

September 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	12	104	301	509	687	813	876	870	785	670	502	298	97	5	0	0	0	0	0	6529
2	0	0	0	0	0	11	93	282	431	563	656	834	827	762	635	453	262	87	8	0	0	0	0	0	5902
3	0	0	0	0	0	10	96	289	488	660	787	856	850	785	657	482	287	91	7	0	0	0	0	0	6344
4	0	0	0	0	0	12	103	304	512	687	812	875	870	799	673	501	298	99	4	0	0	0	0	0	6548
5	0	0	0	0	0	6	88	242	361	621	697	753	795	774	597	409	245	72	4	0	0	0	0	0	5663
6	0	0	0	0	0	5	94	263	447	620	737	814	794	724	596	461	248	80	7	0	0	0	0	0	5888
7	0	0	0	0	0	10	90	280	482	656	781	703	762	769	682	413	197	76	4	0	0	0	0	0	5903
8	0	0	0	0	0	7	84	272	477	651	766	809	693	761	549	427	216	55	2	0	0	0	0	0	5768
9	0	0	0	0	0	9	76	255	447	623	743	828	813	751	613	440	246	69	4	0	0	0	0	0	5918
10	0	0	0	0	0	6	77	249	439	606	736	776	795	618	604	435	225	61	2	0	0	0	0	0	5629
11	0	0	0	0	0	9	87	265	468	645	771	832	820	755	626	453	251	64	0	0	0	0	0	0	6046
12	0	0	0	0	0	7	80	258	458	632	753	818	817	725	606	446	232	56	0	0	0	0	0	0	5889
13	0	0	0	0	0	4	74	249	443	609	702	570	738	677	521	297	122	53	2	0	0	0	0	0	5062
14	0	0	0	0	0	6	88	166	415	614	724	625	173 ?	389 ?	600	211	280	62	1	0	0	0	0	0	4352
15	0	0	0	0	0	5	70	234	428	468	608	718	655	227	286	370	106	31	1	0	0	0	0	0	4205
16	0	0	0	0	0	0	11	109	56 ?	175 ?	326	698	668	605	424	227	117	33	0	0	0	0	0	0	3451
17	0	0	0	0	0	4	80	217	421	611	717	528	443	384	607	473	225	46	0	0	0	0	0	0	4756
18	0	0	0	0	0	5	68	249	448	619	742	705	742	713	586	380	205	43	0	0	0	0	0	0	5506
19	0	0	0	0	0	4	68	235	424	595	710	771	783	743	597	414	201	32	0	0	0	0	0	0	5578
20	0	0	0	0	0	5	42	224	394	583	705	754	786	724	432	230	176	34	0	0	0	0	0	0	5090
21	0	0	0	0	0	4	34	122	159	404	677	782	640	681	538	384	226	31	0	0	0	0	0	0	4679
22	0	0	0	0	0	4	59	221	415	585	703	764	748	694	576	405	202	51	0	0	0	0	0	0	5427
23	0	0	0	0	0	9	71	249	323	524	546	658	584	483	289	175	89	18	0	0	0	0	0	0	4018
24	0	0	0	0	0	0	24	70	178	222	251	352	334	195	132 ?	?	?	3	0	0	0	0	0	0	1761 ?
25	0	0	0	0	0	0	4	33	71	139	98 ?	84 ?	67 ?	54 ?	?	33 ?	31	14	0	0	0	0	0	0	628 ?
26	0	0	0	0	0	3	69	234	433	603	723	777	765	685	546	372	174	31	0	0	0	0	0	0	5415
27	0	0	0	0	0	3	58	217	415	576	694	640	621	598	333	310	162	22	0	0	0	0	0	0	4649
28	0	0	0	0	0	3	44	181	429	582	700	752	743	672	534	359	163	29	0	0	0	0	0	0	5191
29	0	0	0	0	0	1	16	70	286	423	502	480	564	578	350	339	164	29	0	0	0	0	0	0	3802
30	0	0	0	0	0	1	59	245	450	620	741	796	783	705	561	379	165	24	0	0	0	0	0	0	5528
Avg	0	0	0	0	0	6	67	219	390	553	664	708	685	627	532	372	200	50	2	0	0	0	0	0	5038
S D	0	0	0	0	0	3	27	71	121	143	166	169	196	193	136	109	65	26	2	0	0	0	0	0	1314
S/A	0	0	0	0	0	0.62	0.41	0.32	0.31	0.26	0.25	0.24	0.29	0.31	0.26	0.29	0.33	0.52	1.47	0	0	0	0	0	0.26
Min	0	0	0	0	0	0	4	33	56	139	98	84	67	54	132	33	31	3	0	0	0	0	0	0	628
Max	0	0	0	0	0	12	104	304	512	687	813	876	870	799	682	502	298	99	8	0	0	0	0	0	6548
n	0	0	0	0	0	96	359	356	351	356	357	356	345	348	345	338	348	337	40	0	0	0	0	0	4332

Daylight Data Recovery: 0.0% missing; 2.3% exceed the 15% QC threshold -- 4434 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18036F3 Calibration Factor: 7.430 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

September 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	0	0	0	*
2	0	0	0	0	0	348 ?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
3	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
4	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
5	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
6	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
7	0	0	0	0	0	?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
8	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
9	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
10	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
12	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
14	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
16	0	0	0	0	0	163 ?	396 ?	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
18	0	0	0	0	0	*	?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
24	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
25	0	0	0	0	0	871 *	389 ?	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
26	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
Avg	0	0	0	0	0	461	393	N/A	N/A	N/A	N/A	N/A	N/A	N/A	760	N/A	N/A	N/A	0	0	0	0	0	0	N/A *
SD	0	0	0	0	0	367	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S/A	0	0	0	0	0	0.8	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	163	389	N/A	N/A	N/A	N/A	N/A	N/A	N/A	760	N/A	N/A	N/A	0	0	0	0	0	0	N/A
Max	0	0	0	0	0	871	396	N/A	N/A	N/A	N/A	N/A	N/A	N/A	760	N/A	N/A	N/A	0	0	0	0	0	0	N/A
n	0	0	0	0	0	3	8	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 97.4% missing; 2.1% exceed the 15% QC threshold -- 4434 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25796E6 Calibration Factor: 8.670 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 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	10	78 ?	?	?	?	?	?	?	?	?	?	?	82 ?	5	0	0	0	0	0	176 ?
2	0	0	0	0	0	12	100	?	413 ?	512 ?	517 ?	?	?	?	?	?	291 ?	98	8	0	0	0	0	0	1952 ?
3	0	0	0	0	0	9	89	?	?	?	?	?	?	?	?	?	?	75 ?	6	0	0	0	0	0	179 ?
4	0	0	0	0	0	10	68 ?	?	?	?	?	?	?	?	?	?	?	38 ?	3	0	0	0	0	0	119 ?
5	0	0	0	0	0	6	93	264	364	?	545 ?	570 ?	?	?	448 ?	226 ?	168 ?	78	4	0	0	0	0	0	2765 ?
6	0	0	0	0	0	5	47 ?	340 ?	?	?	?	?	?	?	448 ?	?	266 ?	87	7	0	0	0	0	0	1199 ?
7	0	0	0	0	0	9	83	?	?	?	?	578 ?	253 ?	505 ?	?	364 ?	166 ?	85	4	0	0	0	0	0	2047 ?
8	0	0	0	0	0	7	94	?	?	?	?	498 ?	446 ?	?	539 ?	316 ?	243 ?	61	2	0	0	0	0	0	2207 ?
9	0	0	0	0	0	10 ?	86	308 ?	?	?	?	?	?	?	?	?	186 ?	76	5	0	0	0	0	0	671 ?
10	0	0	0	0	0	6	84	271 ?	?	?	?	?	?	?	355 ?	500 ?	385 ?	246	65	2	0	0	0	0	1913 ?
11	0	0	0	0	0	8	95	?	?	?	?	?	?	?	?	?	?	72	0	0	0	0	0	0	176 ?
12	0	0	0	0	0	8 ?	87	?	?	?	?	?	?	?	?	?	?	182 ?	61	0	0	0	0	0	338 ?
13	0	0	0	0	0	4	80	263 ?	?	?	?	400 ?	536 ?	435 ?	313 ?	195 ?	115	56	2	0	0	0	0	0	2400 ?
14	0	0	0	0	0	6	74 ?	171	276 ?	372 ?	?	464 ?	81	275	378 ?	221	?	59	1	0	0	0	0	0	2379 ?
15	0	0	0	0	0	5	72	256 ?	383 ?	421 ?	551 ?	?	522 ?	244	263	340 ?	111	31	0	0	0	0	0	0	3200 ?
16	0	0	0	0	0	0	12	79	44 ?	199	303	557 ?	435 ?	503 ?	365	217	95	31	0	0	0	0	0	0	2841 ?
17	0	0	0	0	0	3	53 ?	205 ?	247 ?	?	?	507 ?	427	402	?	?	165 ?	52	0	0	0	0	0	0	2062 ?
18	0	0	0	0	0	7 ?	72	188 ?	?	?	?	312 ?	522 ?	?	?	372 ?	162 ?	49	0	0	0	0	0	0	1683 ?
19	0	0	0	0	0	6 ?	73	274 ?	?	?	?	?	?	?	?	?	145 ?	35	0	0	0	0	0	0	533 ?
20	0	0	0	0	0	7 ?	43	186 ?	317 ?	?	?	?	?	?	219 ?	253	188	36	0	0	0	0	0	0	1250 ?
21	0	0	0	0	0	4	35	123	164	310 ?	?	?	589 ?	?	?	292 ?	168 ?	34	0	0	0	0	0	0	1718 ?
22	0	0	0	0	0	4	62	231 ?	371 ?	?	?	?	?	?	?	?	167 ?	45	0	0	0	0	0	0	880 ?
23	0	0	0	0	0	12 ?	78	154 ?	335 ?	458 ?	561 ?	632 ?	573 ?	507	303	181	91	19	0	0	0	0	0	0	3903 ?
24	0	0	0	0	0	0	24	72	183	229	259	366	314	201	110	24 ?	?	3	0	0	0	0	0	0	1786 ?
25	0	0	0	0	0	0	5	35	72	141	86	71	60	48	33 ?	28 ?	31	15	0	0	0	0	0	0	626
26	0	0	0	0	0	5 ?	76	170 ?	?	?	?	?	?	?	?	?	142 ?	38	0	0	0	0	0	0	431 ?
27	0	0	0	0	0	5 ?	59	218 ?	?	?	?	555 ?	495 ?	520 ?	307	217 ?	128 ?	24	0	0	0	0	0	0	2527 ?
28	0	0	0	0	0	4 ?	44	112 ?	?	?	?	?	?	?	?	?	144 ?	35	0	0	0	0	0	0	340 ?
29	0	0	0	0	0	1	16	71	278	413	410 ?	486	544 ?	506 ?	355	335 ?	132 ?	36	0	0	0	0	0	0	3581 ?
30	0	0	0	0	0	1	64	?	?	?	?	?	?	?	?	?	124 ?	32	0	0	0	0	0	0	220 ?
Avg	0	0	0	0	0	6	65	190	265	340	404	461	414	375	327	248	161	50	2	0	0	0	0	0	1537 ?
S D	0	0	0	0	0	3	26	85	118	127	174	148	174	153	141	109	58	24	2	0	0	0	0	0	1117
S/A	0	0	0	0	0	0.59	0.4	0.45	0.45	0.37	0.43	0.32	0.42	0.41	0.43	0.44	0.36	0.48	1.48	0	0	0	0	0	0.73
Min	0	0	0	0	0	0	5	35	44	141	86	71	60	48	33	24	31	3	0	0	0	0	0	0	119
Max	0	0	0	0	0	12	100	340	413	512	561	632	589	520	539	385	291	98	8	0	0	0	0	0	3903
n	0	0	0	0	0	86	335	159	93	76	62	80	94	92	97	95	158	321	40	0	0	0	0	0	1807

Daylight Data Recovery: 0.0% missing; 59.2% exceed the 15% QC threshold -- 4434 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18039F3 Calibration Factor: 7.470 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.