

June 2005

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	23	77	243	298	229	469	621	571	387	405	155	118	72	29	5	0	0	0	0	3703
2	0	0	0	0	0	8	32	65	93	147	131	147	121	146	115	74 ?	58	56	18	4	0	0	0	0	1215
3	0	0	0	0	0	6	57	217	268	436	744	789	761	543	466	183	211	89	28	11	0	0	0	0	4809
4	0	0	0	0	0	20	77	174	390	345	572	594	748	740	419	428	537	218	66	11	0	0	0	0	5339
5	0	0	0	0	0	32	150	362	544	698	566	824	849	916	867	711	515	334	125	14	0	0	0	0	7508
6	0	0	0	0	0	34	117	345	486	537	686	897	777	875	689	586	251	246	62	10	0	0	0	0	6596
7	0	0	0	0	0	16	52	101	148	259	352	331	183	145 ?	154	277	480	360	96	8	0	0	0	0	2962
8	0	0	0	0	0	19	118	293	328	390	754	586	516	291	342	428	171	166	72	16	0	0	0	0	4491
9	0	0	0	0	0	31	134	352	525	474	133	427	438	657	239	133	162	184	80	17	0	0	0	0	3986
10	0	0	0	0	0	25	199	338	375	201	572	925	552	453	594	455	215	189	51	16	0	0	0	0	5161
11	0	0	0	0	0	30	142	189	230	234	269	949	991	648	459	358	413	205	95	17	0	0	0	0	5228
12	0	0	0	0	0	54	174	166	355	259	378	410	346	254	260	156	170	110	80	5	0	0	0	0	3177
13	0	0	0	0	0	3	27 ?	270	179	93 ?	101 ?	563	643	734	635	355	323	219	82	15	0	0	0	0	4242
14	0	0	0	0	0	35	123 ?	410 ?	552	714	795	936	868	799	739	711	523	278	126	6	0	0	0	0	7615
15	0	0	0	0	0	20	125	387	540	690	899	866	669	852	749	633	485	246	142	14	0	0	0	0	7317
16	0	0	0	0	0	21	117	317	336	580	376	344	527	644	767	767	580	339	91	20	0	0	0	0	5828
17	0	0	0	0	0	43	?	426 ?	574	764	924	817	911	952	595	741	458	277	133	12	0	0	0	0	7627
18	0	0	0	0	0	39	174	224	149	234	494	505	405	961	471 ?	178	283	193	40	10	0	0	0	0	4358
19	0	0	0	0	0	29	98 ?	369	534	722	770	707	819	426	190	667	311	243	119	16	0	0	0	0	6020
20	0	0	0	0	0	4	52 ?	99	157	396	687	624	898	967	591	428	454	259	65	11	0	0	0	0	5693
21	0	0	0	0	0	36	173	354	548	721	827	745	962	555	496	606	494	252	89	18	0	0	0	0	6876
22	0	0	0	0	0	14	96	217	94	252	619	590	685	828	796	756	560	343	133	15	0	0	0	0	5999
23	0	0	0	0	0	37	122 ?	393 ?	554	616	592	818	929	637	759	769	582	339	133	17	0	0	0	0	7298
24	0	0	0	0	0	20	139	354	498	698	847	731	977	795	503	661	446	297	102	13	0	0	0	0	7080
25	0	0	0	0	0	24	152	351	482	712	845	864	530	812	777	569	393	287	87	22	0	0	0	0	6905
26	0	0	0	0	0	10	91	247	396	457	898	542	418	418	338	386	277	312	97	12	0	0	0	0	4899
27	0	0	0	0	0	11	44	204	438	491	834	822	767	602	93 ?	163 ?	85	373 ?	111 ?	16	0	0	0	0	5054 ?
28	0	0	0	0	0	32	185	242	309	243	230	306	390	573	650	368	389	122	124	32	0	0	0	0	4194
29	0	0	0	0	0	25	92	310	343	416	602	316	596	349	491	489	312	283	116	20	0	0	0	0	4762
30	0	0	0	0	0	21	118	281	490	516	589	726	860	772	756	608	487	225	50	1	0	0	0	0	6500
Avg	0	0	0	0	0	24	112	277	374	451	585	644	657	624	514	460	358	237	88	13	0	0	0	0	5415
S D	0	0	0	0	0	12	47	97	154	205	246	220	237	241	223	222	158	87	35	6	0	0	0	0	1572
S/A	0	0	0	0	0	0.5	0.42	0.35	0.41	0.46	0.42	0.34	0.36	0.39	0.43	0.48	0.44	0.37	0.39	0.46	0	0	0	0	0.29
Min	0	0	0	0	0	3	27	65	93	93	101	147	121	145	93	74	58	56	18	1	0	0	0	0	1215
Max	0	0	0	0	0	54	199	426	574	764	924	949	991	967	867	769	582	373	142	32	0	0	0	0	7627
n	0	0	0	0	0	330	323	342	358	356	357	360	360	351	345	349	358	356	354	254	0	0	0	0	5154

Daylight Data Recovery: 0.0% missing; 2.1% exceed the 15% QC threshold -- 5264 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.

June 2005

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	5	16	117	104	4	91	118	59	6	18	0	0	0	0	1	0	0	0	0	539
2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3
3	0	0	0	0	0	0	0	3	3	116	290	433	341	221	125	6	12	0	0	0	0	0	0	0	1551
4	0	0	0	0	0	0	1	3	214	90	184	137	253	168	148	93	524	189	2	0	0	0	0	0	2005
5	0	0	0	0	0	31	296	556	680	627	316	524	539	715	774	696	653	505	247	0	0	0	0	0	7158
6	0	0	0	0	0	71	165	377	366	276	435	703	485	620	474	440	80	227	77	0	0	0	0	0	4796
7	0	0	0	0	0	1	0	1	1	4	8	2	1	0	1	40	335	530	115	0	0	0	0	0	1040
8	0	0	0	0	0	3	4	272	16	7	424	154	148	6	45	178	6	2	0	0	0	0	0	0	1265
9	0	0	0	0	0	26	240	551	610	167	1	121	189	290	54	15	22	75	2	0	0	0	0	0	2361
10	0	0	0	0	0	62	363	408	186	5	330	615	227	149	256	164	22	39	0	0	0	0	0	0	2827
11	0	0	0	0	0	20	61	50	15	2	3	497	597	152	76	46	232	64	41	0	0	0	0	0	1858
12	0	0	0	0	0	127	235	2	40	1	13	42	28	14	9	0	1	1	42	0	0	0	0	0	556
13	0	0	0	0	0	0	0	308	17	0	1	146	175	379	305	44	160	175	52	0	0	0	0	0	1764
14	0	0	0	0	0	45	216 ?	594 ?	712	680	695	844	668	592	691	790	687	464	334	0	0	0	0	0	8012
15	0	0	0	0	0	3	169	627	594	654	798	627	373	668	610	569	568	323	340	0	0	0	0	0	6924
16	0	0	0	0	0	22	91	271	148	432	113	22	209	335	673	868	795	607	123	0	0	0	0	0	4708
17	0	0	0	0	0	222	?	792 ?	881	931	900	589	697	805	476	785	581	468	378	0	0	0	0	0	8503
18	0	0	0	0	0	129	434	108	1	2	44	63	59	689	218	1	4	25	2	0	0	0	0	0	1779
19	0	0	0	0	0	27	122 ?	576	674	754	645	387	462	177	1	436	168	218	161	0	0	0	0	0	4807
20	0	0	0	0	0	0	0	0	0	32	236	164	487	650	308	84	454	309	11	0	0	0	0	0	2736
21	0	0	0	0	0	144	440	603	688	705	542	399	601	238	127	425	389	278	44	0	0	0	0	0	5623
22	0	0	0	0	0	1	97	134	0	3	264	120	250	594	593	748	688	513	302	0	0	0	0	0	4307
23	0	0	0	0	0	116	363 ?	639 ?	746	548	352	605	685	380	603	759	723	598	320	0	0	0	0	0	7435
24	0	0	0	0	0	26	261	523	499	654	713	437	598	459	212	533	398	297	144	0	0	0	0	0	5754
25	0	0	0	0	0	30	191	428	339	588	516	419	60	333	443	348	220	223	79	0	0	0	0	0	4219
26	0	0	0	0	0	0	1	85	149	29	543	89	14	13	4	12	42	359	114	0	0	0	0	0	1453
27	0	0	0	0	0	0	0	70	360	177	564	368	413	307	0	1	11	627 ?	287 ?	0	0	0	0	0	3186
28	0	0	0	0	0	70	307	122	61	2	2	4	14	30	107	27	277	16	141	0	0	0	0	0	1179
29	0	0	0	0	0	18	80	204	54	97	235	47	96	85	123	175	111	318	197	0	0	0	0	0	1841
30	0	0	0	0	0	3	58	180	282	158	243	308	492	448	540	469	498	195	4	0	0	0	0	0	3879
Avg	0	0	0	0	0	40	145	287	281	258	317	299	307	318	267	292	289	255	119	0	0	0	0	0	3469
S D	0	0	0	0	0	55	144	247	290	303	269	247	236	255	253	304	269	209	125	0	0	0	0	0	2434
S/A	0	0	0	0	0	1.38	0.99	0.86	1.03	1.17	0.85	0.82	0.77	0.8	0.95	1.04	0.93	0.82	1.05	4.73	0	0	0	0	0.7
Min	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
Max	0	0	0	0	0	222	440	792	881	931	900	844	697	805	774	868	795	627	378	1	0	0	0	0	8503
n	0	0	0	0	0	330	332	344	360	360	360	360	360	360	360	360	360	356	355	254	0	0	0	0	5212

Daylight Data Recovery: 0.0% missing; 1.0% exceed the 15% QC threshold -- 5264 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.

June 2005

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	26	75	196	251	240	401	515	536	405	406	165	125	73	29	5	0	0	0	0	3448
2	0	0	0	0	0	8	33	69	99	156	140	157	128	155	122	68	62	59	19	3	0	0	0	0	1279
3	0	0	0	0	0	6	60	229	282	359	492	371	429	333	344	189	214	95	27	11	0	0	0	0	3441
4	0	0	0	0	0	20	81	183	284	289	412	475	518	574	292	368	267	151	69	12	0	0	0	0	3996
5	0	0	0	0	0	31	96	136	154	247	309	351	360	280	237	235	171	161	81	15	0	0	0	0	2864
6	0	0	0	0	0	30	97	180	290	338	318	252	321	319	297	289	210	168	46	10	0	0	0	0	3167
7	0	0	0	0	0	17	55	108	159	272	366	351	195	113	159	260	316	176	72	7	0	0	0	0	2625
8	0	0	0	0	0	19	124	190	331	407	383	451	398	306	318	306	179	173	78	17	0	0	0	0	3679
9	0	0	0	0	0	33	84	135	169	365	142	324	261	398	193	125	159	166	84	16	0	0	0	0	2656
10	0	0	0	0	0	22	125	183	287	210	303	361	338	313	368	350	209	183	54	16	0	0	0	0	3321
11	0	0	0	0	0	29	129	178	236	246	279	493	428	511	410	333	298	190	93	18	0	0	0	0	3872
12	0	0	0	0	0	50	134	176	345	278	387	384	330	255	272	169	185	120	78	5	0	0	0	0	3168
13	0	0	0	0	0	3	24 ?	170	177	87	93	436	481	390	394	344	246	158	78	16	0	0	0	0	3097
14	0	0	0	0	0	33	84 ?	124 ?	143	218	199	163	242	260	170	157	151	121	62	6	0	0	0	0	2132
15	0	0	0	0	0	19	83	134	193	217	223	301	312	252	237	232	174	134	77	15	0	0	0	0	2602
16	0	0	0	0	0	23	97	209	254	275	294	340	342	341	211	163	153	113	67	21	0	0	0	0	2903
17	0	0	0	0	0	29	65 ?	70 ?	74	83	166	278	256	220	210	190	157	99	60	13	0	0	0	0	1970
18	0	0	0	0	0	26	91	193	158	247	473	463	348	339	190	187	294	192	42	10	0	0	0	0	3252
19	0	0	0	0	0	28	81 ?	128	154	176	234	358	394	239	174	362	236	169	92	17	0	0	0	0	2843
20	0	0	0	0	0	4	45	108	170	392	492	489	449	387	328	366	218	141	66	12	0	0	0	0	3664
21	0	0	0	0	0	28	82	119	158	212	380	390	413	354	405	326	298	153	84	20	0	0	0	0	3422
22	0	0	0	0	0	15	84	187	90	267	415	494	465	292	309	238	191	160	78	16	0	0	0	0	3302
23	0	0	0	0	0	30	70 ?	112 ?	122	230	306	269	296	285	253	245	189	124	72	18	0	0	0	0	2622
24	0	0	0	0	0	19	84	159	215	234	259	344	435	392	345	298	234	194	80	14	0	0	0	0	3306
25	0	0	0	0	0	26	113	193	291	292	410	492	494	513	402	331	277	214	73	23	0	0	0	0	4145
26	0	0	0	0	0	11	97	213	325	455	441	472	425	427	357	397	269	181	75	13	0	0	0	0	4159
27	0	0	0	0	0	12	48	179	225	346	341	466	386	326	69 ?	172 ?	75	121	67	16	0	0	0	0	2848
28	0	0	0	0	0	31	127	202	290	258	245	324	404	569	563	359	239	122	100	34	0	0	0	0	3869
29	0	0	0	0	0	28	77	236	324	358	418	286	515	247	409	362	255	169	77	20	0	0	0	0	3780
30	0	0	0	0	0	23	113	234	325	417	400	463	411	375	322	275	217	148	51	1	0	0	0	0	3776
Avg	0	0	0	0	0	23	85	165	219	272	324	377	377	339	292	262	209	148	68	14	0	0	0	0	3174
S D	0	0	0	0	0	10	28	45	80	90	109	98	98	109	107	88	63	37	19	7	0	0	0	0	664
S/A	0	0	0	0	0	0.45	0.33	0.28	0.37	0.33	0.34	0.26	0.26	0.32	0.37	0.34	0.3	0.25	0.29	0.47	0	0	0	0	0.21
Min	0	0	0	0	0	3	24	69	74	83	93	157	128	113	69	68	62	59	19	1	0	0	0	0	1279
Max	0	0	0	0	0	50	134	236	345	455	492	515	536	574	563	397	316	214	100	34	0	0	0	0	4159
n	0	0	0	0	0	320	328	344	360	358	360	360	360	357	356	353	360	359	358	254	0	0	0	0	5187

Daylight Data Recovery: 0.0% missing; 1.5% 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.