	4228	
21	0	0	0	0	0	0	10	63	219	185	334	442	525	497	416	467	303	126	16	0	0	0	0	0	3604	
22	0	0	0	0	0	0	8	71	178	215	607	634	323	476	442	362	291	105	21	0	0	0	0	0	3733	
23	0	0	0	0	0	0	17	79	199	442	349	600	736	686	214 ?	?	135 ?	115	10	0	0	0	0	0	3582 ?	
24	0	0	0	0	0	0	8	34	49	147	247	247	141	83	58	62	58 ?	18	6	0	0	0	0	0	1158	
25	0	0	0	0	0	0	3	17 ?	44	84	140	192	205	204	206	161	123	71	11	0	0	0	0	0	1459	
26	0	0	0	0	0	0	3	22	70	166	165	181	117	144	134	91	62	29 ?	4	0	0	0	0	0	1189	
27	0	0	0	0	0	0	5	29	49	87	122	132	120	98	84	72	47	22 ?	4	0	0	0	0	0	870	
28	0	0	0	0	0	0	4	32	94	166	235	349	454	273	221	184	133	146	22	0	0	0	0	0	2312	
29	0	0	0	0	0	0	15	180	465	578	736	748	778	796	698	552	323	93	17	0	0	0	0	0	5979	
30	0	0	0	0	0	0	5	17 ?	39 ?	49 ?	53 ?	?	77 ?	71 ?	72	143	109	37	11	0	0	0	0	0	683 ?	
31	0	0	0	0	0	0	7	27 ?	52	65	101	81	112	88	68	47 ?	43 ?	16 ?	8	0	0	0	0	0	715 ?	
Avg	0	0	0	0	0	0	6	51	145	239	347	437	459	430	361	276	180	68	9	0	0	0	0	0	2891	
S D	0	0	0	0	0	0	5	39	110	162	226	253	287	271	249	179	102	42	6	0	0	0	0	0	1839	
S/A	0	0	0	0	0	0	0.84	0.76	0.76	0.68	0.65	0.58	0.63	0.63	0.69	0.65	0.57	0.62	0.62	0	0	0	0	0	0	0.64
Min	0	0	0	0	0	0	0	3	39	49	53	74	69	71	58	44	42	2	1	0	0	0	0	0	7	
Max	0	0	0	0	0	0	18	180	465	578	736	776	805	796	698	552	330	146	22	0	0	0	0	0	5979	
n	0	0	0	0	0	0	163	347	351	350	351	341	348	352	337	335	347	345	180	0	0	0	0	0	4148	

Daylight Data Recovery: 0.0% missing; 0.0% untested; 6.5% exceed the 15% QC threshold -- 4435 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.

March 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	0	0	*	
2	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
3	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
4	0	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	*	
31	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	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	N/A	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 -- 4435 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.

March 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	27	127	280	?	?	?	?	?	?	?	100	3	0	0	0	0	0	537 ?
2	0	0	0	0	0	0	2	28	87	298 ?	?	?	?	?	?	?	?	102	5	0	0	0	0	0	523 ?
3	0	0	0	0	0	0	3	28	166	?	?	?	?	?	530 ?	414 ?	211	71	7	0	0	0	0	0	1431 ?
4	0	0	0	0	0	0	2	51	179 ?	249 ?	289 ?	495 ?	472 ?	463 ?	?	289	121	73	8	0	0	0	0	0	2690 ?
5	0	0	0	0	0	0	1	22	74	151	138	215	268	268	151	119	106	24	3	0	0	0	0	0	1539
6	0	0	0	0	0	0	0	3 ?	?	?	?	?	?	?	25 ?	27 ?	?	1 ?	0	0	0	0	0	0	57 ?
7	0	0	0	0	0	0	0	7	36	76	116	165	304	516 ?	503 ?	275 ?	225	78	6	0	0	0	0	0	2306 ?
8	0	0	0	0	0	0	5 ?	38 ?	184	196	370	580 ?	?	?	521 ?	257	204 ?	66	7	0	0	0	0	0	2430 ?
9	0	0	0	0	0	0	1	14	54	76	132	253	244	107	83	80	106	24	2	0	0	0	0	0	1176
10	0	0	0	0	0	0	11	61	70	121	117	63	67	175	134	103	144	34	4	0	0	0	0	0	1104
11	0	0	0	0	0	0	3 ?	18	72	140	220	266	203	322	332 ?	355 ?	194 ?	95	12	0	0	0	0	0	2233 ?
12	0	0	0	0	0	0	7	109	?	?	?	?	?	?	?	?	?	123	13	0	0	0	0	0	253 ?
13	0	0	0	0	0	0	7	105	?	?	?	?	?	?	?	?	?	299 ?	114	12	0	0	0	0	536 ?
14	0	0	0	0	0	0	1	29	51	163	210	146	147	137	67	105	70	26	7	0	0	0	0	0	1157
15	0	0	0	0	0	0	2	60	50	76	172	272	384	285	54	39	42	26	2	0	0	0	0	0	1462
16	0	0	0	0	0	0	2	17	53	123	112	141	146	112	74	98	71	20	4	0	0	0	0	0	971
17	0	0	0	0	0	0	23	130	?	?	?	?	?	?	?	?	?	122	17	0	0	0	0	0	292 ?
18	0	0	0	0	0	0	3	20	118	275 ?	511 ?	458 ?	?	500 ?	391 ?	229 ?	210	79	12	0	0	0	0	0	2807 ?
19	0	0	0	0	0	0	6	77	188	272 ?	?	?	?	?	?	411 ?	282 ?	97	12	0	0	0	0	0	1344 ?
20	0	0	0	0	0	0	15	66	157	246	364	579 ?	689 ?	364 ?	?	305 ?	291 ?	133	18	0	0	0	0	0	3230 ?
21	0	0	0	0	0	0	10	70	238	208	351	466	557 ?	523 ?	342 ?	450 ?	347 ?	131	18	0	0	0	0	0	3712 ?
22	0	0	0	0	0	0	8	80	201	242	352 ?	563 ?	309	429 ?	397 ?	284 ?	284 ?	117	23	0	0	0	0	0	3291 ?
23	0	0	0	0	0	0	19	61 ?	178	394 ?	202 ?	524 ?	?	602 ?	243 ?	40 ?	92 ?	95 ?	12	0	0	0	0	0	2461 ?
24	0	0	0	0	0	0	11	36	55	165	280	283	162	87	63	70	54	19	5	0	0	0	0	0	1290
25	0	0	0	0	0	0	3	17	49	95	159	218	234	234	235	183	139	79	11	0	0	0	0	0	1657
26	0	0	0	0	0	0	2	24	80	189	189	207	136	164	154	104	70	24	4	0	0	0	0	0	1347
27	0	0	0	0	0	0	5	32	52	99	137	152	138	113	96	82	53	19	4	0	0	0	0	0	982
28	0	0	0	0	0	0	4	36	105	186	266	400	468	310	253	208	150	114 ?	22	0	0	0	0	0	2522
29	0	0	0	0	0	0	18	76 ?	?	?	?	?	593 ?	?	?	?	231 ?	105	18	0	0	0	0	0	1041 ?
30	0	0	0	0	0	0	5	18 ?	34	37	49	40	58	68	81	169	128	38	12	0	0	0	0	0	739
31	0	0	0	0	0	0	7	23	59	75	116	93	129	102	73	51	42	17	9	0	0	0	0	0	793
Avg	0	0	0	0	0	0	6	45	105	177	221	299	285	280	218	190	160	70	9	0	0	0	0	0	1546 ?
S D	0	0	0	0	0	0	6	32	61	89	115	177	184	170	167	130	91	42	6	0	0	0	0	0	973
S/A	0	0	0	0	0	0	0.98	0.72	0.59	0.5	0.52	0.59	0.64	0.61	0.76	0.68	0.57	0.6	0.66	0	0	0	0	0	0.63
Min	0	0	0	0	0	0	0	3	34	37	49	40	58	68	25	27	42	1	0	0	0	0	0	0	57
Max	0	0	0	0	0	0	23	130	238	394	511	580	689	602	530	450	347	133	23	0	0	0	0	0	3712
n	0	0	0	0	0	0	158	348	300	271	229	212	208	211	201	229	255	354	180	0	0	0	0	0	3163

Daylight Data Recovery: 0.0% missing; 0.0% untested; 28.7% exceed the 15% QC threshold -- 4435 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.