

**October 2007**

**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	26	166	362	509	644	722	763	708	601	428	250	61	0	0	0	0	0	0	5240
2	0	0	0	0	0	0	25	156	346	517	650	726	741	690	580	425	238	53	0	0	0	0	0	0	5147
3	0	0	0	0	0	0	17	147	329	505	645	490	393	452	445	374	221	49	0	0	0	0	0	0	4068
4	0	0	0	0	0	0	13	47	149	177	122	248	318	196	169	188	106	34	0	0	0	0	0	0	1767
5	0	0	0	0	0	0	2	21	101	237	341	420	352	496	375	330	162	30	0	0	0	0	0	0	2869
6	0	0	0	0	0	0	16	135	323	492	627	625	773	604	615	261	148	47	0	0	0	0	0	0	4666
7	0	0	0	0	0	0	20	138	315	482	617	698	655	649	544	381	198	40	0	0	0	0	0	0	4737
8	0	0	0	0	0	0	19	120	223	432	613	641	632	576	488	398	193	47	0	0	0	0	0	0	4383
9	0	0	0	0	0	0	18	117	289	462	514	606	597	236	60 ?	29 ?	27 ?	20	0	0	0	0	0	0	2974 ?
10	0	0	0	0	0	0	17	117	354	505	631	705	712	655	551	250	175	42	0	0	0	0	0	0	4714
11	0	0	0	0	0	0	5	33	57	119	308	173	227	186	145	145	111	19	0	0	0	0	0	0	1527
12	0	0	0	0	0	0	5	36	82	127	185	156	166	174	113	90	55	12	0	0	0	0	0	0	1201
13	0	0	0	0	0	0	17	109	290	381	590	692	707	648	533	372	177	37	0	0	0	0	0	0	4554
14	0	0	0	0	0	0	17	135	312	462	587	660	629	601	431	253	149	25	0	0	0	0	0	0	4259
15	0	0	0	0	0	0	11	114	290	429	547	608	640	596	522	332	108	24	0	0	0	0	0	0	4222
16	0	0	0	0	0	0	11	88	252	417	576	515	423	367	401	245	29	13	0	0	0	0	0	0	3340
17	0	0	0	0	0	0	11	62	147	386	391	442	492	361	489	315	110	26	0	0	0	0	0	0	3232
18	0	0	0	0	0	0	10	97	234	111	131	362	644	592	385	253	156	28	0	0	0	0	0	0	3002
19	0	0	0	0	0	0	7	75	135	210	162	94	132	115	104	134	68	26	0	0	0	0	0	0	1263
20	0	0	0	0	0	0	7	58	178	416	470	641	660	614	501	342	147	24	0	0	0	0	0	0	4055
21	0	0	0	0	0	0	9	110	284	452	583	655	659	601	489	331	139	22	0	0	0	0	0	0	4334
22	0	0	0	0	0	0	6	52	150	155	153	201	305	465	260	92	42	11	0	0	0	0	0	0	1891
23	0	0	0	0	0	0	3	17	54	135	262	403	203	145	122	87	27	6	0	0	0	0	0	0	1465
24	0	0	0	0	0	0	1	7	34	43 ?	63 ?	65 ?	116	97	60 ?	39 ?	18 ?	6	0	0	0	0	0	0	550 ?
25	0	0	0	0	0	0	1	12	56 ?	123	126	69 ?	141	102 ?	154 ?	50 ?	86 ?	60	0	0	0	0	0	0	979 ?
26	0	0	0	0	0	0	3	8 ?	35	116	87	153 ?	?	104 ?	?	254 ?	78 ?	8	0	0	0	0	0	0	845 ?
27	0	0	0	0	0	0	0	3 ?	?	?	566 ?	625	642	582	461	322	56	4	0	0	0	0	0	0	3262 ?
28	0	0	0	0	0	0	2	8	69	161	264	514	654	576	464	307	121	12	0	0	0	0	0	0	3152
29	0	0	0	0	0	0	6	135 ?	279	433	562	629	633	571	458	298	116	11	0	0	0	0	0	0	4131
30	0	0	0	0	0	0	5	136 ?	312	430	556	626	632	571	455	294	112	10	0	0	0	0	0	0	4139
31	0	0	0	0	0	0	5	35 ?	291	426	549	613	622	568	461	298	114	9	0	0	0	0	0	0	3993
Avg	0	0	0	0	0	0	10	80	211	328	423	477	509	448	381	255	121	26	0	0	0	0	0	0	3225
S D	0	0	0	0	0	0	7	53	111	160	207	221	215	210	178	118	63	17	0	0	0	0	0	0	1418
S/A	0	0	0	0	0	0	0.72	0.66	0.53	0.49	0.49	0.46	0.42	0.47	0.47	0.46	0.53	0.64	5.57	0	0	0	0	0	0.44
Min	0	0	0	0	0	0	0	3	34	43	63	65	116	97	60	29	18	4	0	0	0	0	0	0	550
Max	0	0	0	0	0	0	26	166	362	517	650	726	773	708	615	428	250	61	0	0	0	0	0	0	5240
n	0	0	0	0	0	0	171	344	351	356	359	354	360	357	344	343	349	269	2	0	0	0	0	0	3959

Daylight Data Recovery: 0.0% missing; 0.0% untested; 4.9% exceed the 15% QC threshold -- 4162 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.

October 2007

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	*
2	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	*	*	*	*	*	*	*	*	*	*	*	241	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	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
12	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	*	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	?	?	130 ?	?	?	?	?	442 ?	?	?	455 ?	141 ?	0	0	0	0	0	0	1168 ?
26	0	0	0	0	0	0	?	757 ?	?	?	?	?	?	?	?	279 ?	786 ?	?	0	0	0	0	0	0	1823 ?
27	0	0	0	0	0	0	455 ?	125 ?	?	?	791 ?	973 ?	?	?	*	*	*	*	0	0	0	0	0	0	2344 *?
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	*
30	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	*
Avg	0	0	0	0	0	0	455	441	130	N/A	791	973	N/A	442	N/A	279	620	191	0	0	0	0	0	0	1495 *
SD	0	0	0	0	0	0	0	447	0	0	0	0	0	0	0	0	235	71	0	0	0	0	0	0	463
S/A	0	0	0	0	0	0	0	1.01	0	0	0	0	0	0	0	0	0.38	0.37	0	0	0	0	0	0	0.31
Min	0	0	0	0	0	0	455	125	130	N/A	791	973	N/A	442	N/A	279	455	141	0	0	0	0	0	0	1168
Max	0	0	0	0	0	0	455	757	130	N/A	791	973	N/A	442	N/A	279	786	241	0	0	0	0	0	0	1823
n	0	0	0	0	0	0	1	11	3	0	4	5	0	2	0	5	8	15	0	0	0	0	0	0	28

Daylight Data Recovery: 89.0% missing; 0.0% untested; 9.6% exceed the 15% QC threshold -- 4162 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.

**October 2007**

**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	13	41	65	90	110	95	78	76	74	61	45	19	0	0	0	0	0	0	768
2	0	0	0	0	0	0	14	40	62	77	85	89	84	82	73	62	45	18	0	0	0	0	0	0	730
3	0	0	0	0	0	0	13	41	54	61	79	189	218	216	197	131	58	18	0	0	0	0	0	0	1277
4	0	0	0	0	0	0	15	50	163	197	133	266	337	211	175	198	109	32	0	0	0	0	0	0	1887
5	0	0	0	0	0	0	2	21	105	247	318	394	314	356	221	118	61	18	0	0	0	0	0	0	2174
6	0	0	0	0	0	0	14	49	70	78	91	163	237	145	164	119	83	24	0	0	0	0	0	0	1238
7	0	0	0	0	0	0	17	52	52	62	75	90	93	81	65	56	41	13	0	0	0	0	0	0	696
8	0	0	0	0	0	0	17	60	144	183	227	282	195	197	228	226	149	42	0	0	0	0	0	0	1952
9	0	0	0	0	0	0	17	59	96	199	273	208	318	224	60 ?	26 ?	29	22	0	0	0	0	0	0	1533
10	0	0	0	0	0	0	10	44	55	65	69	73	72	69	83	94	44	14	0	0	0	0	0	0	692
11	0	0	0	0	0	0	4	34	59	125	232	182	228	193	153	139	112	19	0	0	0	0	0	0	1482
12	0	0	0	0	0	0	4	37	87	134	197	165	176	185	121	96	58	12	0	0	0	0	0	0	1272
13	0	0	0	0	0	0	13	77	138	148	83	69	71	68	60	48	35	13	0	0	0	0	0	0	823
14	0	0	0	0	0	0	17	101	234	190	91	91	110	80	106	136	80	16	0	0	0	0	0	0	1252
15	0	0	0	0	0	0	11	104 ?	?	340 ?	178	175	174	161	107	90	56	21	0	0	0	0	0	0	1416 ?
16	0	0	0	0	0	0	13	88	194 ?	330 ?	309	186	275	264	216	143	31	14	0	0	0	0	0	0	2064 ?
17	0	0	0	0	0	0	11	53	152	319 ?	359	377	288	302	197	152	63	20	0	0	0	0	0	0	2292
18	0	0	0	0	0	0	9	75	173 ?	118	139	286	119	141	162	130	62	15	0	0	0	0	0	0	1429
19	0	0	0	0	0	0	7	68	126	170	162	95	139	115	102	135	69	21	0	0	0	0	0	0	1208
20	0	0	0	0	0	0	6	55	101 ?	304 ?	288 ?	461 ?	181	63	53	42	27	7	0	0	0	0	0	0	1589 ?
21	0	0	0	0	0	0	11	63 ?	?	?	?	?	255 ?	51	41	33	21	5	0	0	0	0	0	0	481 ?
22	0	0	0	0	0	0	6	55	134	161	158	207	310	356	225	92	42	11	0	0	0	0	0	0	1757
23	0	0	0	0	0	0	3	18	55	139	271	352 ?	205	148	125	90	29	6	0	0	0	0	0	0	1440
24	0	0	0	0	0	0	0	8	35	41	53	46	124	103	49	38	17 ?	5	0	0	0	0	0	0	518
25	0	0	0	0	0	0	1	12	51	126	134	61	148	91	170	88	60 ?	?	0	0	0	0	0	0	942
26	0	0	0	0	0	0	3 ?	8	33	116	83	128	185	128	180	227 ?	61 ?	9	0	0	0	0	0	0	1160
27	0	0	0	0	0	0	0	4	66	235	221 ?	?	?	?	239 ?	89	47	4	0	0	0	0	0	0	906 ?
28	0	0	0	0	0	0	1	8	61	167	247	252 ?	?	?	334 ?	104	22	4	0	0	0	0	0	0	1200 ?
29	0	0	0	0	0	0	6 ?	12 ?	?	?	?	?	?	?	?	157 ?	24	2	0	0	0	0	0	0	201 ?
30	0	0	0	0	0	0	5 ?	11 ?	?	?	?	?	?	?	?	186 ?	47	2	0	0	0	0	0	0	251 ?
31	0	0	0	0	0	0	4 ?	23 ?	?	?	?	?	?	?	?	?	83	4	0	0	0	0	0	0	113 ?
Avg	0	0	0	0	0	0	9	44	99	164	173	192	190	158	142	110	55	14	0	0	0	0	0	0	1185 ?
S D	0	0	0	0	0	0	6	28	54	86	90	114	84	89	74	54	30	9	0	0	0	0	0	0	578
S/A	0	0	0	0	0	0	0.65	0.63	0.54	0.53	0.52	0.59	0.44	0.56	0.52	0.49	0.53	0.63	5.57	0	0	0	0	0	0.49
Min	0	0	0	0	0	0	0	4	33	41	53	46	71	51	41	26	17	2	0	0	0	0	0	0	113
Max	0	0	0	0	0	0	17	104	234	340	359	461	337	356	334	227	149	42	0	0	0	0	0	0	2292
n	0	0	0	0	0	0	160	327	290	294	306	293	309	311	318	335	360	262	2	0	0	0	0	0	3567

Daylight Data Recovery: 0.0% missing; 0.0% untested; 14.3% exceed the 15% QC threshold -- 4162 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.