

November 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	6	76	?	?	?	?	311 ?	346 ?	?	104 ?	61	11	0	0	0	0	0	0	915 ?
2	0	0	0	0	0	0	3	38	163 ?	?	?	?	?	?	?	?	73 ?	10	0	0	0	0	0	0	286 ?
3	0	0	0	0	0	0	5	74	?	?	?	?	?	?	?	?	55 ?	7	0	0	0	0	0	0	140 ?
4	0	0	0	0	0	0	5	53	?	?	?	?	?	?	?	166 ?	55 ?	8	0	0	0	0	0	0	287 ?
5	0	0	0	0	0	0	5	66	?	217 ?	?	?	199 ?	250 ?	209	160	68	14	0	0	0	0	0	0	1188 ?
6	0	0	0	0	0	0	3	39	?	161 ?	224	227	198 ?	247 ?	?	?	38 ?	7	0	0	0	0	0	0	1144 ?
7	0	0	0	0	0	0	3	47	?	?	?	?	?	?	248 ?	141 ?	51 ?	6	0	0	0	0	0	0	496 ?
8	0	0	0	0	0	0	3	58	94	136	255 ?	287 ?	?	322 ?	251 ?	148 ?	41	3	0	0	0	0	0	0	1598 ?
9	0	0	0	0	0	0	3	42	132 ?	167	205	262 ?	248	277 ?	203 ?	137 ?	70	6	0	0	0	0	0	0	1752 ?
10	0	0	0	0	0	0	0	37	117 ?	?	274 ?	?	?	?	?	?	56 ?	4	0	0	0	0	0	0	489 ?
11	0	0	0	0	0	0	0	84	?	?	?	?	?	?	?	?	64 ?	3	0	0	0	0	0	0	151 ?
12	0	0	0	0	0	0	0	40	?	?	?	?	?	?	?	?	54 ?	1	0	0	0	0	0	0	96 ?
13	0	0	0	0	0	0	0	44	?	?	?	?	339 ?	?	124	102	51	4	0	0	0	0	0	0	664 ?
14	0	0	0	0	0	0	0	5	34	103	155	299	283	280	115	73 ?	27	4	0	0	0	0	0	0	1379
15	0	0	0	0	0	0	0	18	62 ?	?	307 ?	?	?	?	200 ?	82	28	4	0	0	0	0	0	0	701 ?
16	0	0	0	0	0	0	0	13	37	46	49	50 ?	70	97	49	47	13	3	0	0	0	0	0	0	473
17	0	0	0	0	0	0	0	25	58 ?	?	?	?	?	?	?	?	60	4	0	0	0	0	0	0	147 ?
18	0	0	0	0	0	0	0	57	178 ?	?	?	?	?	?	?	?	55	1	0	0	0	0	0	0	290 ?
19	0	0	0	0	0	0	0	49	163 ?	?	?	?	?	?	?	212 ?	?	54	0	0	0	0	0	0	478 ?
20	0	0	0	0	0	0	0	26	91 ?	?	?	?	?	?	?	125 ?	79	30	2	0	0	0	0	0	352 ?
21	0	0	0	0	0	0	0	3	30	85	109	96	122	97	42	22	6	2	0	0	0	0	0	0	616
22	0	0	0	0	0	0	0	2	40 ?	68	49	100	117	103	161	123	13	5	0	0	0	0	0	0	780
23	0	0	0	0	0	0	0	31	112 ?	?	?	330 ?	275	175	84	34	7	3	0	0	0	0	0	0	1050 ?
24	0	0	0	0	0	0	0	28	89 ?	?	?	?	?	?	?	?	56	2	0	0	0	0	0	0	175 ?
25	0	0	0	0	0	0	0	10	65	199 ?	231 ?	?	?	?	?	?	52	0	0	0	0	0	0	0	558 ?
26	0	0	0	0	0	0	0	26	101 ?	?	?	?	?	?	?	?	43	1	0	0	0	0	0	0	171 ?
27	0	0	0	0	0	0	0	15	63	144	148	249	194	113	107	95 ?	24	4	0	0	0	0	0	0	1155
28	0	0	0	0	0	0	0	5	24 ?	115	155	180	194	140	154	116	28	0	0	0	0	0	0	0	1111
29	0	0	0	0	0	0	0	27	63	84 ?	75	187 ?	91 ?	122	58	99	54	2	0	0	0	0	0	0	860 ?
30	0	0	0	0	0	0	0	10	32	90	161	238 ?	?	?	?	?	50	1	0	0	0	0	0	0	581 ?
Avg	0	0	0	0	0	0	1	35	83	124	171	209	203	198	146	102	44	4	0	0	0	0	0	0	669 ?
S D	0	0	0	0	0	0	2	23	47	52	82	88	86	92	69	42	19	3	0	0	0	0	0	0	457
S/A	0	0	0	0	0	0	1.64	0.65	0.56	0.42	0.48	0.42	0.42	0.47	0.47	0.42	0.42	0.84	0	0	0	0	0	0	0.68
Min	0	0	0	0	0	0	0	2	24	46	49	50	70	97	42	22	6	0	0	0	0	0	0	0	96
Max	0	0	0	0	0	0	6	84	178	217	307	330	339	346	251	166	73	14	0	0	0	0	0	0	1752
n	0	0	0	0	0	0	13	314	168	120	137	113	122	115	142	151	313	69	0	0	0	0	0	0	1793

Daylight Data Recovery: 0.0% missing; 50.8% exceed the 15% QC threshold -- 3646 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.

November 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	2	?	?	?	?	3?	3?	?	0?	0	0	0	0	0	0	0	0	0	8?
2	0	0	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	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	2?
4	0	0	0	0	0	0	1	1	?	?	?	?	?	?	?	0?	0?	0	0	0	0	0	0	0	0	2?
5	0	0	0	0	0	0	0	1	1?	1?	?	?	1?	2?	1	1	0	0	0	0	0	0	0	0	0	8?
6	0	0	0	0	0	0	0	0	0?	1?	1	2	2?	2?	?	?	0?	0	0	0	0	0	0	0	0	8?
7	0	0	0	0	0	0	0	1	?	?	?	?	?	?	1?	0?	0?	0	0	0	0	0	0	0	0	1?
8	0	0	0	0	0	0	0	1	0	1	2?	2?	?	2?	2?	1?	0	0	0	0	0	0	0	0	0	12?
9	0	0	0	0	0	0	0	0	1?	1	1	2?	2	2?	1?	0?	0	0	0	0	0	0	0	0	0	11?
10	0	0	0	0	0	0	0	0	0?	?	2?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	2?
11	0	0	0	0	0	0	0	1	1?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	2?
12	0	0	0	0	0	0	0	1	?	?	?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	1?
13	0	0	0	0	0	0	0	1	?	?	?	?	4?	?	0	1	0	0	0	0	0	0	0	0	0	6?
14	0	0	0	0	0	0	0	0	0	1	1	3	3	3	0	0	0	0	0	0	0	0	0	0	0	12
15	0	0	0	0	0	0	0	0	0?	?	2?	?	3?	1?	1?	0	0	0	0	0	0	0	0	0	0	8?
16	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	1
17	0	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	0	0?
18	0	0	0	0	0	0	0	1	2?	4?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	0	7?
19	0	0	0	0	0	0	0	1	3?	?	?	?	?	?	2?	?	0	0	0	0	0	0	0	0	0	6?
20	0	0	0	0	0	0	0	0	1?	?	?	?	?	?	0?	0	0	0	0	0	0	0	0	0	0	2?
21	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	1
22	0	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
23	0	0	0	0	0	0	0	0	0?	?	?	2?	2	1	0	0	0	0	0	0	0	0	0	0	0	5?
24	0	0	0	0	0	0	0	0	0?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	0	0?
25	0	0	0	0	0	0	0	0	0	2?	1?	?	?	?	?	?	0	0	0	0	0	0	0	0	0	3?
26	0	0	0	0	0	0	0	1	2?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	0	3?
27	0	0	0	0	0	0	0	0	0	1	1	2	1	0	1	0?	0	0	0	0	0	0	0	0	0	7
28	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	6
29	0	0	0	0	0	0	0	0	0	0	0	1?	0	1	0	1	0	0	0	0	0	0	0	0	0	4?
30	0	0	0	0	0	0	0	0	0	0	1	2?	?	?	?	?	0	0	0	0	0	0	0	0	0	3?
Avg	0	0	0	0	0	0	0	0	1	1	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	4?
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	3.79	1.13	1.35	1.02	0.72	0.76	0.77	0.74	0.97	1.21	2.17	5.48	0	0	0	0	0	0	0	0.81
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	3	4	2	3	4	3	2	1	0	0	0	0	0	0	0	0	0	12
n	0	0	0	0	0	0	13	314	184	127	141	117	135	118	145	162	316	69	0	0	0	0	0	0	0	1853

Daylight Data Recovery: 0.0% missing; 49.2% exceed the 15% QC threshold -- 3646 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.

November 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	7 ?	45	?	?	?	?	251 ?	276 ?	?	79 ?	49	11	0	0	0	0	0	0	0	717 ?
2	0	0	0	0	0	0	2	36	137 ?	?	?	?	?	?	?	?	18 ?	4	0	0	0	0	0	0	0	197 ?
3	0	0	0	0	0	0	4 ?	21	?	?	?	?	?	?	?	?	22 ?	5	0	0	0	0	0	0	0	52 ?
4	0	0	0	0	0	0	6 ?	22	?	?	?	?	?	?	?	132 ?	34 ?	8	0	0	0	0	0	0	0	202 ?
5	0	0	0	0	0	0	?	52	75 ?	169 ?	?	?	194 ?	216 ?	206	147	67	13	0	0	0	0	0	0	0	1138 ?
6	0	0	0	0	0	0	?	28	74 ?	118 ?	233	212	208 ?	232 ?	?	?	35 ?	8	0	0	0	0	0	0	0	1147 ?
7	0	0	0	0	0	0	?	23	?	?	?	?	?	?	207 ?	99 ?	43 ?	6	0	0	0	0	0	0	0	378 ?
8	0	0	0	0	0	0	?	43	93	135	206 ?	220 ?	?	228 ?	209 ?	119 ?	39	3	0	0	0	0	0	0	0	1296 ?
9	0	0	0	0	0	0	?	37	106 ?	164	212	215 ?	220	255 ?	133 ?	116 ?	59	6	0	0	0	0	0	0	0	1522 ?
10	0	0	0	0	0	0	0	29	98 ?	?	230 ?	?	?	?	?	?	19 ?	4	0	0	0	0	0	0	0	380 ?
11	0	0	0	0	0	0	0	25	57 ?	?	?	?	?	?	?	?	18 ?	2	0	0	0	0	0	0	0	102 ?
12	0	0	0	0	0	0	0	19	?	?	?	?	?	?	?	?	14 ?	2	0	0	0	0	0	0	0	35 ?
13	0	0	0	0	0	0	0	20	?	?	?	?	271 ?	?	118	96	53	4	0	0	0	0	0	0	0	561 ?
14	0	0	0	0	0	0	0	5	37	110	166	287	268	259	120	65 ?	27	2	0	0	0	0	0	0	0	1348
15	0	0	0	0	0	0	0	19	63 ?	?	262 ?	?	170 ?	155 ?	158 ?	77	30	4	0	0	0	0	0	0	0	937 ?
16	0	0	0	0	0	0	0	14	41	49	53	46	75	104	48	50	13	2	0	0	0	0	0	0	0	495
17	0	0	0	0	0	0	0	27	49 ?	?	?	?	?	?	?	?	20	4	0	0	0	0	0	0	0	100 ?
18	0	0	0	0	0	0	0	19	38 ?	140 ?	?	?	?	?	?	?	18	1	0	0	0	0	0	0	0	216 ?
19	0	0	0	0	0	0	0	19	37 ?	?	?	?	?	?	?	172 ?	?	17	1	0	0	0	0	0	0	244 ?
20	0	0	0	0	0	0	0	27	79 ?	?	?	?	?	?	?	117 ?	81	31	2	0	0	0	0	0	0	337 ?
21	0	0	0	0	0	0	0	3	32	91	117	104	132	103	45	22	7	2	0	0	0	0	0	0	0	658
22	0	0	0	0	0	0	0	1	34	72	47	106	121	108	146	109	12	4	0	0	0	0	0	0	0	760
23	0	0	0	0	0	0	0	19	49 ?	?	?	281 ?	271	186	89	32	7	2	0	0	0	0	0	0	0	937 ?
24	0	0	0	0	0	0	0	22	53 ?	?	?	?	?	?	?	?	18	2	0	0	0	0	0	0	0	96 ?
25	0	0	0	0	0	0	0	9	55	128 ?	150 ?	?	?	?	?	?	13	0	0	0	0	0	0	0	0	354 ?
26	0	0	0	0	0	0	0	14	27 ?	?	?	?	?	?	?	?	17	1	0	0	0	0	0	0	0	60 ?
27	0	0	0	0	0	0	0	15	67	138	157	245	201	120	114	97 ?	25	4	0	0	0	0	0	0	0	1185
28	0	0	0	0	0	0	0	5	24	112	164	173	203	148	160	121	30	0	0	0	0	0	0	0	0	1140
29	0	0	0	0	0	0	0	16 ?	67	77	70	182 ?	56 ?	129	59	97	25	2	0	0	0	0	0	0	0	780 ?
30	0	0	0	0	0	0	0	10	33	96	170	245 ?	?	?	?	?	15	1	0	0	0	0	0	0	0	570 ?
Avg	0	0	0	0	0	0	1	21	59	114	160	193	188	180	131	90	26	4	0	0	0	0	0	0	0	598 ?
S D	0	0	0	0	0	0	2	12	28	35	68	75	70	63	54	34	15	3	0	0	0	0	0	0	0	452
S/A	0	0	0	0	0	0	2.52	0.56	0.47	0.3	0.42	0.39	0.37	0.35	0.41	0.38	0.57	0.83	0	0	0	0	0	0	0	0.76
Min	0	0	0	0	0	0	0	1	24	49	47	46	56	103	45	22	7	0	0	0	0	0	0	0	0	35
Max	0	0	0	0	0	0	7	52	137	169	262	287	271	276	209	147	67	13	0	0	0	0	0	0	0	1522
n	0	0	0	0	0	0	5	303	182	125	141	117	131	118	145	156	316	69	0	0	0	0	0	0	0	1820

Daylight Data Recovery: 0.0% missing; 50.1% exceed the 15% QC threshold -- 3646 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17860F3 Calibration Factor: 7.010 $\mu\text{V}/\text{W}/\text{m}^2$ 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.