

**March 2010**

**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	10	?	124 ?	338	216	192	188	124	95	58	16	0	0	0	0	0	0	1362 ?
2	0	0	0	0	0	0	1	24	76	108	84	86	147	190	148	105	42	2 ?	0	0	0	0	0	0	1015
3	0	0	0	0	0	0	1	5	22 ?	?	?	?	?	141	143	129	57	11	2	0	0	0	0	0	511 ?
4	0	0	0	0	0	0	2	16	64	165	255	409	472	558	500	463	308	111	9	0	0	0	0	0	3332
5	0	0	0	0	0	0	4	107	309	465	623	728	767	738	638	483	300	108	9	0	0	0	0	0	5278
6	0	0	0	0	0	0	6	139	376	541	636	738	779	750	649	497	311	112	6	0	0	0	0	0	5538
7	0	0	0	0	0	0	4	130	361	485	583	670	666	685	527	487	254	100	9	0	0	0	0	0	4961
8	0	0	0	0	0	0	2	21	70	176	434	688	737	713	618	470	293	104	5	0	0	0	0	0	4332
9	0	0	0	0	0	0	7	102	287	469	616	689	673	650	514	358	199	99	12	0	0	0	0	0	4676
10	0	0	0	0	0	0	9	53	84	218	335	473	506	252	122	72	88	42	5	0	0	0	0	0	2258
11	0	0	0	0	0	0	7	96	227	496	571	353	267	156	99	67	39	16	4	0	0	0	0	0	2397
12	0	0	0	0	0	0	8	39	178	505	626	639	277	299	144	87	72	22	1	0	0	0	0	0	2898
13	0	0	0	0	0	0	4	36	78	96	139	188	190 ?	218	223	327	128	43	18	0	0	0	0	0	1687
14	0	0	0	0	0	0	4	27	108	269	211	274	324	250	214	194	63	16	2	0	0	0	0	0	1955
15	0	0	0	0	0	0	3	28	24 ?	48 ?	79	170	71	67	62	50	47	21	5	0	0	0	0	0	676
16	0	0	0	0	0	0	5	21	32	107	131	119	96	88	106	122	101	37	6	0	0	0	0	0	969
17	0	0	0	0	0	0	9	73	227	509	643	732	707	411	353	355	123	29	7	0	0	0	0	0	4178
18	0	0	0	0	0	0	9	63	190	431	653	686	391	546	584	546	244	109	14	0	0	0	0	0	4466
19	0	0	0	0	0	0	22	155	337	507	660	763	802	772	675	499 ?	339	142	15	0	0	0	0	0	5689
20	0	0	0	0	0	0	22	134	324	506	671	751	789	759	670	530	335	119	20	0	0	0	0	0	5628
21	0	0	0	0	0	0	13	90	299	438	480	342	469	231	205	99	43 ?	13 ?	1	0	0	0	0	0	2721 ?
22	0	0	0	0	0	0	19	176	331	455	561	504	620	718	507	173	152	60	1	0	0	0	0	0	4276
23	0	0	0	0	0	0	4	13 ?	36	70 ?	81	99	144	112	71	42	35	25	10	0	0	0	0	0	742 ?
24	0	0	0	0	0	0	18	122	317	463	678	785	820	768	700 ?	435	246	81	29	0	0	0	0	0	5463
25	0	0	0	0	0	0	12	74	168	140	168	179	117	221	172	67	73	36	7	0	0	0	0	0	1434
26	0	0	0	0	0	0	4	12 ?	33 ?	52 ?	52 ?	?	66	119	151	99	91	66	22	0	0	0	0	0	766 ?
27	0	0	0	0	0	0	48	205	413	569	724	818	844	767	670	554	365	165	26	0	0	0	0	0	6166
28	0	0	0	0	0	0	14	70	80	124	159	91 ?	140	125	364	193	114	75	5	0	0	0	0	0	1554
29	0	0	0	0	0	0	10	37	152	203	109 ?	145	282	392	281	200	88	29 ?	2	0	0	0	0	0	1930
30	0	0	0	0	0	0	3	6 ?	38 ?	185	541	798	862	832	730	571	376	172	26	0	0	0	0	0	5138 ?
31	0	0	0	0	0	0	38	195	397	562	730	832	859	818	703	547	348	184	33	0	0	0	0	0	6247
Avg	0	0	0	0	0	0	10	74	188	316	419	482	469	436	376	288	172	70	10	0	0	0	0	0	3234
S D	0	0	0	0	0	0	11	59	133	188	242	273	288	276	240	195	119	53	9	0	0	0	0	0	1923
S/A	0	0	0	0	0	0	1.08	0.81	0.71	0.59	0.58	0.57	0.61	0.63	0.64	0.68	0.69	0.76	0.92	0	0	0	0	0	0.59
Min	0	0	0	0	0	0	0	5	22	48	52	86	66	67	62	42	35	2	0	0	0	0	0	0	511
Max	0	0	0	0	0	0	48	205	413	569	730	832	862	832	730	571	376	184	33	0	0	0	0	0	6247
n	0	0	0	0	0	0	167	343	328	346	346	344	356	370	365	365	360	352	180	0	0	0	0	0	4224

Daylight Data Recovery: 0.0% missing; 0.0% untested; 4.8% exceed the 15% QC threshold -- 4439 total daylight measurements.

Instrument: Eppley PSP    Serial Number: 25821F3    Calibration Factor: 9.020 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.

**March 2010**

**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	42	65	?	?	*	*	*	?	*	*	*	*	*	0	0	0	0	0	*
2	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
3	0	0	0	0	0	0	?	38 ?	69 ?	?	?	?	?	*	?	*	?	?	?	0	0	0	0	0	107 *?
4	0	0	0	0	0	0	?	?	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
5	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
6	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
7	0	0	0	0	0	0	611 ?	413 ?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
8	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
9	0	0	0	0	0	0	?	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
10	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
11	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
12	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
13	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
14	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
15	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
16	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
17	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	?	?	*	*	*	0	0	0	0	0	*
20	0	0	0	0	0	0	*	*	*	?	?	?	*	*	*	*	?	?	?	0	0	0	0	0	*
21	0	0	0	0	0	0	*	*	*	?	?	?	?	?	?	*	*	*	*	0	0	0	0	0	*
22	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
23	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
24	0	0	0	0	0	0	*	*	*	*	*	*	*	?	?	761 ?	693 ?	?	*	*	0	0	0	0	*
25	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
26	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
27	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
28	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
29	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
30	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
31	0	0	0	0	0	0	*	*	*	*	*	*	*	*	441 ?	411 ?	501	?	?	?	0	0	0	0	1352 *?
Avg	0	0	0	0	0	0	326	172	69	N/A	N/A	N/A	N/A	441	586	597	N/A	N/A	N/A	0	0	0	0	0	N/A *?
S/D	0	0	0	0	0	0	402	209	0	0	0	0	0	0	248	136	0	0	0	0	0	0	0	0	0
S/A	0	0	0	0	0	0	1.23	1.22	0	0	0	0	0	0	0.42	0.23	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	42	38	69	N/A	N/A	N/A	N/A	441	411	501	N/A	N/A	N/A	0	0	0	0	0	N/A
Max	0	0	0	0	0	0	611	413	69	N/A	N/A	N/A	N/A	441	761	693	N/A	N/A	N/A	0	0	0	0	0	N/A
n	0	0	0	0	0	0	3	22	7	0	0	0	0	3	9	12	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 88.6% missing; 0.0% untested; 10.0% exceed the 15% QC threshold -- 4439 total daylight measurements.

Instrument: Eppley NIP    Serial Number: 17664E6    Calibration Factor: 8.480 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.

**March 2010**

**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	12	44	148	223 ?	242	215	211	139	106	65	17	0	0	0	0	0	0	1422
2	0	0	0	0	0	0	0	26	85	122	94	98	156	195	158	111	40	3 ?	0	0	0	0	0	0	1088
3	0	0	0	0	0	0	0	6	31	70	98	126	152	158	161	145	64	12	1	0	0	0	0	0	1024
4	0	0	0	0	0	0	1	17	71	185	284	375 ?	434 ?	463 ?	451 ?	?	?	83 ?	9	0	0	0	0	0	2372 ?
5	0	0	0	0	0	0	4	23 ?	?	?	?	?	?	?	?	?	?	99	9	0	0	0	0	0	134 ?
6	0	0	0	0	0	0	5	14 ?	?	?	?	?	?	?	?	?	?	95 ?	6	0	0	0	0	0	119 ?
7	0	0	0	0	0	0	4 ?	21 ?	?	?	?	?	?	?	443 ?	?	227 ?	107	9	0	0	0	0	0	810 ?
8	0	0	0	0	0	0	1	23	78	198	427 ?	?	?	?	?	?	?	114	6	0	0	0	0	0	848 ?
9	0	0	0	0	0	0	10 ?	?	351 ?	?	?	?	596 ?	?	482 ?	355 ?	224	107	13	0	0	0	0	0	2137 ?
10	0	0	0	0	0	0	11 ?	57	94	239	371	473 ?	553	282	134	80	100	47	5	0	0	0	0	0	2448
11	0	0	0	0	0	0	6	91	231	?	581 ?	366	302	168	109	74	44	18	4	0	0	0	0	0	1994 ?
12	0	0	0	0	0	0	10 ?	41	162	?	?	576 ?	318	311	165	99	81	24	1	0	0	0	0	0	1788 ?
13	0	0	0	0	0	0	3	39	86	108	154	209	171	247	251	292 ?	144	45	19	0	0	0	0	0	1769
14	0	0	0	0	0	0	4	30	122	228	237	310	328	283	242	222	72	17	1	0	0	0	0	0	2096
15	0	0	0	0	0	0	3	31	23	44	89	191	79	76	70	56	52	23	5	0	0	0	0	0	742
16	0	0	0	0	0	0	5	23	35	121	149	135	110	100	120	138	115	41	6	0	0	0	0	0	1097
17	0	0	0	0	0	0	12	80	249	?	?	?	622 ?	438	397	356 ?	141	33	8	0	0	0	0	0	2336 ?
18	0	0	0	0	0	0	10	70	212	376 ?	?	516 ?	412	420 ?	211 ?	321 ?	157 ?	94 ?	14	0	0	0	0	0	2813 ?
19	0	0	0	0	0	0	17	61 ?	68	95	115	121	113	108	100	87 ?	63	41	11	0	0	0	0	0	1001
20	0	0	0	0	0	0	16	46	70	86	92	126	130	111	110	112	83	61	18	0	0	0	0	0	1060
21	0	0	0	0	0	0	15	76	138	284	331	344	382	243	220	100	37 ?	11 ?	1	0	0	0	0	0	2181
22	0	0	0	0	0	0	12	40	140	113	141	346	314	291	273	177	146	63	1	0	0	0	0	0	2057
23	0	0	0	0	0	0	3	15	37	65	87	107	154	120	74	44	37	26	10	0	0	0	0	0	781
24	0	0	0	0	0	0	20	66	102	129	135	162	208	202	166 ?	274	202	87	31	0	0	0	0	0	1783
25	0	0	0	0	0	0	13	77	171	152	183	194	128	237	183	72	78	38	6	0	0	0	0	0	1532
26	0	0	0	0	0	0	3	13	31	51	47	44	69	128	163	106	97	68	21	0	0	0	0	0	842
27	0	0	0	0	0	0	26	72	94	103	116	128	157	252	289	509 ?	?	144 ?	27	0	0	0	0	0	1918 ?
28	0	0	0	0	0	0	14	74	86	135	175	88	153	137	306	206	122	65	5	0	0	0	0	0	1568
29	0	0	0	0	0	0	10	39	162	219	88	159	304	415	301	213	94	22	2	0	0	0	0	0	2028
30	0	0	0	0	0	0	2	12 ?	26	168	318	232	161	260	?	?	?	148 ?	28	0	0	0	0	0	1356 ?
31	0	0	0	0	0	0	21	51	79	124	106	99	100	351 ?	?	?	309 ?	132 ?	36	0	0	0	0	0	1407 ?
Avg	0	0	0	0	0	0	8	41	110	148	193	231	253	239	220	177	112	61	10	0	0	0	0	0	1502 ?
S D	0	0	0	0	0	0	7	25	78	78	131	145	160	111	118	119	69	42	10	0	0	0	0	0	678
S/A	0	0	0	0	0	0	0.8	0.61	0.71	0.53	0.68	0.63	0.63	0.47	0.54	0.67	0.62	0.69	0.97	0	0	0	0	0	0.45
Min	0	0	0	0	0	0	0	6	23	44	47	44	69	76	70	44	37	3	0	0	0	0	0	0	119
Max	0	0	0	0	0	0	26	91	351	376	581	576	622	463	482	509	309	148	36	0	0	0	0	0	2813
n	0	0	0	0	0	0	153	319	322	279	271	272	297	297	275	256	270	336	180	0	0	0	0	0	3534

Daylight Data Recovery: 0.0% missing; 0.0% untested; 20.4% exceed the 15% QC threshold -- 4439 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17860F3 Calibration Factor: 7.010 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.