

January 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	0	0	8	43	105 ?	261	201 ?	274 ?	214	327	213	58	4	0	0	0	0	0	0	1709 ?
2	0	0	0	0	0	0	0	9	60	145	265	316	311	348	188	110	37	8	0	0	0	0	0	0	1798
3	0	0	0	0	0	0	0	8	66	310 ?	341 ?	349	499	464	376	237	84	6	0	0	0	0	0	0	2740 ?
4	0	0	0	0	0	0	0	8	44 ?	387 ?	459 ?	474	498	460	373	193	63	14	0	0	0	0	0	0	2972 ?
5	0	0	0	0	0	0	0	6	48	156	291	277	356	218	177	82	28	2	0	0	0	0	0	0	1641
6	0	0	0	0	0	0	0	7	31	120	269	208	195	149	158	146	60	7	0	0	0	0	0	0	1350
7	0	0	0	0	0	0	0	8	40 ?	179	202	368	218	332	389	206	73	11	0	0	0	0	0	0	2026
8	0	0	0	0	0	0	0	6	83	230	367	460	494	446	377	238	77	10	0	0	0	0	0	0	2790
9	0	0	0	0	0	0	0	2	40	204	270	456	496	451	362	232	84	18	0	0	0	0	0	0	2614
10	0	0	0	0	0	0	0	0	11	35	76	98	50	70	171	76	23	1	0	0	0	0	0	0	613
11	0	0	0	0	0	0	0	3	29	153	208	159	198 ?	200 ?	165	73	28	4	0	0	0	0	0	0	1221 ?
12	0	0	0	0	0	0	0	10	111	125	188 ?	469	487	299	280	197	70	11	0	0	0	0	0	0	2249
13	0	0	0	0	0	0	0	18	106	174	194	222	236	277	276	199	35	0	0	0	0	0	0	0	1737
14	0	0	0	0	0	0	0	2	18	47	128	200	229	213	113	83	31	9	0	0	0	0	0	0	1073
15	0	0	0	0	0	0	0	3	36	145	334	417	387	534	419	295	115	17	0	0	0	0	0	0	2703
16	0	0	0	0	0	0	0	12	96	297	410	360	369	338	245	141	45	7	0	0	0	0	0	0	2320
17	0	0	0	0	0	0	0	2	15	45	102	61	93	120	165	192	61 ?	11	0	0	0	0	0	0	866
18	0	0	0	0	0	0	0	8	57	81	101	251	402	511	402	268	108	21	0	0	0	0	0	0	2211
19	0	0	0	0	0	0	0	5	43	189	151	145	166	132	109	81	69	6	0	0	0	0	0	0	1097
20	0	0	0	0	0	0	0	8	82	281	428	522	560	532	446	307	139	25	0	0	0	0	0	0	3330
21	0	0	0	0	0	0	0	9	104	265	407	501	535	508	425	292	128 ?	16	0	0	0	0	0	0	3190
22	0	0	0	0	0	0	0	6	28	40	110	83	118	73	122	86	48	2	0	0	0	0	0	0	716
23	0	0	0	0	0	0	0	2	13	33	71	87	117	195	209	92	29	7	0	0	0	0	0	0	856
24	0	0	0	0	0	0	0	2	9 ?	57	128	426	151	161	160	104	60	11	0	0	0	0	0	0	1268
25	0	0	0	0	0	0	0	10	177	389	520	548	567	536	419	316	142	18	0	0	0	0	0	0	3642
26	0	0	0	0	0	0	0	6	48	112	147	231	255	148	129	80	31	5	0	0	0	0	0	0	1190
27	0	0	0	0	0	0	0	2	15	64	243	418	605	467	455	319	151	29	0	0	0	0	0	0	2768
28	0	0	0	0	0	0	0	11	195	394	447	529	565	522	452	238	82	17	0	0	0	0	0	0	3453
29	0	0	0	0	0	0	0	7	34	96	166	56	69	118	173	99	30	5	0	0	0	0	0	0	852
30	0	0	0	0	0	0	0	10	129	305	453	557	595	565	476	339	169	33	0	0	0	0	0	0	3631
31	0	0	0	0	0	0	0	11	100	200	282	350	232	206	160	127	77	14	0	0	0	0	0	0	1758
Avg	0	0	0	0	0	0	0	7	62	173	259	316	333	316	281	183	72	11	0	0	0	0	0	0	2012
S D	0	0	0	0	0	0	0	4	47	110	130	159	177	164	126	87	41	8	0	0	0	0	0	0	934
S/A	0	0	0	0	0	0	0	0.58	0.76	0.63	0.5	0.5	0.53	0.52	0.45	0.48	0.56	0.72	0	0	0	0	0	0	0.46
Min	0	0	0	0	0	0	0	0	9	33	71	56	50	70	109	73	23	0	0	0	0	0	0	0	613
Max	0	0	0	0	0	0	0	18	195	394	520	557	605	565	476	339	169	33	0	0	0	0	0	0	3642
n	0	0	0	0	0	0	0	149	350	348	349	361	360	358	371	372	365	175	0	0	0	0	0	0	3558

Daylight Data Recovery: 0.0% missing; 0.0% untested; 3.1% exceed the 15% QC threshold -- 3672 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.

January 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	*	?	?	515 ?	?	245 ?	?	?	?	*	*	0	0	0	0	0	0	?
2	0	0	0	0	0	0	0	*	*	*	?	?	?	?	?	?	?	?	0	0	0	0	0	0	?
3	0	0	0	0	0	0	0	?	?	705 ?	570 ?	?	258 ?	558 ?	?	?	?	?	0	0	0	0	0	0	2091 ?
4	0	0	0	0	0	0	0	179	561	761 ?	404 ?	?	?	?	?	?	?	?	0	0	0	0	0	0	1905 ?
5	0	0	0	0	0	0	0	821 ?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	?
6	0	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	?
7	0	0	0	0	0	0	0	*	921 ?	209 ?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	?
8	0	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	0	?
10	0	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	?
11	0	0	0	0	0	0	0	?	?	?	?	*	?	57 ?	?	?	?	?	0	0	0	0	0	0	?
12	0	0	0	0	0	0	0	?	*	?	170 ?	46 ?	?	?	?	?	?	?	0	0	0	0	0	0	?
13	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
14	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	?
15	0	0	0	0	0	0	0	?	?	?	367 ?	?	?	?	363 ?	*	*	?	0	0	0	0	0	0	?
16	0	0	0	0	0	0	0	?	?	?	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
17	0	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	0	*
19	0	0	0	0	0	0	0	*	*	*	*	*	*	*	?	?	?	?	0	0	0	0	0	0	*
20	0	0	0	0	0	0	0	?	?	375 ?	?	1051 ?	1022 ?	*	*	?	?	?	0	0	0	0	0	0	2448 *?
21	0	0	0	0	0	0	0	202	565 ?	*	485 ?	?	?	?	?	?	618 ?	?	0	0	0	0	0	0	1870 *?
22	0	0	0	0	0	0	0	?	377 ?	?	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
23	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
24	0	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	?
25	0	0	0	0	0	0	0	*	?	762 ?	706 ?	*	*	?	?	?	?	?	0	0	0	0	0	0	?
26	0	0	0	0	0	0	0	?	?	?	?	?	?	*	*	?	?	*	0	0	0	0	0	0	?
27	0	0	0	0	0	0	0	?	?	?	?	*	*	*	*	*	*	*	0	0	0	0	0	0	*
28	0	0	0	0	0	0	0	*	770 *?	?	?	?	?	?	*	*	*	*	0	0	0	0	0	0	?
29	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
30	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
31	0	0	0	0	0	0	0	?	?	*	*	*	?	?	?	?	?	?	0	0	0	0	0	0	?
Avg	0	0	0	0	0	0	0	401	639	563	460	549	508	308	363	N/A	618	N/A	0	0	0	0	0	0	1998 *?
S/D	0	0	0	0	0	0	0	364	210	255	169	710	445	354	0	0	0	0	0	0	0	0	0	0	132
S/A	0	0	0	0	0	0	0	0.91	0.33	0.45	0.37	1.29	0.88	1.15	0	0	0	0	0	0	0	0	0	0	0.07
Min	0	0	0	0	0	0	0	179	377	209	170	46	245	57	363	N/A	618	N/A	0	0	0	0	0	0	1905
Max	0	0	0	0	0	0	0	821	921	762	706	1051	1022	558	363	N/A	618	N/A	0	0	0	0	0	0	2091
n	0	0	0	0	0	0	0	11	22	13	33	4	14	8	3	0	4	0	0	0	0	0	0	0	44

Daylight Data Recovery: 37.0% missing; 0.0% untested; 59.7% exceed the 15% QC threshold -- 3672 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.

January 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	0	0	7	41	105	159 ?	198	191 ?	185	185 ?	167 ?	55	3	0	0	0	0	0	0	1296 ?
2	0	0	0	0	0	0	0	8	58	140	261	310	302	343	180	110	36	7	0	0	0	0	0	0	1754
3	0	0	0	0	0	0	0	7	66	?	141 ?	200 ?	?	?	?	210 ?	90	7	0	0	0	0	0	0	722 ?
4	0	0	0	0	0	0	0	7	15 ?	?	?	?	?	?	?	189	59	12	0	0	0	0	0	0	282 ?
5	0	0	0	0	0	0	0	6	45	156	214 ?	276	336	218	173	82	28	2	0	0	0	0	0	0	1536
6	0	0	0	0	0	0	0	8	26	107	153 ?	202	189	148	156	140	58	7	0	0	0	0	0	0	1194
7	0	0	0	0	0	0	0	9 ?	46	158 ?	159	257 ?	219	217 ?	?	206	72	10	0	0	0	0	0	0	1354 ?
8	0	0	0	0	0	0	0	6	91	220 ?	?	?	?	?	?	235 ?	79	9	0	0	0	0	0	0	639 ?
9	0	0	0	0	0	0	0	2	39	179 ?	226 ?	?	?	?	343 ?	233	85	18	0	0	0	0	0	0	1124 ?
10	0	0	0	0	0	0	0	0	11	32	76	99	50	69	169	78	24	1	0	0	0	0	0	0	609
11	0	0	0	0	0	0	0	3	29	114 ?	162	158	197	191 ?	164	73	27	3	0	0	0	0	0	0	1122
12	0	0	0	0	0	0	0	9	37 ?	101	211 ?	233 ?	373 ?	296	269 ?	186	66	10	0	0	0	0	0	0	1791 ?
13	0	0	0	0	0	0	0	19 ?	95	163	168	220	233	280	195 ?	148 ?	33	0	0	0	0	0	0	0	1554 ?
14	0	0	0	0	0	0	0	1	18	47	127	198	231	210	114	82	30	8	0	0	0	0	0	0	1066
15	0	0	0	0	0	0	0	3	35	106	325 ?	363 ?	251 ?	?	?	270 ?	122	18	0	0	0	0	0	0	1492 ?
16	0	0	0	0	0	0	0	12	91	195 ?	?	356	367	333	239	136	44	7	0	0	0	0	0	0	1779 ?
17	0	0	0	0	0	0	0	1	14	41	101	61	93	126	168	188	68	11	0	0	0	0	0	0	872
18	0	0	0	0	0	0	0	9	56	82	103	207	307 ?	?	?	242 ?	113	20	0	0	0	0	0	0	1139 ?
19	0	0	0	0	0	0	0	4	41	176	152	147	168	134	110	82	67	5	0	0	0	0	0	0	1088
20	0	0	0	0	0	0	0	8	86	?	?	?	?	?	?	?	135	27	0	0	0	0	0	0	255 ?
21	0	0	0	0	0	0	0	9	112	222 ?	?	?	?	?	?	?	139 ?	16	0	0	0	0	0	0	499 ?
22	0	0	0	0	0	0	0	7	28	41	104	83	119	74	123	86	48	2	0	0	0	0	0	0	714
23	0	0	0	0	0	0	0	1	12	31	68	85	114	191	198	90	28	6	0	0	0	0	0	0	824
24	0	0	0	0	0	0	0	1	9	57	127	327 ?	152	158	159	103	59	11	0	0	0	0	0	0	1163
25	0	0	0	0	0	0	0	10	?	?	?	?	?	?	?	327 ?	?	153	17	0	0	0	0	0	508 ?
26	0	0	0	0	0	0	0	6	47	113	148	216	249	151	132	81	31	4	0	0	0	0	0	0	1178
27	0	0	0	0	0	0	0	2	14	64	223	357 ?	?	326 ?	?	?	164	31	0	0	0	0	0	0	1182 ?
28	0	0	0	0	0	0	0	12	?	?	?	?	?	?	?	215	80	16	0	0	0	0	0	0	323 ?
29	0	0	0	0	0	0	0	7	34	99	167	56	70	119	177	102	31	5	0	0	0	0	0	0	866
30	0	0	0	0	0	0	0	9	132	?	?	?	?	?	?	?	160 ?	34	0	0	0	0	0	0	336 ?
31	0	0	0	0	0	0	0	10	87	182	234 ?	339	230	196	156	127	77	13	0	0	0	0	0	0	1653
Avg	0	0	0	0	0	0	0	7	49	117	166	215	211	198	187	149	73	11	0	0	0	0	0	0	1030 ?
S D	0	0	0	0	0	0	0	4	33	59	62	98	93	82	63	62	43	9	0	0	0	0	0	0	462
S/A	0	0	0	0	0	0	0	0.65	0.68	0.51	0.37	0.45	0.44	0.41	0.34	0.42	0.58	0.77	0	0	0	0	0	0	0.45
Min	0	0	0	0	0	0	0	0	9	31	68	56	50	69	110	73	24	0	0	0	0	0	0	0	255
Max	0	0	0	0	0	0	0	19	132	222	325	363	373	343	343	270	164	34	0	0	0	0	0	0	1791
n	0	0	0	0	0	0	0	138	323	253	232	229	223	219	209	269	363	175	0	0	0	0	0	0	2643

Daylight Data Recovery: 0.0% missing; 0.0% untested; 28.0% exceed the 15% QC threshold -- 3672 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.