

June 2008

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	22	55 ?	109 ?	264	286 ?	480	637	499	240	821	431	384	150	0 ?	2	0	0	0	0	4381 ?
2	0	0	0	0	0	32	214	315	584	748	829	899	977	940	860	718	477	322	88	15	0	0	0	0	8018
3	0	0	0	0	0	22	79	197	229	304	383	266	160 ?	?	313 ?	169	60	63	24	17	0	0	0	0	2286 ?
4	0	0	0	0	0	22	128 ?	342	447	629	756	831	879	663	725	546	437	317	119	35	0	0	0	0	6876
5	0	0	0	0	0	24	177	322	485	600	720	583	914	949	740	658	471	292	106	10	0	0	0	0	7050
6	0	0	0	0	0	33	160	343	537	674	855	732	904	817	744	684	487	303	115	10	0	0	0	0	7396
7	0	0	0	0	0	21	119	329	522	606	743	696	863	680	724	649	316	113	81	15	0	0	0	0	6477
8	0	0	0	0	0	25	126	281	481	569	782	916	604	712	514	558	474	300	107	14	0	0	0	0	6462
9	0	0	0	0	0	36	163	336	524	623	725	862	751	803	773	669	486	225	36	5	0	0	0	0	7018
10	0	0	0	0	0	21	78	238	479	707	840	847	480	625	637	433	44 ?	24 ?	12	0	0	0	0	0	6326
11	0	0	0	0	0	22	138	348	565	735	790	934	939	865	424	646	380	251	83	18	0	0	0	0	7135
12	0	0	0	0	0	19	147	309	383	413	477	761	863	809	817	544	342	124	35	7	0	0	0	0	6052
13	0	0	0	0	0	25	146	262	490	662	837	917	899	377	152	573	282	225	117	18	0	0	0	0	5981
14	0	0	0	0	0	42	96	247	546	542	550	358	134 ?	217	145	113	122	96	52	13	0	0	0	0	3272
15	0	0	0	0	0	16	86	233	420	665	658	922	986	849	727	757	482	324	117	10	0	0	0	0	7251
16	0	0	0	0	0	33	121	331	509	728	866	861	820	689	728	468	69 ?	75 ?	34 ?	10	0	0	0	0	6342
17	0	0	0	0	0	25	57	124	314	542	854	989	1008	967	872	734	494	319	139	15	0	0	0	0	7452
18	0	0	0	0	0	32	155	361	544	734	891	927	1004	841	816	530	406	274	132	13	0	0	0	0	7659
19	0	0	0	0	0	34	153	336	454	680	831	677	830	882	733	669	453	342	129	13	0	0	0	0	7217
20	0	0	0	0	0	30	150	246	438	473	407	529	534	528	849	541	425	155	78	11	0	0	0	0	5394
21	0	0	0	0	0	15	64	162	198	398	641	787	399	257	301	306	394	299	112	9	0	0	0	0	4343
22	0	0	0	0	0	29	131	322	503	656	621	887	589	377	463	634	291	52 ?	37 ?	49	0	0	0	0	5643
23	0	0	0	0	0	29	127	324	536	739	877 ?	937	775	743	766	705	522	346	135	7	0	0	0	0	7566
24	0	0	0	0	0	31	165	357	558	694	733	961	1000	937	828	667	511	336	129	15	0	0	0	0	7922
25	0	0	0	0	0	37	145	319	532	709	834	922	951	920	817	683	501	339	116	11	0	0	0	0	7837
26	0	0	0	0	0	18	96	257	393	661	747	878	770	337 ?	541	661	484 ?	152	87	13	0	0	0	0	6095
27	0	0	0	0	0	31	160	301	330	354	578	742	429 ?	330 ?	703 ?	?	338	166	40	7	0	0	0	0	4509 ?
28	0	0	0	0	0	24	101	329	449	665	632	641	818	884	746	639	438	96	98	7	0	0	0	0	6566
29	0	0	0	0	0	23	58	156	174	92	204	542	568	524	563	328	339	90	94	32	0	0	0	0	3786
30	0	0	0	0	0	26	77	124	279	220	625 ?	477	589	482	432	299 ?	391	167	20	8	0	0	0	0	4217
Avg	0	0	0	0	0	27	122	275	439	570	692	764	743	659	642	559	390	212	83	14	0	0	0	0	6151
S D	0	0	0	0	0	7	41	76	117	174	171	188	241	246	210	169	124	105	42	9	0	0	0	0	1501
S/A	0	0	0	0	0	0.25	0.33	0.28	0.27	0.31	0.25	0.25	0.32	0.37	0.33	0.3	0.32	0.49	0.5	0.68	0	0	0	0	0.24
Min	0	0	0	0	0	15	55	109	174	92	204	266	134	217	145	113	60	44	0	2	0	0	0	0	2286
Max	0	0	0	0	0	42	214	361	584	748	891	989	1008	967	872	757	522	346	139	49	0	0	0	0	8018
n	0	0	0	0	0	330	350	354	353	357	353	358	345	333	351	342	349	340	336	254	0	0	0	0	5107

Daylight Data Recovery: 0.0% missing; 0.0% untested; 3.0% exceed the 15% QC threshold -- 5264 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25821F3 Calibration Factor: 9.020 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

June 2008

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	?	139 ?	*	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	813 ?	0	0	0	0	*
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
12	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	?	385 ?	0	0	0	0	*
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	?	*	*	?	?	?	371 ?	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	*	*	*	121 *?	?	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	?	*	*	*	*	?	706 ?	?	?	*	*	*	?	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	?
Avg	0	0	0	0	0	N/A	139	N/A	121	N/A	N/A	N/A	N/A	N/A	706	N/A	N/A	N/A	N/A	523	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	251	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	0.48	0	0	0	0	0	0
Min	0	0	0	0	0	N/A	139	N/A	121	N/A	N/A	N/A	N/A	N/A	706	N/A	N/A	N/A	N/A	371	0	0	0	0	N/A	N/A
Max	0	0	0	0	0	N/A	139	N/A	121	N/A	N/A	N/A	N/A	N/A	706	N/A	N/A	N/A	N/A	813	0	0	0	0	N/A	N/A
n	0	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	0	0	0	10	0	0	0	0	0	0

Daylight Data Recovery: 88.2% missing; 0.0% untested; 11.3% exceed the 15% QC threshold -- 5264 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.

June 2008

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	22	48 ?	112	231	240	441	493	426	259	?	375 ?	338 ?	132	5 ?	2	0	0	0	0	3125 ?
2	0	0	0	0	0	31	67	97	113	131	190	291	676 ?	?	?	?	320 ?	?	85	16	0	0	0	0	2017 ?
3	0	0	0	0	0	23	82	196	244	319	400	285	130	54	238	179	62	65	24	16	0	0	0	0	2317
4	0	0	0	0	0	22	96	171	293	307	325	448	697 ?	652 ?	726 ?	528 ?	382 ?	?	128	37	0	0	0	0	4813 ?
5	0	0	0	0	0	19	85	171	210	312	294	355	738 ?	?	684 ?	?	?	248 ?	122	10	0	0	0	0	3248 ?
6	0	0	0	0	0	28	73	92	110	189	262	414	?	405 ?	?	?	?	?	123	11	0	0	0	0	1707 ?
7	0	0	0	0	0	24	81	121	149	183	288	484	626 ?	470 ?	367 ?	?	251 ?	116	88	16	0	0	0	0	3266 ?
8	0	0	0	0	0	24	101	183	244	276	301	490 ?	480 ?	336 ?	464 ?	529 ?	?	293 ?	122	14	0	0	0	0	3857 ?
9	0	0	0	0	0	31	77	111	160	230	279	563	641 ?	591 ?	?	?	?	143 ?	38	5	0	0	0	0	2870 ?
10	0	0	0	0	0	22	81	130	200	242	323	538 ?	740 ?	478	563 ?	?	252 ?	38 ?	22	12	0	0	0	0	3641 ?
11	0	0	0	0	0	22	95	84	106	129	222	500 ?	?	?	455	?	346 ?	272 ?	90	18	0	0	0	0	2341 ?
12	0	0	0	0	0	19	95	187	261	331	452	604 ?	708 ?	412 ?	341	362	253	128	39	7	0	0	0	0	4199
13	0	0	0	0	0	24	118	169	234	270	366	403	367	261	163	328	262	183	85	15	0	0	0	0	3246
14	0	0	0	0	0	39	98	146	171	336	397	361	115	201	154	121	129	101	55	13	0	0	0	0	2437
15	0	0	0	0	0	16	92	204	281	287	265	230	186	238	202	188	210	125	50	11	0	0	0	0	2584
16	0	0	0	0	0	33	76	92	159	135	142	334	350	307	364	221	57 ?	61	32 ?	10	0	0	0	0	2372
17	0	0	0	0	0	26	59	129	269	313	157	103	100	97	97	112	160	121	64	15	0	0	0	0	1822
18	0	0	0	0	0	26	66	86	98	120	144	170	188	210	183	196	234	146	72	13	0	0	0	0	1953
19	0	0	0	0	0	31	82	119	276	294	258	304	279	256	218	162	137	112	55	14	0	0	0	0	2598
20	0	0	0	0	0	28	92	147	283	409	409	501	476	488	466	392	213	145	80	11	0	0	0	0	4141
21	0	0	0	0	0	17	67	167	182	369	460	328	277	220	254	307	258	146	60	10	0	0	0	0	3123
22	0	0	0	0	0	29	90	145	161	238	293	317	289	300	360	254	139	46 ?	34 ?	39 ?	0	0	0	0	2733
23	0	0	0	0	0	30	106	116	84	96	109 ?	205	343	337	188	128	124	73	47	8	0	0	0	0	1994
24	0	0	0	0	0	30	70	81	91	175	209	113	134	136	180	207	107	79	58	16	0	0	0	0	1686
25	0	0	0	0	0	29	73	112	99	113	129	135	135	127	165	166	127	105	52	12	0	0	0	0	1578
26	0	0	0	0	0	18	75	193	311	313	340	275	277	172 ?	307	199	208	137	75	12	0	0	0	0	2913
27	0	0	0	0	0	28	82	202	269	303	313	357	217 ?	295	339	229 ?	248	169	42	7	0	0	0	0	3101
28	0	0	0	0	0	25	91	110	254	385	426	381	373	322	264	191	162	87	62	8	0	0	0	0	3142
29	0	0	0	0	0	23	59	165	186	98	204	427	501	456	449	283	261	92	73	33	0	0	0	0	3310
30	0	0	0	0	0	27	79	131	245	206	378 ?	442	368	382	288	252	269	135	20	8	0	0	0	0	3229
Avg	0	0	0	0	0	26	82	139	199	245	293	362	387	313	326	257	212	130	63	14	0	0	0	0	2845 ?
S D	0	0	0	0	0	5	15	39	70	91	102	135	210	148	163	117	86	63	32	8	0	0	0	0	805
S/A	0	0	0	0	0	0.2	0.19	0.28	0.35	0.37	0.35	0.37	0.54	0.47	0.5	0.45	0.41	0.48	0.51	0.6	0	0	0	0	0.28
Min	0	0	0	0	0	16	48	81	84	96	109	103	100	54	97	112	57	38	5	2	0	0	0	0	1578
Max	0	0	0	0	0	39	118	204	311	409	460	604	740	652	726	529	382	293	128	39	0	0	0	0	4813
n	0	0	0	0	0	315	356	357	356	359	354	338	262	276	272	252	264	284	343	250	0	0	0	0	4648

Daylight Data Recovery: 0.0% missing; 0.0% untested; 11.7% exceed the 15% QC threshold -- 5264 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.