

August 2004

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	25	107 ?	328	535	721	834	662	700	616	660	567	401	178	41	0	0	0	0	0	6374
2	0	0	0	0	0	29	145	329	531	709	841	893	909	849	674	553	348	165	32	0	0	0	0	0	7006
3	0	0	0	0	0	26	139	319	522	700	840	896	897	843	711	541	361	167	30	0	0	0	0	0	6992
4	0	0	0	0	0	23	137	325	526	702	831	901	848	707	672	538	255	72	26	0	0	0	0	0	6562
5	0	0	0	0	0	5	9 ?	124 ?	225	582	634	684	440	813	724	574	353	164	24	0	0	0	0	0	5353
6	0	0	0	0	0	25	153	361	574	751	884	948	955	894	774	600	401	186	37	0	0	0	0	0	7542
7	0	0	0	0	0	24	158	368	586	735	863	939	935	893	774	582	385	177	38	0	0	0	0	0	7458
8	0	0	0	0	0	17	115	271	318	651	829	894	850	821	735	530	330	98	37	0	0	0	0	0	6497
9	0	0	0	0	0	19	106	191	416	422	485	878	951	477	663	535	318	152	38	0	0	0	0	0	5650
10	0	0	0	0	0	10	52	142	284	623	862	925	920	857	739	571	376	166	30	0	0	0	0	0	6559
11	0	0	0	0	0	29	158	272	433	528	567	737	930	847	526	359	95	?	0	0	0	0	0	0	5481
12	0	0	0	0	0	13	106	331	556	734	875	773	767	864	778	593	392	166	29	0	0	0	0	0	6978
13	0	0	0	0	0	23	146	355	565	741	799	600	592	582	615	526	346	160	31	0	0	0	0	0	6079
14	0	0	0	0	0	21	141	347	559	732	869	937	941	875	753	575	364	157	26	0	0	0	0	0	7297
15	0	0	0	0	0	20	132	331	536	710	845	918	917	853	733	556	359	161	39	0	0	0	0	0	7110
16	0	0	0	0	0	23	132	340	524	712	736	628	686	711	581	392	372	143	26	0	0	0	0	0	6006
17	0	0	0	0	0	17	122	320	523	693	804	905	871	812	700	527	331	128	17	0	0	0	0	0	6768
18	0	0	0	0	0	20	118	301	500	670	794	861	821	790	666	535	334	129	19	0	0	0	0	0	6558
19	0	0	0	0	0	15	117	306	506	684	647	645	730	725	680	427	224	73	7	0	0	0	0	0	5785
20	0	0	0	0	0	18	40	117	236	95 ?	488 ?	621	357	149	100	76	78	60	16	0	0	0	0	0	2451
21	0	0	0	0	0	2	13 ?	?	60 ?	131	314	541	386	334	610	492	143	41	16	0	0	0	0	0	3082 ?
22	0	0	0	0	0	9	57	169	338	505	735	550	809	645	644	298	164	152	19	0	0	0	0	0	5094
23	0	0	0	0	0	18	70	190	248	444	564	666	897	761	397	348	128	89	6	0	0	0	0	0	4825
24	0	0	0	0	0	8	65	209	288	452	562	408	394	722	587	496	93	48	4	0	0	0	0	0	4334
25	0	0	0	0	0	10	80	270	414	607	625	716	932	756	566	541	304	121	12	0	0	0	0	0	5955
26	0	0	0	0	0	10	26	148	296	386	662	827	562	409	408	429	317	113	15	0	0	0	0	0	4608
27	0	0	0	0	0	12	103	294	483	659	587	721	713	758	707	449	347	99	24	0	0	0	0	0	5955
28	0	0	0	0	0	8	52	205	473	402	556	220	325	110 ?	?	42 ?	33 ?	3 ?	3	0	0	0	0	0	2433 ?
29	0	0	0	0	0	1	14 ?	82	156	203	484	484	649	706	667	499	323	79	10	0	0	0	0	0	4355
30	0	0	0	0	0	3	38	144	234	458	531	702	784	814	675	416	219	107	12	0	0	0	0	0	5136
31	0	0	0	0	0	11	87	300	503	688	771	818	896	812	700	503	287	88	11	0	0	0	0	0	6476
Avg	0	0	0	0	0	16	95	260	418	575	701	739	754	703	641	473	283	121	22	0	0	0	0	0	5767
S D	0	0	0	0	0	8	47	86	144	184	154	178	198	206	139	135	109	48	12	0	0	0	0	0	1365
S/A	0	0	0	0	0	0.5	0.5	0.33	0.35	0.32	0.22	0.24	0.26	0.29	0.22	0.28	0.38	0.39	0.55	0	0	0	0	0	0.24
Min	0	0	0	0	0	1	9	82	60	95	314	220	325	110	100	42	33	3	0	0	0	0	0	0	2433
Max	0	0	0	0	0	29	158	368	586	751	884	948	955	894	778	600	401	186	41	0	0	0	0	0	7542
n	0	0	0	0	0	226	350	356	364	369	368	370	372	365	358	362	365	351	254	0	0	0	0	0	4830

Daylight Data Recovery: 0.0% missing; 2.3% exceed the 15% QC threshold -- 4944 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18036F3 Calibration Factor: 7.430 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.

August 2004

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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*	
7	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
8	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
9	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
10	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
12	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
14	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
16	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
24	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
25	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
26	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
31	0	0	0	0	0	?	?	?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
Avg	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	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	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	N/A	0	0	0	0	0	N/A	0
Max	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	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: 98.0% missing; 2.0% exceed the 15% QC threshold -- 4944 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25796E6 Calibration Factor: 8.670 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.

August 2004

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	24	83 ?	124	134	156	245	288	313	256	251	136	149	96	32	0	0	0	0	0	2289
2	0	0	0	0	0	25	84	123	157	170	216	254	221	235	269	217	171	100	27	0	0	0	0	0	2268
3	0	0	0	0	0	22	82	124	162	185	248	270	236	198	199	183	132	87	24	0	0	0	0	0	2151
4	0	0	0	0	0	23	78	123	169	207	222	234	305	346	260	192	121	76	27	0	0	0	0	0	2382
5	0	0	0	0	0	5	14 ?	93	231	398	422	455	429	345	205	208	215	121	25	0	0	0	0	0	3167
6	0	0	0	0	0	18	58	76	85	92	96	104	109	113	128	100	84	63	24	0	0	0	0	0	1150
7	0	0	0	0	0	16	51	69	119	135	100	98	105	94	87	99	90	63	25	0	0	0	0	0	1149
8	0	0	0	0	0	18	95	169	191	201	213	217	265	262	220	224	164	94	36	0	0	0	0	0	2369
9	0	0	0	0	0	19	100	191	306	420	462	418	497	405	462	371	205	92	36	0	0	0	0	0	3985
10	0	0	0	0	0	10	55	150	290	314	235	215	160	151	146	124	96	71	23	0	0	0	0	0	2042
11	0	0	0	0	0	27	118	171	215	241	297	284	243	234	324	284	94	?	0	0	0	0	0	0	2530
12	0	0	0	0	0	15	87	96	88	91	123	224	228	205	142	93	72	56	19	0	0	0	0	0	1538
13	0	0	0	0	0	15	45	62	72	85	215	326	440	436	260	162	112	57	19	0	0	0	0	0	2304
14	0	0	0	0	0	15	51	71	89	101	92	94	98	103	106	107	107	81	21	0	0	0	0	0	1136
15	0	0	0	0	0	15	59	92	115	136	138	138	142	140	136	142	170	133	35	0	0	0	0	0	1592
16	0	0	0	0	0	21	68	93	180	184	240	421	449	335	345	284	367 ?	145	26	0	0	0	0	0	3159
17	0	0	0	0	0	20	73	95	149	159	172	192	181	181	260	466 ?	344 ?	148	16	0	0	0	0	0	2453
18	0	0	0	0	0	18	71	119	163	192	210	227	250	322	473 ?	?	?	137	18	0	0	0	0	0	2199 ?
19	0	0	0	0	0	13	63	112	148	194	288	304	280	465	565 ?	380 ?	242	76	7	0	0	0	0	0	3138
20	0	0	0	0	0	21	42	120	206	101 ?	200	532	325	160	95	80	81	63	16	0	0	0	0	0	2043
21	0	0	0	0	0	2	14	22	42	137	319	417	393	347	461 ?	409 ?	126	43	17	0	0	0	0	0	2749
22	0	0	0	0	0	9	60	170	248	356	377	532	659 ?	480 ?	534 ?	303	170	116 ?	18	0	0	0	0	0	4032 ?
23	0	0	0	0	0	21	62	175	257	427	417	572	?	434 ?	347	320	135	86	6	0	0	0	0	0	3259 ?
24	0	0	0	0	0	9	67	189	290	413	491	416	406	619 ?	438 ?	417 ?	99	52	4	0	0	0	0	0	3911 ?
25	0	0	0	0	0	10	68	156	185	244	395 ?	634 ?	?	565 ?	369 ?	?	327 ?	97 ?	11	0	0	0	0	0	3060 ?
26	0	0	0	0	0	12	27	153	252	354	591 ?	561 ?	523 ?	409	285 ?	312 ?	?	100 ?	14	0	0	0	0	0	3595 ?
27	0	0	0	0	0	13	61	127	316	?	502 ?	447 ?	473 ?	653 ?	?	430 ?	355 ?	104	25	0	0	0	0	0	3503 ?
28	0	0	0	0	0	8	49	176	403 ?	412	456 ?	152	339	83 ?	?	38 ?	32	6 ?	3	0	0	0	0	0	2158 ?
29	0	0	0	0	0	1	13	85	163	215	496	473	395 ?	373 ?	?	?	83	7	0	0	0	0	0	0	2306 ?
30	0	0	0	0	0	3	40	151	243	413	454 ?	593 ?	635 ?	733 ?	?	285 ?	180 ?	88 ?	9	0	0	0	0	0	3825 ?
31	0	0	0	0	0	10	83	?	?	?	536 ?	580 ?	?	?	?	?	?	85	11	0	0	0	0	0	1306 ?
Avg	0	0	0	0	0	15	62	123	189	232	305	344	325	323	283	236	165	87	19	0	0	0	0	0	2540 ?
S D	0	0	0	0	0	7	25	42	83	117	145	164	153	174	140	124	91	31	10	0	0	0	0	0	863
S/A	0	0	0	0	0	0.46	0.4	0.35	0.44	0.5	0.48	0.48	0.47	0.54	0.5	0.52	0.55	0.36	0.52	0	0	0	0	0	0.34
Min	0	0	0	0	0	1	13	22	42	85	92	94	98	83	87	38	32	6	0	0	0	0	0	0	1136
Max	0	0	0	0	0	27	118	191	403	427	591	634	659	733	565	466	367	148	36	0	0	0	0	0	4032
n	0	0	0	0	0	218	358	360	352	343	338	329	300	296	262	271	288	333	254	0	0	0	0	0	4310

Daylight Data Recovery: 0.0% missing; 12.8% exceed the 15% QC threshold -- 4944 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18039F3 Calibration Factor: 7.470 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.