

**September 2006**

**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	8	40	72	85	126	225	190	338	182	131	84	62	12	0	0	0	0	0	1554
2	0	0	0	0	0	3	25	68	131	194	225	228	304	258	282	288	150	61 ?	8	0	0	0	0	0	2225
3	0	0	0	0	0	2	15	77	263	362 ?	?	465 ?	?	415 ?	359 ?	274 ?	179 ?	86	29	0	0	0	0	0	2527 ?
4	0	0	0	0	0	0	8	26	67	228	470	522 ?	584 ?	534	504 ?	142 ?	110	33 ?	3	0	0	0	0	0	3231 ?
5	0	0	0	0	0	0	7	44 ?	69	155	187	200	185	142	130	163	108	30	10	0	0	0	0	0	1430
6	0	0	0	0	0	0	37	98	196	290 ?	330 ?	310 ?	333 ?	280 ?	?	?	?	95 ?	10	0	0	0	0	0	1978 ?
7	0	0	0	0	0	0	36	134 ?	?	390 ?	?	?	205 ?	121 ?	253 ?	328 ?	215 ?	75	18	0	0	0	0	0	1772 ?
8	0	0	0	0	0	0	31	141	?	?	248 ?	324 ?	279 ?	?	234 ?	?	?	67 ?	15	0	0	0	0	0	1339 ?
9	0	0	0	0	0	0	40	119 ?	?	?	?	416 ?	?	337 ?	280 ?	317 ?	233 ?	75	13	0	0	0	0	0	1828 ?
10	0	0	0	0	0	0	27	83	253	315	314 ?	?	444 ?	495 ?	?	318	278 ?	98	19	0	0	0	0	0	2642 ?
11	0	0	0	0	0	0	35	141 ?	?	?	?	?	?	?	367	228	141	75	13	0	0	0	0	0	1001 ?
12	0	0	0	0	0	0	46	117	109	189	396	287	387	494 ?	247	244	137	47	7	0	0	0	0	0	2707
13	0	0	0	0	0	0	7	25	83	111	201	200	264	145	112	60	118	83	26	0	0	0	0	0	1434
14	0	0	0	0	0	0	11	54	185 ?	306	352 ?	409 ?	307 ?	275 ?	352	174 ?	162	54 ?	12	0	0	0	0	0	2653 ?
15	0	0	0	0	0	0	7	102	106	110	158	246	341	262	165	101	94	42	13	0	0	0	0	0	1746
16	0	0	0	0	0	0	18	109	213 ?	?	?	241 ?	326 ?	281 ?	194 ?	167 ?	?	63 ?	13	0	0	0	0	0	1624 ?
17	0	0	0	0	0	0	39	?	?	?	?	?	?	?	?	?	?	58 ?	5	0	0	0	0	0	102 ?
18	0	0	0	0	0	0	31	?	?	?	?	?	?	?	?	?	?	45 ?	3	0	0	0	0	0	79 ?
19	0	0	0	0	0	0	10	30	219 ?	283 ?	334 ?	347 ?	?	?	?	?	?	39 ?	7	0	0	0	0	0	1269 ?
20	0	0	0	0	0	0	35	148 ?	193	236	291	439	425	352	332	210	92	39	9	0	0	0	0	0	2803
21	0	0	0	0	0	0	38	?	?	?	?	?	?	?	?	?	?	60	5	0	0	0	0	0	103 ?
22	0	0	0	0	0	0	35	100	169	326	354	236	302	70	206 ?	216	140	73	12	0	0	0	0	0	2238
23	0	0	0	0	0	0	7	31 ?	53 ?	82 ?	87 ?	178	443	434	312	204	138	72	4	0	0	0	0	0	2045 ?
24	0	0	0	0	0	0	36	133 ?	223	309	126	102	205	135	174	165	37 ?	19	6	0	0	0	0	0	1669 ?
25	0	0	0	0	0	0	4	19 ?	46	201	190	137	260	412	337	217 ?	?	43 ?	3	0	0	0	0	0	1868 ?
26	0	0	0	0	0	0	24	97 ?	?	?	287 ?	251	252 ?	281	256 ?	168 ?	106 ?	48	2	0	0	0	0	0	1772 ?
27	0	0	0	0	0	0	27	128	175 ?	264 ?	?	?	?	?	?	?	?	46 ?	2	0	0	0	0	0	642 ?
28	0	0	0	0	0	0	40	54	189	180	324	176	223	90 ?	51 ?	61 ?	74	25	4	0	0	0	0	0	1491 ?
29	0	0	0	0	0	0	11	89	210 ?	210	198 ?	205 ?	304 ?	287 ?	197 ?	179 ?	138 ?	50 ?	6	0	0	0	0	0	2084 ?
30	0	0	0	0	0	0	9	58	197	299 ?	393 ?	343 ?	435 ?	?	?	219 ?	57	14	0	0	0	0	0	0	2024 ?
Avg	0	0	0	0	0	0	23	84	155	233	266	282	318	293	251	199	133	56	10	0	0	0	0	0	1729 ?
S D	0	0	0	0	0	1	14	41	68	89	103	110	101	136	102	75	58	21	7	0	0	0	0	0	787
S/A	0	0	0	0	0	3.79	0.58	0.49	0.44	0.38	0.39	0.39	0.32	0.47	0.41	0.38	0.44	0.38	0.71	0	0	0	0	0	0.46
Min	0	0	0	0	0	0	4	19	46	82	87	102	185	70	51	60	37	14	0	0	0	0	0	0	79
Max	0	0	0	0	0	3	46	148	263	390	470	522	584	534	504	328	278	98	29	0	0	0	0	0	3231
n	0	0	0	0	0	4	319	265	228	214	180	192	194	191	190	200	205	289	168	0	0	0	0	0	2854

Daylight Data Recovery: 0.0% missing; 0.0% untested; 35.9% exceed the 15% QC threshold -- 4451 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.

September 2006

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	1	1	1	2	2	3	1	1	0	0	0	0	0	0	0	0	12
2	0	0	0	0	0	0	0	1	1	1	2	2	3	2	2	2	1	0	0	0	0	0	0	0	17
3	0	0	0	0	0	0	0	1	3	4?	?	5?	?	3?	2?	1?	0?	0	0	0	0	0	0	0	19?
4	0	0	0	0	0	0	0	0	0	2	4	5?	6?	5	4	1?	0	0	0	0	0	0	0	0	26?
5	0	0	0	0	0	0	0	0	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	7
6	0	0	0	0	0	0	0	0	2	3?	4?	2?	3?	3?	?	?	?	0?	0	0	0	0	0	0	18?
7	0	0	0	0	0	0	0	0?	?	3?	?	?	1?	0	1?	2?	0?	0	0	0	0	0	0	0	7?
8	0	0	0	0	0	0	0	0	?	?	3?	5?	2?	?	1?	?	?	0?	0	0	0	0	0	0	11?
9	0	0	0	0	0	0	0	0?	?	?	?	4?	?	3?	1?	3?	1?	0	0	0	0	0	0	0	13?
10	0	0	0	0	0	0	0	0	2	4	3?	?	6?	5?	?	1	1	0	0	0	0	0	0	0	22?
11	0	0	0	0	0	0	0	1?	?	?	?	?	?	?	2	1	1	0	0	0	0	0	0	0	6?
12	0	0	0	0	0	0	0	0	0	1	4	2	3	4?	1	2	0	0	0	0	0	0	0	0	19
13	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	6
14	0	0	0	0	0	0	0	0	1?	2	3?	5?	3?	2?	3	1?	0	0?	0	0	0	0	0	0	22?
15	0	0	0	0	0	0	0	1	1	1	2	2	3	2	1	0	1	0	0	0	0	0	0	0	13
16	0	0	0	0	0	0	0	1	3?	?	?	3?	4?	2?	1?	1?	?	0?	0	0	0	0	0	0	14?
17	0	0	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	0	0?
19	0	0	0	0	0	0	0	0	1?	2?	3?	4?	?	?	?	?	?	0?	0	0	0	0	0	0	10?
20	0	0	0	0	0	0	0	0?	1	2	2	4	3	2	2	1	0	0	0	0	0	0	0	0	17
21	0	0	0	0	0	0	0	?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0?
22	0	0	0	0	0	0	0	1	2	3	3	1	3	0	1	2	1	0	0	0	0	0	0	0	15
23	0	0	0	0	0	0	0	0	0	0	0	2	5	4	3	1	1	0	0	0	0	0	0	0	15
24	0	0	0	0	0	0	0	1?	1	2	1	0	2	1	1	1	0	0	0	0	0	0	0	0	9
25	0	0	0	0	0	0	0	0	0	2	2	1	2	4	3	1?	?	0?	0	0	0	0	0	0	14?
26	0	0	0	0	0	0	0	0?	?	?	0?	2	4?	2	3?	0?	0?	0	0	0	0	0	0	0	12?
27	0	0	0	0	0	0	0	1	2?	3?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	5?
28	0	0	0	0	0	0	0	0	1	1	1	2	1	2	0	0	0	0	0	0	0	0	0	0	9
29	0	0	0	0	0	0	0	0	1?	2	2?	3?	3?	2?	1?	1?	0?	0?	0	0	0	0	0	0	13?
30	0	0	0	0	0	0	0	0	1	2?	3?	3?	4?	?	?	1?	0	0	0	0	0	0	0	0	15?
Avg	0	0	0	0	0	0	0	0	1	2	2	3	3	2	2	1	0	0	0	0	0	0	0	0	12?
SD	0	0	0	0	0	0	0	0	1	1	1	2	1	2	1	1	0	0	0	0	0	0	0	0	7
StA	0	0	0	0	0	0	1.5	0.9	0.76	0.56	0.53	0.59	0.49	0.69	0.72	0.62	0.78	1.51	0	0	0	0	0	0	0.54
Min	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Max	0	0	0	0	0	0	0	1	3	4	4	5	6	5	4	3	1	0	0	0	0	0	0	0	26
n	0	0	0	0	0	4	319	290	237	222	192	196	197	204	207	211	217	301	168	0	0	0	0	0	2982

Daylight Data Recovery: 0.0% missing; 0.0% untested; 33.0% exceed the 15% QC threshold -- 4451 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.

**September 2006**

**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	8	42	78	92	137	245	205	362	196	142	90	66	12	0	0	0	0	0	1675
2	0	0	0	0	0	?	27	73	142	210	244	247	328	274	303	297	159	43	8	0	0	0	0	0	2354
3	0	0	0	0	0	?	15	83	267	326 ?	?	386 ?	?	321 ?	257 ?	235 ?	140 ?	82	27	0	0	0	0	0	2139 ?
4	0	0	0	0	0	0	8	28	72	243	466	464 ?	533 ?	495	463	196 ?	117	30	3	0	0	0	0	0	3117 ?
5	0	0	0	0	0	0	8	34	75	167	201	216	201	153	140	175	115	32	10	0	0	0	0	0	1524
6	0	0	0	0	0	0	35	100	196	272 ?	272 ?	312 ?	281 ?	274 ?	?	?	?	88 ?	11	0	0	0	0	0	1841 ?
7	0	0	0	0	0	0	36	105 ?	?	332 ?	?	?	193 ?	109	254 ?	264 ?	179 ?	78	18	0	0	0	0	0	1567 ?
8	0	0	0	0	0	0	34	104	?	?	205 ?	253 ?	258 ?	?	191 ?	?	?	46 ?	14	0	0	0	0	0	1106 ?
9	0	0	0	0	0	0	38	97 ?	?	?	?	282 ?	?	241 ?	255 ?	259 ?	179 ?	75	14	0	0	0	0	0	1440 ?
10	0	0	0	0	0	0	30	87	249	312	299 ?	?	369 ?	363 ?	?	263	232	98	20	0	0	0	0	0	2321 ?
11	0	0	0	0	0	0	31	108 ?	?	?	?	?	?	?	347	234	149	80	13	0	0	0	0	0	962 ?
12	0	0	0	0	0	0	44	115	116	204	385	309	395	423 ?	253	253	149	50	7	0	0	0	0	0	2703
13	0	0	0	0	0	0	6	26	83	120	222	222	290	159	123	65	126	85	25	0	0	0	0	0	1554
14	0	0	0	0	0	0	11	56	165 ?	273	287 ?	318 ?	294 ?	286 ?	326	173 ?	139	51 ?	13	0	0	0	0	0	2393 ?
15	0	0	0	0	0	0	7	103	114	118	159	263	356	273	178	109	101	44	14	0	0	0	0	0	1838
16	0	0	0	0	0	0	20	112	209 ?	?	?	247 ?	315 ?	266 ?	185 ?	166 ?	?	44 ?	14	0	0	0	0	0	1579 ?
17	0	0	0	0	0	0	21	?	?	?	?	?	?	?	?	?	?	25 ?	6	0	0	0	0	0	51 ?
18	0	0	0	0	0	0	21	?	?	?	?	?	?	?	?	?	?	30 ?	4	0	0	0	0	0	54 ?
19	0	0	0	0	0	0	10	30	223 ?	262 ?	325 ?	340 ?	?	?	?	?	?	23 ?	8	0	0	0	0	0	1221 ?
20	0	0	0	0	0	0	23	118 ?	201	240	292	413	377	328	313	223	98	42	9	0	0	0	0	0	2676
21	0	0	0	0	0	0	20	?	?	?	?	?	?	?	?	?	?	45	5	0	0	0	0	0	71 ?
22	0	0	0	0	0	0	40	100	176	310	343	246	299	73	176	242	149	63	12	0	0	0	0	0	2227
23	0	0	0	0	0	0	7	28	46 ?	67	77 ?	193	415	380	279	181	141	67	4	0	0	0	0	0	1886
24	0	0	0	0	0	0	34	102 ?	207	300	129	106	222	147	189	178	33	20	5	0	0	0	0	0	1671
25	0	0	0	0	0	0	4	16	43	216	203	148	274	386	326	203 ?	?	20 ?	3	0	0	0	0	0	1841 ?
26	0	0	0	0	0	0	27	78 ?	?	?	222 ?	209	266 ?	248	209 ?	167 ?	107 ?	28	2	0	0	0	0	0	1565 ?
27	0	0	0	0	0	0	26	116	131 ?	200 ?	?	?	?	?	?	?	?	24 ?	2	0	0	0	0	0	499 ?
28	0	0	0	0	0	0	46	49	194	189	319	190	220	89 ?	41 ?	55 ?	75	26	4	0	0	0	0	0	1497 ?
29	0	0	0	0	0	0	12	92	182 ?	209	180 ?	208 ?	269 ?	238 ?	205 ?	171 ?	122 ?	20 ?	6	0	0	0	0	0	1916 ?
30	0	0	0	0	0	0	9	61	176	245 ?	356 ?	339 ?	343 ?	?	?	205 ?	58	15	0	0	0	0	0	0	1807 ?
Avg	0	0	0	0	0	0	22	76	152	223	253	268	305	268	237	194	127	48	10	0	0	0	0	0	1637 ?
S D	0	0	0	0	0	0	13	34	66	76	95	84	82	112	90	62	44	24	7	0	0	0	0	0	757
S/A	0	0	0	0	0	0	0.58	0.44	0.43	0.34	0.37	0.31	0.27	0.42	0.38	0.32	0.35	0.51	0.68	0	0	0	0	0	0.46
Min	0	0	0	0	0	0	4	16	43	67	77	106	193	73	41	55	33	15	0	0	0	0	0	0	51
Max	0	0	0	0	0	0	46	118	267	332	466	464	533	495	463	297	232	98	27	0	0	0	0	0	3117
n	0	0	0	0	0	2	308	288	234	220	186	196	196	198	201	207	216	299	168	0	0	0	0	0	2936

Daylight Data Recovery: 0.0% missing; 0.0% untested; 34.0% exceed the 15% QC threshold -- 4451 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.