

June 2004

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	1	2	?	?	110 ?	401	721	991	969	908	783	614	416	207	45	0	0	0	0	0	6169 ?
2	0	0	0	0	0	2	?	72	303	578	905	946	1002	830	725	385	400	197	27	0	0	0	0	0	6372
3	0	0	0	0	0	31	213	390	602	542	885	959	925	705	747	504	294	166	16	0	0	0	0	0	6980
4	0	0	0	0	3	50	193	413	621	746	908	914	852	655	716	578	363	214	32	1	0	0	0	0	7259
5	0	0	0	0	3	65	171	354	597	747	878	928	871	635	676	587	412	187	38	0	0	0	0	0	7150
6	0	0	0	0	0	16	45	168	233	244	243	437	714	495	175	165	116	54 ?	19	2	0	0	0	0	3126
7	0	0	0	0	1	34	158	395	586	746	808	830	745	687	693	431	313	199	43	0	0	0	0	0	6667
8	0	0	0	0	2	41	196	429	601	659	814	948	938	936	725	609	300	126	33	0	0	0	0	0	7355
9	0	0	0	0	1	50	205	404	598	760	865	941	869	914	725	608	370	202	48	0	0	0	0	0	7559
10	0	0	0	0	2	48	183	369	571	717	755	731	823	541	488	449	196	199	35	0	0	0	0	0	6107
11	0	0	0	0	3	43	202	401	576	768	895	947	879	769	703	593	394	193	25	3	0	0	0	0	7392
12	0	0	0	0	3	51	213	400	595	770	772	941	836	819	742	602	400	225	56	1	0	0	0	0	7426
13	0	0	0	0	3	63	235	409	600	760	871	932	719	837	753	615	449	220	34	3	0	0	0	0	7503
14	0	0	0	0	2	54	144	320	481	561	810	553	535	279	231 ?	127	46 ?	25	1	0	0	0	0	0	4702
15	0	0	0	0	0	11	88	61	162	245	404	676	462	778	447	471	312	206	58	1	0	0	0	0	4384
16	0	0	0	0	3	50	147	276	406	633	726	789	485	101	163	142 ?	244	119	62	9	0	0	0	0	4356
17	0	0	0	0	3	28	107	54 ?	93 ?	187	189	240	600	689	636	567	332	108	30	2	0	0	0	0	3865
18	0	0	0	0	4	33	147	183	466	616	825	844	882	897	723	571	406	196	68	13	0	0	0	0	6875
19	0	0	0	0	2	46	200	395	585	738	839	885	848	628	572	556	419	229	31	1	0	0	0	0	6973
20	0	0	0	0	0	3	42 ?	126	281	414	416	565	635	898	733	517	277	54	16	4	0	0	0	0	4980
21	0	0	0	0	3	53	208	394	560	722	810	787	764	833	783	361	254	104	25	0	0	0	0	0	6660
22	0	0	0	0	2	51	174	384	528	685	816	452	?	356	424	173	143	85	30	3	0	0	0	0	4306
23	0	0	0	0	0	3	33 ?	82	58 ?	74 ?	213	217	284	417	403	233	117	101	14	9	0	0	0	0	2259 ?
24	0	0	0	0	1	44	87	97	139	221	438	446	288	379	298	226	99	?	5 ?	0	0	0	0	0	2768
25	0	0	0	0	0	12	91	131	203	300	329	676	609	549	381	390	241	149	68	4	0	0	0	0	4133
26	0	0	0	0	0	28	89	249	302	788	869	398	141	126	71 ?	58 ?	62	69	23	2	0	0	0	0	3279
27	0	0	0	0	0	6	54	56	327	614	389	408	299	667	350	100	50 ?	37 ?	18	3	0	0	0	0	3377
28	0	0	0	0	0	0	?	49 ?	87 ?	522	541	459	626	643	691	286	164	103	69	9	0	0	0	0	4249 ?
29	0	0	0	0	0	41	175	319	533	552	531	494	103 ?	651	620	606 ?	275	167	36	2	0	0	0	0	5106
30	0	0	0	0	0	10	62 ?	103	167	251	362	597	515	540	403	361	186	67	31	3	0	0	0	0	3659

Avg	0	0	0	0	1	32	143	258	399	552	661	698	663	647	554	420	271	146	35	2	0	0	0	0	5433
S/D	0	0	0	0	1	21	63	144	200	215	241	239	254	217	212	181	121	63	17	3	0	0	0	0	1690
S/A	0	0	0	0	0.89	0.63	0.44	0.56	0.5	0.39	0.36	0.34	0.38	0.34	0.38	0.43	0.44	0.43	0.49	1.35	0	0	0	0	0.31
Min	0	0	0	0	0	0	33	49	58	74	189	217	103	101	71	58	50	37	5	0	0	0	0	0	2259
Max	0	0	0	0	4	65	235	429	621	788	908	991	1002	936	783	615	449	229	69	13	0	0	0	0	7559
n	0	0	0	0	56	349	309	325	334	351	356	358	344	358	348	344	350	335	352	49	0	0	0	0	4918

Daylight Data Recovery: 0.0% missing; 4.4% exceed the 15% QC threshold -- 5145 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18036F3 Calibration Factor: 7.430 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.

June 2004

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	*	
2	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
3	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
4	0	0	0	0	*	356 *	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
5	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
6	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
7	0	0	0	0	*	?	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
8	0	0	0	0	*	353 *?	?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
9	0	0	0	0	?	?	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
10	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
11	0	0	0	0	?	515 ?	?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
12	0	0	0	0	?	?	234 ?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
13	0	0	0	0	?	?	227 ?	?	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
14	0	0	0	0	*	*	*	?	?	*	*	*	*	*	*	*	*	*	*	*	?	0	0	0	0	*
15	0	0	0	0	*	247 *?	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
16	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	?	*	*	*	*	0	0	0	0	*	
17	0	0	0	0	*	*	*	*	*	*	?	*	?	*	*	*	*	*	*	*	0	0	0	0	*	
18	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
19	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
20	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
21	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
22	0	0	0	0	*	?	*	352 ?	?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
23	0	0	0	0	?	330 *	?	*	?	?	*	*	*	*	*	*	*	*	*	*	?	0	0	0	0	*
24	0	0	0	0	?	*	*	?	?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
25	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	?	*	0	0	0	0	*	
26	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
27	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	595 *	0	0	0	0	*	
28	0	0	0	0	*	?	?	?	383 *?	*	*	?	*	*	*	*	*	*	*	*	0	0	0	0	*	
29	0	0	0	0	?	?	*	*	*	*	*	*	*	*	?	343 ?	?	?	?	*	0	0	0	0	*	
30	0	0	0	0	?	?	69 ?	?	*	?	?	*	*	*	*	*	*	*	*	*	0	0	0	0	*	
Avg	0	0	0	0	N/A	360	177	352	383	N/A	N/A	N/A	N/A	N/A	N/A	343	N/A	N/A	595	N/A	0	0	0	0	N/A *	
SD	0	0	0	0	0	97	93	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	0.27	0.53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Min	0	0	0	0	N/A	247	69	352	383	N/A	N/A	N/A	N/A	N/A	N/A	343	N/A	N/A	595	N/A	0	0	0	0	N/A	
Max	0	0	0	0	N/A	515	234	352	383	N/A	N/A	N/A	N/A	N/A	N/A	343	N/A	N/A	595	N/A	0	0	0	0	N/A	
n	0	0	0	0	0	12	9	2	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	

Daylight Data Recovery: 89.3% missing; 9.9% exceed the 15% QC threshold -- 5145 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.

Mississippi Valley State University
33.5 N Latitude 90.33 W Longitude 52 Meters AMSL Time Zone -6

June 2004

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	1	2	?	25 ?	102 ?	388	329	165	138	107	96	88	75	61	26	0	0	0	0	0	1605 ?
2	0	0	0	0	0	2	?	66	294	346	133	144	206	193	190	157	89	61	17	0	0	0	0	0	1898
3	0	0	0	0	0	33	196 ?	327 ?	547 ?	413	264	217	304	386	245	235	192	119	17	0	0	0	0	0	3496 ?
4	0	0	0	0	5 ?	52	187	329 ?	?	534 ?	308	234	233	291	244	200	124	107	30	1	0	0	0	0	2878 ?
5	0	0	0	0	4 ?	69	169	286 ?	?	627 ?	341	233	323	425	329	249	164	96	30	0	0	0	0	0	3347 ?
6	0	0	0	0	0	16	47	175	240	255	256	396	581	453	183	171	122	52	18	2	0	0	0	0	2968
7	0	0	0	0	1	36	172	332 ?	?	677 ?	573	385	324	262	251	172	131	83	30	0	0	0	0	0	3429 ?
8	0	0	0	0	2	45	188 ?	?	?	567 ?	544 ?	308	269	254	170	162	173	108	34	0	0	0	0	0	2823 ?
9	0	0	0	0	1	56	182 ?	?	?	?	678 ?	389	257	248	226	160	120	85	34	0	0	0	0	0	2436 ?
10	0	0	0	0	2	52	207	362 ?	?	709 ?	629 ?	437	397	298	279	239	135	101	28	0	0	0	0	0	3875 ?
11	0	0	0	0	5 ?	46	190 ?	?	?	?	703 ?	326	270	221	204	165	129	80	22	3	0	0	0	0	2364 ?
12	0	0	0	0	3	56	170 ?	400 ?	?	?	?	576 ?	451	257	205	172	160	96	74	33	2	0	0	0	2656 ?
13	0	0	0	0	5 ?	48	284 ?	?	?	?	?	463	409	295	196	189	120	77	31	3	0	0	0	0	2120 ?
14	0	0	0	0	2	58	155	276 ?	442 ?	401 ?	608 ?	482	444	423	291	228	113	39	25	0	0	0	0	0	3987 ?
15	0	0	0	0	0	11	91	63	168	209	344	480	220	294	329	206	136	80	35	2	0	0	0	0	2669
16	0	0	0	0	5 ?	53	154	261 ?	400	444 ?	669 ?	522	272	100	158	125	229	122	59	10	0	0	0	0	3582
17	0	0	0	0	4 ?	29	112	39 ?	89 ?	193	194	248	418	328	300	231	161	104	29	2	0	0	0	0	2482
18	0	0	0	0	5 ?	35	156	191	411 ?	566 ?	631 ?	470 ?	345	235	220	181	163	103	59	6 ?	0	0	0	0	3777 ?
19	0	0	0	0	4 ?	50	178 ?	?	?	?	694 ?	570	269	330	315	204	147	117	29	1	0	0	0	0	2907 ?
20	0	0	0	0	0	4	36	132	294	427	430	570	508	312	262	255	183	56	17	4	0	0	0	0	3491
21	0	0	0	0	6 ?	57	179 ?	?	?	608 ?	618 ?	599 ?	393	345	290	238	167	77	25	0	0	0	0	0	3601 ?
22	0	0	0	0	1	50	153 ?	348 ?	459 ?	555 ?	775 ?	384	50 ?	286	343	174	132	87	30	3	0	0	0	0	3831 ?
23	0	0	0	0	0	4	27	79	46 ?	64	221	224	289	395	378	247	125	106	14	10	0	0	0	0	2228
24	0	0	0	0	2 ?	42	90	100	145	228	446	462	301	382	305	236	104	?	6	0	0	0	0	0	2849
25	0	0	0	0	0	13	94	137	211	309	337	592	535	489	381	342	234	145	65	4	0	0	0	0	3887
26	0	0	0	0	0	31	92	225	293	?	691 ?	359	145	128	45	48	64	72	24	2	0	0	0	0	2219 ?
27	0	0	0	0	0	7	57	57	221 ?	422 ?	400	420	309	448	331	106	42	34	18	2	0	0	0	0	2874
28	0	0	0	0	0	1	?	39	90	286 ?	546	467	454	380	362	277	173	99	58	11	0	0	0	0	3243 ?
29	0	0	0	0	1	45	112 ?	240 ?	484 ?	527	451	421	98	456	344	272	181	150	38	2	0	0	0	0	3823 ?
30	0	0	0	0	0	12	66	109	151	259	376	536	498	467	382	338	185	68	33	3	0	0	0	0	3484
Avg	0	0	0	0	2	34	139	192	268	417	475	399	317	315	261	202	140	88	31	2	0	0	0	0	3028 ?
S/D	0	0	0	0	2	21	62	121	152	170	180	129	129	107	85	66	45	28	14	3	0	0	0	0	662
S/A	0	0	0	0	0.98	0.62	0.45	0.63	0.57	0.41	0.38	0.32	0.41	0.34	0.33	0.33	0.32	0.32	0.45	1.27	0	0	0	0	0.22
Min	0	0	0	0	0	1	27	25	46	64	133	144	50	100	45	48	42	34	6	0	0	0	0	0	1605
Max	0	0	0	0	6	69	284	400	547	709	775	599	581	489	382	342	234	150	65	11	0	0	0	0	3987
n	0	0	0	0	46	350	257	209	177	201	254	350	353	359	359	355	359	342	356	48	0	0	0	0	4382

Daylight Data Recovery: 0.0% missing; 14.8% exceed the 15% QC threshold -- 5145 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.