

October 2005

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	27	95	208 ?	?	?	?	249 ?	262 ?	278 ?	236 ?	160 ?	38	0	0	0	0	0	0	1551 ?
2	0	0	0	0	0	0	24	87 ?	?	?	?	?	?	?	?	?	?	44	0	0	0	0	0	0	155 ?
3	0	0	0	0	0	0	17	72 ?	?	?	?	?	?	?	?	?	?	26	0	0	0	0	0	0	115 ?
4	0	0	0	0	0	0	22	97 ?	?	?	?	?	?	?	?	?	?	37	0	0	0	0	0	0	156 ?
5	0	0	0	0	0	0	14	82	181	205	209	242	184	244	241	226	122 ?	40	0	0	0	0	0	0	1991
6	0	0	0	0	0	0	7	42	108	285	194	331	286	205	146	97	27 ?	6	0	0	0	0	0	0	1734
7	0	0	0	0	0	0	8	46	82	141	154	199	178	151	130	67 ?	28 ?	6	0	0	0	0	0	0	1190 ?
8	0	0	0	0	0	0	4	29	71	84	88	82	99	102	72	36 ?	?	4	0	0	0	0	0	0	672 ?
9	0	0	0	0	0	0	8	34	92	256	353	404 ?	428 ?	?	?	321 ?	117	44	0	0	0	0	0	0	2058 ?
10	0	0	0	0	0	0	10	56	102	150 ?	299 ?	245	386 ?	350	268 ?	238	133	36	0	0	0	0	0	0	2272 ?
11	0	0	0	0	0	0	5	29	64	162	254	226	164	280	215	170	120 ?	28	0	0	0	0	0	0	1717
12	0	0	0	0	0	0	10	65	160	307	318	299	336	232	252 ?	205 ?	104	20	0	0	0	0	0	0	2307
13	0	0	0	0	0	0	5	19	50	181	209	262	294 ?	334 ?	281	138	46	10	0	0	0	0	0	0	1829
14	0	0	0	0	0	0	5	37	72	126	90	100	184	234	174	131	60	11	0	0	0	0	0	0	1224
15	0	0	0	0	0	0	10	74 ?	?	?	?	?	?	?	?	?	99 ?	32	0	0	0	0	0	0	216 ?
16	0	0	0	0	0	0	13	83 ?	?	?	?	?	?	?	?	?	100 ?	31	0	0	0	0	0	0	227 ?
17	0	0	0	0	0	0	7	41	99 ?	?	?	?	?	?	?	?	89 ?	27	0	0	0	0	0	0	263 ?
18	0	0	0	0	0	0	9	48	120	214	329	?	352 ?	342 ?	295	212 ?	76	10	0	0	0	0	0	0	2007 ?
19	0	0	0	0	0	0	11	61 ?	?	?	?	?	?	?	?	?	75 ?	39	0	0	0	0	0	0	186 ?
20	0	0	0	0	0	0	12	63 ?	?	?	?	320 ?	303	365 ?	168 ?	117 ?	66 ?	15	0	0	0	0	0	0	1428 ?
21	0	0	0	0	0	0	7	72	132 ?	273 ?	272 ?	321 ?	313 ?	255 ?	295	167	77	12	0	0	0	0	0	0	2196 ?
22	0	0	0	0	0	0	1	3 ?	55 ?	48	55 ?	92 ?	?	47 ?	44 ?	38 ?	30	11	0	0	0	0	0	0	422 ?
23	0	0	0	0	0	0	7	54 ?	?	?	?	?	429 ?	?	?	130 ?	64 ?	12	0	0	0	0	0	0	696 ?
24	0	0	0	0	0	0	0	5 ?	35 ?	67	91	87	163	144	88	141 ?	63	18	0	0	0	0	0	0	903 ?
25	0	0	0	0	0	0	3	19	41	54 ?	94	198	119	102	78	63	35	9	0	0	0	0	0	0	814
26	0	0	0	0	0	0	1	25	36 ?	139	207 ?	178	267	242	216	155 ?	77 ?	13	0	0	0	0	0	0	1555 ?
27	0	0	0	0	0	0	5	100 ?	?	?	?	?	?	?	?	88 ?	68 ?	6	0	0	0	0	0	0	267 ?
28	0	0	0	0	0	0	5	42 ?	102 ?	137 ?	201 ?	236	264 ?	212 ?	158	147	35 ?	10	0	0	0	0	0	0	1547 ?
29	0	0	0	0	0	0	5	95 ?	?	?	245 ?	?	?	?	?	?	75 ?	14	0	0	0	0	0	0	433 ?
30	0	0	0	0	0	0	3	106 ?	?	?	?	?	?	?	?	?	72 ?	8	0	0	0	0	0	0	190 ?
31	0	0	0	0	0	0	7	75 ?	?	?	?	?	?	?	?	?	64 ?	7	0	0	0	0	0	0	152 ?
Avg	0	0	0	0	0	0	9	57	95	166	203	225	263	228	189	149	77	20	0	0	0	0	0	0	1048 ?
S/D	0	0	0	0	0	0	6	29	49	81	92	95	99	91	83	73	34	13	0	0	0	0	0	0	778
S/A	0	0	0	0	0	0	0.74	0.51	0.51	0.49	0.45	0.42	0.38	0.4	0.44	0.49	0.44	0.65	0	0	0	0	0	0	0.74
Min	0	0	0	0	0	0	0	3	35	48	55	82	99	47	44	36	27	4	0	0	0	0	0	0	115
Max	0	0	0	0	0	0	27	106	208	307	353	404	429	365	295	321	160	44	0	0	0	0	0	0	2307
n	0	0	0	0	0	0	166	284	185	174	182	178	188	180	186	163	217	257	2	0	0	0	0	0	2366

Daylight Data Recovery: 0.0% missing; 43.0% exceed the 15% QC threshold -- 4153 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 2005

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	1	2?	?	?	?	3?	3?	3?	2?	0?	0	0	0	0	0	0	0	14 ?
2	0	0	0	0	0	0	0	1?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	2 ?
3	0	0	0	0	0	0	0	1?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	1 ?
4	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0 ?
5	0	0	0	0	0	0	0	1	1	1	2	2	1	2	2	1	0?	0	0	0	0	0	0	0	13
6	0	0	0	0	0	0	0	0	1	2	1	2	2	1	1	0	0	0	0	0	0	0	0	0	10
7	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
9	0	0	0	0	0	0	0	0	0	2	3	4?	7?	?	?	1?	0	0	0	0	0	0	0	0	17 ?
10	0	0	0	0	0	0	0	0	1	2?	3?	2	4?	3	2?	1	0	0	0	0	0	0	0	0	18 ?
11	0	0	0	0	0	0	0	0	0	1	2	2	1	3	2	1	0?	0	0	0	0	0	0	0	13
12	0	0	0	0	0	0	0	0	1	3	2	3	3	2	3	1?	0	0	0	0	0	0	0	0	19
13	0	0	0	0	0	0	0	0	1	2	2	3	3?	4?	2	1	0	0	0	0	0	0	0	0	17
14	0	0	0	0	0	0	0	0	1	1	0	1	2	2	1	1	0	0	0	0	0	0	0	0	8
15	0	0	0	0	0	0	0	1?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	1 ?
16	0	0	0	0	0	0	0	1?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	1 ?
17	0	0	0	0	0	0	0	1	2?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	3 ?
18	0	0	0	0	0	0	0	0	1	2	3	?	4?	3	2	1?	0	0	0	0	0	0	0	0	15 ?
19	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0 ?
20	0	0	0	0	0	0	0	1?	?	?	?	2?	3	3?	1?	0?	0	0	0	0	0	0	0	0	11 ?
21	0	0	0	0	0	0	0	1	2?	1?	3?	3?	3?	2?	3	1	0	0	0	0	0	0	0	0	19 ?
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23	0	0	0	0	0	0	0	0?	?	?	?	?	5	?	?	0?	0?	0	0	0	0	0	0	0	5 ?
24	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1?	0	0	0	0	0	0	0	0	3
25	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
26	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1	1?	0?	0	0	0	0	0	0	0	9
27	0	0	0	0	0	0	0	0?	3?	?	?	?	?	?	?	0?	0?	0	0	0	0	0	0	0	3 ?
28	0	0	0	0	0	0	0	1	1?	2?	1?	2	3?	2?	1	1	0?	0	0	0	0	0	0	0	13 ?
29	0	0	0	0	0	0	0	0?	3?	?	2?	?	?	?	?	?	0?	0	0	0	0	0	0	0	4 ?
30	0	0	0	0	0	0	0	0?	3?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	3 ?
31	0	0	0	0	0	0	0	1?	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	1 ?
Avg	0	0	0	0	0	0	0	0	1	1	1	2	2	2	1	1	0	0	0	0	0	0	0	0	7 ?
SD	0	0	0	0	0	0	0	0	1	1	1	1	2	1	1	1	0	0	0	0	0	0	0	0	7
StA	0	0	0	0	0	0	2.01	1.04	0.91	0.62	0.65	0.73	0.76	0.66	0.77	0.85	1.53	3.51	0	0	0	0	0	0	0.89
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
Max	0	0	0	0	0	0	0	1	3	3	3	4	7	4	3	2	0	0	0	0	0	0	0	0	19
n	0	0	0	0	0	0	166	306	211	179	191	183	203	190	191	190	242	258	2	0	0	0	0	0	2517

Daylight Data Recovery: 0.0% missing; 39.4% exceed the 15% QC threshold -- 4153 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 2005

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	21	92	170 ?	?	?	?	215 ?	234 ?	248 ?	200 ?	145 ?	29	0	0	0	0	0	0	1354 ?
2	0	0	0	0	0	0	16	43 ?	?	?	?	?	?	?	?	?	?	24	0	0	0	0	0	0	83 ?
3	0	0	0	0	0	0	13	39 ?	?	?	?	?	?	?	?	?	?	13	0	0	0	0	0	0	65 ?
4	0	0	0	0	0	0	13	29 ?	?	?	?	?	?	?	?	?	?	15	0	0	0	0	0	0	58 ?
5	0	0	0	0	0	0	15	79	166	202	209	256	195	255	249	211	100 ?	27	0	0	0	0	0	0	1965
6	0	0	0	0	0	0	7	44	114	283	207	345	289	217	157	91	26 ?	6	0	0	0	0	0	0	1785
7	0	0	0	0	0	0	9	49	89	151	164	214	191	161	139	38 ?	25	7	0	0	0	0	0	0	1237
8	0	0	0	0	0	0	4	30	76	90	95	88	106	109	77	33	16	4	0	0	0	0	0	0	727
9	0	0	0	0	0	0	9	36	98	265	314	304 ?	350 ?	?	?	262 ?	117	44	0	0	0	0	0	0	1798 ?
10	0	0	0	0	0	0	11	56	105	140 ?	279 ?	215	306 ?	324	214 ?	235	137	38	0	0	0	0	0	0	2061 ?
11	0	0	0	0	0	0	5	31	69	174	248	225	173	292	217	168	94 ?	29	0	0	0	0	0	0	1724
12	0	0	0	0	0	0	12	67	167	314	343	324	339	245	237	174 ?	97	20	0	0	0	0	0	0	2339
13	0	0	0	0	0	0	6	21	54	195	221	261	285 ?	310 ?	279	148	49	10	0	0	0	0	0	0	1840
14	0	0	0	0	0	0	5	39	78	136	88	107	197	225	174	131	64	12	0	0	0	0	0	0	1256
15	0	0	0	0	0	0	11	47 ?	?	?	?	?	?	?	?	?	?	27 ?	13	0	0	0	0	0	98 ?
16	0	0	0	0	0	0	8	23 ?	?	?	?	?	?	?	?	?	?	23 ?	11	0	0	0	0	0	64 ?
17	0	0	0	0	0	0	7	40	68 ?	?	?	?	?	?	?	?	?	20 ?	8	0	0	0	0	0	143 ?
18	0	0	0	0	0	0	11	47	124	212	295	?	319 ?	307	245	168 ?	73	10	0	0	0	0	0	0	1813 ?
19	0	0	0	0	0	0	11	33 ?	?	?	?	?	?	?	?	?	?	52 ?	30	0	0	0	0	0	126 ?
20	0	0	0	0	0	0	13	37 ?	?	?	?	273 ?	265	293 ?	178 ?	111 ?	64	17	0	0	0	0	0	0	1251 ?
21	0	0	0	0	0	0	7	62	122 ?	250 ?	265 ?	271 ?	311 ?	246 ?	233	167	67	13	0	0	0	0	0	0	2015 ?
22	0	0	0	0	0	0	0	2 ?	53 ?	50	47	78	36	41	45	27	31	11	0	0	0	0	0	0	422
23	0	0	0	0	0	0	8 ?	31 ?	?	?	?	?	386 ?	?	?	104 ?	33 ?	8	0	0	0	0	0	0	570 ?
24	0	0	0	0	0	0	0	7	27	71	96	91	175	150	92	134 ?	64	17	0	0	0	0	0	0	924
25	0	0	0	0	0	0	3 ?	20	44	53	101	209	127	109	83	66	37	9	0	0	0	0	0	0	860
26	0	0	0	0	0	0	0	24	31	147	198	187	254	238	220	147 ?	63 ?	10	0	0	0	0	0	0	1519
27	0	0	0	0	0	0	4	28 ?	58 ?	?	?	?	?	?	?	70 ?	30 ?	7	0	0	0	0	0	0	198 ?
28	0	0	0	0	0	0	5	39	82 ?	102 ?	191 ?	229	238 ?	194 ?	169	148	33 ?	10	0	0	0	0	0	0	1440 ?
29	0	0	0	0	0	0	5 ?	29 ?	62 ?	?	214 ?	?	?	?	?	?	21 ?	7	0	0	0	0	0	0	338 ?
30	0	0	0	0	0	0	4 ?	24 ?	48 ?	?	?	?	?	?	?	?	15 ?	2	0	0	0	0	0	0	91 ?
31	0	0	0	0	0	0	5	22 ?	?	?	?	?	?	?	?	?	15 ?	2	0	0	0	0	0	0	44 ?
Avg	0	0	0	0	0	0	8	38	87	167	199	216	238	219	181	135	55	15	0	0	0	0	0	0	974 ?
S D	0	0	0	0	0	0	5	19	43	81	86	83	89	79	70	65	38	10	0	0	0	0	0	0	775
S/A	0	0	0	0	0	0	0.61	0.5	0.49	0.48	0.43	0.38	0.38	0.36	0.38	0.48	0.68	0.7	0	0	0	0	0	0	0.8
Min	0	0	0	0	0	0	0	2	27	50	47	78	36	41	45	27	15	2	0	0	0	0	0	0	44
Max	0	0	0	0	0	0	21	92	170	314	343	345	386	324	279	262	145	44	0	0	0	0	0	0	2339
n	0	0	0	0	0	0	153	299	207	179	191	183	202	190	191	185	238	258	2	0	0	0	0	0	2483

Daylight Data Recovery: 0.0% missing; 40.2% exceed the 15% QC threshold -- 4153 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.