

February 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	0	0	27	93	295	383	464	337	238	243	96	52	6	0	0	0	0	0	0	2234
2	0	0	0	0	0	0	0	8	31	97	125	111	109	78 ?	55 ?	175	55	17	0	0	0	0	0	0	862
3	0	0	0	0	0	0	0	52	216	400	544	632	649	599	465	304	122	18	0	0	0	0	0	0	4001
4	0	0	0	0	0	0	0	32	92	219	298	236	289	429	331	153	69	22	0	0	0	0	0	0	2170
5	0	0	0	0	0	0	0	0	51 ?	42 ?	62 ?	?	77	63	73	57	22	3	0	0	0	0	0	0	450 ?
6	0	0	0	0	0	0	0	9	51	105	205	184	272	96	72	105	65	4	0	0	0	0	0	0	1167
7	0	0	0	0	0	0	0	7	62	168	248	236	346	442	592	409	153	28	0	0	0	0	0	0	2690
8	0	0	0	0	0	0	0	46	152	338	470	520	450	442	428	301	135	25	0	0	0	0	0	0	3306
9	0	0	0	0	0	0	0	15	34	60	94	88	96	158	265	109	61	12	0	0	0	0	0	0	993
10	0	0	0	0	0	0	0	4 ?	36 ?	90	135	142	165	113	102	84	62	20	0	0	0	0	0	0	954
11	0	0	0	0	0	0	0	13	46	85 ?	103 ?	89	85	57	45 ?	33 ?	5 ?	1	0	0	0	0	0	0	562 ?
12	0	0	0	0	0	0	0	15	111	172	292	266	119	122	116	110	28	10	0	0	0	0	0	0	1362
13	0	0	0	0	0	0	1	48	150	189	275	289	371	296	161	110	59	12	0	0	0	0	0	0	1962
14	0	0	0	0	0	0	1	19	76	124	160	126	98	172 ?	132	67	30	5	0	0	0	0	0	0	1011
15	0	0	0	0	0	0	0	50	143	187	163	353	349	269	350	155	123	32	0	0	0	0	0	0	2174
16	0	0	0	0	0	0	11	48	238	378	421	367	636	569	554	362	177	32	0	0	0	0	0	0	3795
17	0	0	0	0	0	0	7	57	160	322	348	627	507	307	208	349	173	32	0	0	0	0	0	0	3098
18	0	0	0	0	0	0	6	79	264	462	607	700	724	675	506	397	192	35	0	0	0	0	0	0	4647
19	0	0	0	0	0	0	7	85	226	382	581	705	719	674	549	386	187	31	0	0	0	0	0	0	4533
20	0	0	0	0	0	0	7	68	108	274	331	531	483	521	366	326	152	41	0	0	0	0	0	0	3209
21	0	0	0	0	0	0	12	90	291	477	630	717	740	678	554	377	186	40	0	0	0	0	0	0	4793
22	0	0	0	0	0	0	4	49	207	317	605	625	677	633	457	344	131	40	0	0	0	0	0	0	4089
23	0	0	0	0	0	0	0	2 ?	?	53 ?	65 ?	123 ?	114	127	55 ?	71	44 ?	12	0	0	0	0	0	0	667 ?
24	0	0	0	0	0	0	2	19	67	84	113	390	240	486	322	252	164	34	0	0	0	0	0	0	2173
25	0	0	0	0	0	0	0	1 ?	39 ?	47 ?	70 ?	73 ?	?	60 ?	57 ?	32 ?	24	10	0	0	0	0	0	0	414 ?
26	0	0	0	0	0	0	1	10 ?	32	92	204	224	182	336	212	143	31	7	0	0	0	0	0	0	1474
27	0	0	0	0	0	0	9	102	364	485	646	708	745	706	587	412	208	48	0	0	0	0	0	0	5019
28	0	0	0	0	0	0	15	121	323	518	656	743	756	660	467	305	129	28	0	0	0	0	0	0	4721
29	0	0	0	0	0	0	10	33	65	108	113	130	164	377	567	305	66	12	0	0	0	0	0	0	1950

Avg	0	0	0	0	0	0	3	38	133	227	309	371	375	358	307	218	100	21	0	0	0	0	0	0	2430
S D	0	0	0	0	0	0	5	33	97	152	204	236	245	227	195	132	63	13	0	0	0	0	0	0	1506
S/A	0	0	0	0	0	0	1.41	0.87	0.73	0.67	0.66	0.64	0.65	0.63	0.64	0.61	0.63	0.63	0	0	0	0	0	0	0.62
Min	0	0	0	0	0	0	0	0	31	42	62	73	77	57	45	32	5	1	0	0	0	0	0	0	414
Max	0	0	0	0	0	0	15	121	364	518	656	743	756	706	592	412	208	48	0	0	0	0	0	0	5019
n	0	0	0	0	0	0	92	322	306	319	321	321	334	329	327	335	330	241	0	0	0	0	0	0	3578

Daylight Data Recovery: 0.0% missing; 6.2% exceed the 15% QC threshold -- 3813 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18036F3 Calibration Factor: 7.430 μV/W/m<sup>2</sup> 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.

February 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	0	0	*
2	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
3	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
4	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
5	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
6	0	0	0	0	0	0	?	*	*	*	?	*	*	*	*	*	*	?	0	0	0	0	0	0	*
7	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
8	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
9	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
10	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
11	0	0	0	0	0	0	*	*	?	?	?	*	*	?	?	*	*	219*	0	0	0	0	0	0	?
12	0	0	0	0	0	0	334?	587?	?	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
13	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
14	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	332*?	0	0	0	0	0	0	*
15	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
16	0	0	0	0	0	0	396?	255?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
17	0	0	0	0	0	0	*	*	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	?
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
20	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
21	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
22	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
23	0	0	0	0	0	0	482*	397*	643*?	*	?	126?	?	*	*	*	*	*	0	0	0	0	0	0	*
24	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
25	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
26	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
27	0	0	0	0	0	0	*	*	*	*	*	*	?	?	40?	*	*	*	0	0	0	0	0	0	*
28	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
29	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*

Avg	0	0	0	0	0	0	404	413	643	N/A	N/A	126	N/A	N/A	40	N/A	N/A	275	0	0	0	0	0	0	N/A	*
SD	0	0	0	0	0	0	74	166	0	0	0	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0
S/A	0	0	0	0	0	0	0.18	0.4	0	0	0	0	0	0	0	0	0	0.29	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	334	255	643	N/A	N/A	126	N/A	N/A	40	N/A	N/A	219	0	0	0	0	0	0	N/A	
Max	0	0	0	0	0	0	482	587	643	N/A	N/A	126	N/A	N/A	40	N/A	N/A	332	0	0	0	0	0	0	N/A	
n	0	0	0	0	0	0	3	10	2	0	0	2	0	0	4	0	0	4	0	0	0	0	0	0	0	0

Daylight Data Recovery: 89.5% missing; 9.7% exceed the 15% QC threshold -- 3813 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.

February 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	0	0	26	90	252 ?	293 ?	457	329	233	238	93	50	5	0	0	0	0	0	0	2067
2	0	0	0	0	0	0	0	7	30	89	121	107	105	60	46	169	54	16	0	0	0	0	0	0	805
3	0	0	0	0	0	0	0	55	181 ?	?	?	?	?	381 ?	285 ?	112	19	0	0	0	0	0	0	0	1032 ?
4	0	0	0	0	0	0	0	31	90	225	301	229	280	357 ?	276	149	69	22	0	0	0	0	0	0	2029
5	0	0	0	0	0	0	0	0	41 ?	35 ?	45 ?	36 ?	73	63	69	56	23	5	0	0	0	0	0	0	445 ?
6	0	0	0	0	0	0	0	10	50	104	201	184	266	96	73	104	66	5	0	0	0	0	0	0	1157
7	0	0	0	0	0	0	0	7	60	163	241	234	342	374 ?	?	?	132 ?	33	0	0	0	0	0	0	1585 ?
8	0	0	0	0	0	0	0	45	152	331	468 ?	489 ?	469	468	414 ?	286 ?	100 ?	27	0	0	0	0	0	0	3249 ?
9	0	0	0	0	0	0	0	14	31	58	92	82	93	150	195 ?	105	59	11	0	0	0	0	0	0	890
10	0	0	0	0	0	0	1	6	25	89	133	140	164	113	101	84	63	22	0	0	0	0	0	0	940
11	0	0	0	0	0	0	1	14	45	90	106	87	83	55	44	27	11 ?	2	0	0	0	0	0	0	565
12	0	0	0	0	0	0	1	15	109	170	288	262	119	121	115	95	28	10	0	0	0	0	0	0	1333
13	0	0	0	0	0	0	1	46	148	185	272	286	373	296	159	109	57	11	0	0	0	0	0	0	1944
14	0	0	0	0	0	0	1	19	75	124	158	125	97	141	131	60	30	5	0	0	0	0	0	0	966
15	0	0	0	0	0	0	0	50	142	186	162	353	347	268	289 ?	159	131	38	0	0	0	0	0	0	2125
16	0	0	0	0	0	0	14 ?	48	179 ?	338 ?	308 ?	374	545 ?	449 ?	?	?	154 ?	41	0	0	0	0	0	0	2449 ?
17	0	0	0	0	0	0	7	56	158	325	340	483 ?	445 ?	305	208	194 ?	159 ?	37	0	0	0	0	0	0	2716 ?
18	0	0	0	0	0	0	6	87	215 ?	?	?	?	?	?	?	?	134 ?	43	0	0	0	0	0	0	486 ?
19	0	0	0	0	0	0	9 ?	71	179 ?	328 ?	?	?	?	?	?	?	149 ?	38	0	0	0	0	0	0	773 ?
20	0	0	0	0	0	0	7	68	108	275	341	494 ?	472	471 ?	354	314 ?	148	42	0	0	0	0	0	0	3095 ?
21	0	0	0	0	0	0	13	96	198 ?	?	?	?	?	?	?	?	158 ?	51	0	0	0	0	0	0	515 ?
22	0	0	0	0	0	0	4	50	211	286 ?	?	?	?	?	424 ?	285 ?	112	43	0	0	0	0	0	0	1415 ?
23	0	0	0	0	0	0	0	1 ?	?	49 ?	57	122	112	126	47	70	29	12	0	0	0	0	0	0	625 ?
24	0	0	0	0	0	0	2	18	67	84	113	303 ?	239	291 ?	266	252	131	37	0	0	0	0	0	0	1804 ?
25	0	0	0	0	0	0	0	1 ?	36 ?	38 ?	58	44	41	40 ?	44	31	24	11	0	0	0	0	0	0	368 ?
26	0	0	0	0	0	0	2	13	32	93	204	225	185	268	214	145	32	9	0	0	0	0	0	0	1423
27	0	0	0	0	0	0	9	93	296 ?	?	?	?	?	?	?	?	163 ?	59	0	0	0	0	0	0	620 ?
28	0	0	0	0	0	0	16	125	?	?	?	?	?	?	485 ?	326	132	28	0	0	0	0	0	0	1112 ?
29	0	0	0	0	0	0	10	33	66	109	114	131	166	258 ?	?	265 ?	66	12	0	0	0	0	0	0	1229 ?

Avg	0	0	0	0	0	0	4	38	112	168	201	238	243	227	208	159	89	24	0	0	0	0	0	0	0	1371 ?
S D	0	0	0	0	0	0	5	33	73	103	114	149	153	140	139	97	51	16	0	0	0	0	0	0	0	806
S/A	0	0	0	0	0	0	1.39	0.87	0.65	0.61	0.57	0.63	0.63	0.61	0.67	0.61	0.57	0.68	0	0	0	0	0	0	0	0.59
Min	0	0	0	0	0	0	0	0	25	35	45	36	41	40	44	27	11	2	0	0	0	0	0	0	0	368
Max	0	0	0	0	0	0	16	125	296	338	468	494	545	471	485	326	163	59	0	0	0	0	0	0	0	3249
n	0	0	0	0	0	0	90	331	269	251	240	226	249	226	225	235	290	240	0	0	0	0	0	0	0	2876

Daylight Data Recovery: 0.0% missing; 24.6% exceed the 15% QC threshold -- 3813 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.