

October 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	20	116 ?	210	?	?	?	?	?	?	?	?	39 ?	0	0	0	0	0	0	386 ?
2	0	0	0	0	0	0	28	89 ?	?	?	?	?	?	?	?	?	?	35	0	0	0	0	0	0	152 ?
3	0	0	0	0	0	0	23	71 ?	?	?	?	263 ?	?	?	?	?	?	29	0	0	0	0	0	0	386 ?
4	0	0	0	0	0	0	27	104 ?	?	?	?	402 ?	336 ?	?	?	?	?	37	0	0	0	0	0	0	906 ?
5	0	0	0	0	0	0	6	83	?	?	?	?	?	?	182 ?	90	38 ?	4	0	0	0	0	0	0	403 ?
6	0	0	0	0	0	0	2	4 ?	49	65	72	64	70	89	61	31 ?	40	5	0	0	0	0	0	0	552 ?
7	0	0	0	0	0	0	3	23	48	62	95	123	159	97	46 ?	?	25 ?	5	0	0	0	0	0	0	687 ?
8	0	0	0	0	0	0	7	29	41	111	160	185	169	294	225	197	97	23	0	0	0	0	0	0	1538
9	0	0	0	0	0	0	15	103	?	?	?	?	?	?	?	?	?	37	0	0	0	0	0	0	155 ?
10	0	0	0	0	0	0	18	81 ?	?	?	?	?	?	?	110 ?	174 ?	148 ?	29	0	0	0	0	0	0	561 ?
11	0	0	0	0	0	0	7	30	72	86	54	84	79	109	138	164 ?	40 ?	10	0	0	0	0	0	0	873 ?
12	0	0	0	0	0	0	12	77	38	166 ?	269 ?	265 ?	327 ?	306 ?	190 ?	80	51	24	0	0	0	0	0	0	1804 ?
13	0	0	0	0	0	0	17	?	?	?	?	?	?	?	?	?	?	42	0	0	0	0	0	0	59 ?
14	0	0	0	0	0	0	14	90 ?	?	?	?	?	?	?	?	?	?	36	0	0	0	0	0	0	139 ?
15	0	0	0	0	0	0	22	148 ?	?	?	?	?	?	?	?	?	104	23	0	0	0	0	0	0	297 ?
16	0	0	0	0	0	0	6	34	125	289	304	219	290	260	127	59	4 ?	0	0	0	0	0	0	0	1717
17	0	0	0	0	0	0	3	23	126	232	200	197	231	363 ?	285	155	28	10	0	0	0	0	0	0	1852
18	0	0	0	0	0	0	8	49	116	225	?	?	?	?	?	?	83 ?	24	0	0	0	0	0	0	506 ?
19	0	0	0	0	0	0	8	38	155	176	183	230	163	136	124	94	46	13	0	0	0	0	0	0	1366
20	0	0	0	0	0	0	2	9 ?	46	115	169	105	247	218	217	98	66	10	0	0	0	0	0	0	1302
21	0	0	0	0	0	0	9	72	?	?	?	?	?	?	?	?	82 ?	24	0	0	0	0	0	0	187 ?
22	0	0	0	0	0	0	4	34	123	263 ?	231 ?	234	176 ?	143 ?	197 ?	82 ?	53	5	0	0	0	0	0	0	1547 ?
23	0	0	0	0	0	0	1	10	94	97	149	295	312 ?	275 ?	134	67	30	5	0	0	0	0	0	0	1470
24	0	0	0	0	0	0	3	31	95	168	238	251	255	250	242 ?	156	70	16	0	0	0	0	0	0	1775
25	0	0	0	0	0	0	3	32 ?	?	?	?	?	?	?	?	?	75 ?	14	0	0	0	0	0	0	124 ?
26	0	0	0	0	0	0	4	21	70	120	168	268	200	109	130	72	32	5	0	0	0	0	0	0	1199
27	0	0	0	0	0	0	2	7 ?	33	47	69	61	60 ?	?	43	37	25	6	0	0	0	0	0	0	389 ?
28	0	0	0	0	0	0	2	10	30 ?	35 ?	60 ?	94	76	178	228 ?	?	79 ?	18	0	0	0	0	0	0	810 ?
29	0	0	0	0	0	0	6	69	112	223 ?	?	?	?	?	?	?	68 ?	14	0	0	0	0	0	0	493 ?
30	0	0	0	0	0	0	6	66 ?	?	?	?	?	?	?	?	156 ?	83 ?	6	0	0	0	0	0	0	318 ?
31	0	0	0	0	0	0	7	40	53 ?	?	?	?	?	?	?	?	74 ?	9	0	0	0	0	0	0	183 ?
Avg	0	0	0	0	0	0	10	53	86	146	162	197	197	202	158	107	60	18	0	0	0	0	0	0	779 ?
S D	0	0	0	0	0	0	8	37	49	79	79	95	94	90	71	52	32	13	0	0	0	0	0	0	597
S/A	0	0	0	0	0	0	0.83	0.7	0.57	0.54	0.49	0.49	0.48	0.45	0.45	0.49	0.53	0.7	0	0	0	0	0	0	0.77
Min	0	0	0	0	0	0	1	4	30	35	54	61	60	89	43	31	4	0	0	0	0	0	0	0	59
Max	0	0	0	0	0	0	28	148	210	289	304	402	336	363	285	197	148	42	0	0	0	0	0	0	1852
n	0	0	0	0	0	0	168	279	210	178	157	179	153	145	159	155	200	255	2	0	0	0	0	0	2249

Daylight Data Recovery: 0.0% missing; 0.0% untested; 45.9% exceed the 15% QC threshold -- 4159 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.

October 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	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	1?
2	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	0?
3	0	0	0	0	0	0	0	2?	2?	?	?	2?	?	?	?	?	?	0	0	0	0	0	0	0	0	6?
4	0	0	0	0	0	0	0	0?	?	?	?	5?	5?	?	?	?	?	0	0	0	0	0	0	0	0	10?
5	0	0	0	0	0	0	0	1	?	?	?	?	?	?	3?	0	0	0	0	0	0	0	0	0	0	4?
6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
8	0	0	0	0	0	0	0	0	0	0	1	2	2	3	1	1	1	0	0	0	0	0	0	0	0	12
9	0	0	0	0	0	0	0	1	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	1?
10	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	3?	0?	0?	0	0	0	0	0	0	0	0	4?
11	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0?	0?	0	0	0	0	0	0	0	0	4?
12	0	0	0	0	0	0	0	0	0	1?	1?	2?	3?	2?	1?	0	0	0	0	0	0	0	0	0	0	11?
13	0	0	0	0	0	0	0	0?	1?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	1?
14	0	0	0	0	0	0	0	0	1?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	2?
15	0	0	0	0	0	0	0	2?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	0	2?
16	0	0	0	0	0	0	0	0	1	3	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	12
17	0	0	0	0	0	0	0	0	1	2	1	1	1	3?	2	1	0	0	0	0	0	0	0	0	0	12
18	0	0	0	0	0	0	0	1	1	3	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	5?
19	0	0	0	0	0	0	0	0	1	3	3	3	1	1	1	0	0	0	0	0	0	0	0	0	0	14
20	0	0	0	0	0	0	0	0	0	1	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	6
21	0	0	0	0	0	0	0	0	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	0?
22	0	0	0	0	0	0	0	0	1	2?	2?	2	1?	1?	1?	0?	0	0	0	0	0	0	0	0	0	9?
23	0	0	0	0	0	0	0	0	0	0	1	2	3?	2	0	0	0	0	0	0	0	0	0	0	0	8
24	0	0	0	0	0	0	0	0	0	1	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	10
25	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	0?
26	0	0	0	0	0	0	0	0	1	1	2	4	2	0	1	0	0	0	0	0	0	0	0	0	0	11
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1?	?	0?	0	0	0	0	0	0	0	0	3?
29	0	0	0	0	0	0	0	0	1	1?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	2?
30	0	0	0	0	0	0	1	1?	?	?	?	?	?	?	?	0?	0?	0	0	0	0	0	0	0	0	3?
31	0	0	0	0	0	0	0	1	1?	?	?	?	?	?	2?	?	0?	0	0	0	0	0	0	0	0	4?
Avg	0	0	0	0	0	0	0	0	1	1	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	5?
SD	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4
S/A	0	0	0	0	0	0	3.08	1.32	0.88	0.92	0.74	0.79	0.77	0.77	0.81	1.46	2.42	0	0	0	0	0	0	0	0	0.82
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	0	0	0	0	0	0	1	2	2	3	3	5	5	3	3	1	1	0	0	0	0	0	0	0	0	14
n	0	0	0	0	0	0	169	308	224	187	169	179	160	161	176	179	228	259	2	0	0	0	0	0	0	2411

Daylight Data Recovery: 0.0% missing; 0.0% untested; 42.0% exceed the 15% QC threshold -- 4159 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 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	19	104 ?	189 ?	?	?	?	?	?	?	?	?	13 ?	0	0	0	0	0	0	325 ?
2	0	0	0	0	0	0	17	31 ?	?	?	?	?	?	?	?	?	?	9	0	0	0	0	0	0	57 ?
3	0	0	0	0	0	0	17	43 ?	57 ?	?	?	227 ?	?	?	?	?	?	14	0	0	0	0	0	0	358 ?
4	0	0	0	0	0	0	26	75 ?	?	?	?	333 ?	257 ?	?	?	?	?	21	0	0	0	0	0	0	712 ?
5	0	0	0	0	0	0	6	78	?	?	?	?	?	?	197 ?	99	30 ?	4	0	0	0	0	0	0	415 ?
6	0	0	0	0	0	0	1	8 ?	49	70	77	68	75	96	61	30	38	5	0	0	0	0	0	0	577
7	0	0	0	0	0	0	2	24	48	67	103	132	172	104	40	28 ?	23 ?	5	0	0	0	0	0	0	749
8	0	0	0	0	0	0	8	31	44	121	173	199	179	291	230	195	101	24	0	0	0	0	0	0	1596
9	0	0	0	0	0	0	17	90	?	?	?	?	?	?	?	?	?	10	0	0	0	0	0	0	117 ?
10	0	0	0	0	0	0	23 ?	60 ?	?	?	?	?	?	?	77 ?	139 ?	128 ?	30	0	0	0	0	0	0	457 ?
11	0	0	0	0	0	0	7	33	77	94	56	93	85	116	148	132 ?	40 ?	10	0	0	0	0	0	0	892 ?
12	0	0	0	0	0	0	15	63	39	135 ?	201 ?	227 ?	274 ?	275 ?	193 ?	86	53	24	0	0	0	0	0	0	1584 ?
13	0	0	0	0	0	0	10	32 ?	54 ?	?	?	?	?	?	?	?	?	15	0	0	0	0	0	0	111 ?
14	0	0	0	0	0	0	9	26 ?	?	?	?	?	?	?	?	?	?	11	0	0	0	0	0	0	46 ?
15	0	0	0	0	0	0	13	37 ?	?	?	?	?	?	?	?	?	82	23	0	0	0	0	0	0	155 ?
16	0	0	0	0	0	0	5	36	134	275	283	239	310	280	138	58	14	0	0	0	0	0	0	0	1773
17	0	0	0	0	0	0	3	22	129	230	212	206	232	328 ?	286	139	31	10	0	0	0	0	0	0	1828
18	0	0	0	0	0	0	10	52	124	224	?	?	?	?	?	?	20 ?	9	0	0	0	0	0	0	438 ?
19	0	0	0	0	0	0	7	41	153	186	196	247	177	147	134	102	49	14	0	0	0	0	0	0	1454
20	0	0	0	0	0	0	1	10	49	123	176	112	246	219	214	105	69	10	0	0	0	0	0	0	1334
21	0	0	0	0	0	0	10	67	?	?	?	?	?	?	?	?	21 ?	9	0	0	0	0	0	0	106 ?
22	0	0	0	0	0	0	4	35	130	242 ?	242 ?	242	174 ?	128 ?	166 ?	85 ?	46	6	0	0	0	0	0	0	1500 ?
23	0	0	0	0	0	0	1	10	96	103	158	303	270 ?	266	144	71	31	4	0	0	0	0	0	0	1458
24	0	0	0	0	0	0	3	33	100	176	239	247	259	253	207	152	71	16	0	0	0	0	0	0	1755
25	0	0	0	0	0	0	2	25 ?	?	?	?	?	?	?	?	?	21 ?	6	0	0	0	0	0	0	55 ?
26	0	0	0	0	0	0	4 ?	22	75	128	178	276	216	116	139	77	34	5	0	0	0	0	0	0	1269
27	0	0	0	0	0	0	1	8	34	49	74	65	55 ?	29 ?	42	37	25	6	0	0	0	0	0	0	426
28	0	0	0	0	0	0	2	10	29	30	40	100	81	175	182 ?	?	33 ?	10	0	0	0	0	0	0	691 ?
29	0	0	0	0	0	0	8 ?	48	116	204 ?	?	?	?	?	?	?	20 ?	7	0	0	0	0	0	0	404 ?
30	0	0	0	0	0	0	8 ?	23 ?	?	?	?	?	?	?	?	?	118 ?	53 ?	6	0	0	0	0	0	207 ?
31	0	0	0	0	0	0	14 ?	32	34 ?	?	?	?	?	?	148 ?	?	42 ?	9	0	0	0	0	0	0	280 ?
Avg	0	0	0	0	0	0	9	39	84	145	161	195	191	188	153	97	45	11	0	0	0	0	0	0	746 ?
S D	0	0	0	0	0	0	7	24	46	73	74	84	81	90	66	46	28	7	0	0	0	0	0	0	613
S/A	0	0	0	0	0	0	0.77	0.63	0.55	0.51	0.46	0.43	0.42	0.48	0.43	0.47	0.62	0.63	0	0	0	0	0	0	0.82
Min	0	0	0	0	0	0	1	8	29	30	40	65	55	29	40	28	14	0	0	0	0	0	0	0	46
Max	0	0	0	0	0	0	26	104	189	275	283	333	310	328	286	195	128	30	0	0	0	0	0	0	1828
n	0	0	0	0	0	0	152	305	223	187	169	179	156	154	176	173	220	255	2	0	0	0	0	0	2361

Daylight Data Recovery: 0.0% missing; 0.0% untested; 43.2% exceed the 15% QC threshold -- 4159 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.