

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

**May 2002**

**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	29	82	169	346	637	790	930	918	827	696	513	325	131	25	0	0	0	0	0	6417
2	0	0	0	0	0	*	*	*	*	*	*	660*	521	533	533	485	122	0?	1	0	0	0	0	0	2854*
3	0	0	0	0	0	3	10	29	45	66	42	86	166	239	543	478	179	27	12	0	0	0	0	0	1926
4	0	0	0	0	0	24	61	104?	150	234	261	327	339	288	287	325	406	204	28	0	0	0	0	0	3040
5	0	0	0	0	0	44	93	117	284	353	676	706	543	597	626	503	349	142	24	0	0	0	0	0	5057
6	0	0	0	0	0	22	126	342	359	539	677	628	669	628	525	400	287	117	21	0	0	0	0	0	5341
7	0	0	0	0	0	24	102	181	295	402	662	521	732	609	518	438	250	155	25	0	0	0	0	0	4913
8	0	0	0	0	0	26	153	338	425	601	601	833	982	919	582	536	325	115	19	0	0	0	0	0	6455
9	0	0	0	0	0	26	110	82	99	210	495	322	500	151	438	479	200	118	34	0	0	0	0	0	3263
10	0	0	0	0	0	3	42	81	58?	236	356	416	709	688	618	524	365	143	25	0	0	0	0	0	4263
11	0	0	0	0	0	27	140	354	521	563	516	759	651	654	727	477	299	151	35	0	0	0	0	0	5876
12	0	0	0	0	0	30	172	386	464	743	810	783	816	672	698	429	344	214	38	0	0	0	0	0	6598
13	0	0	0	0	0	3	39	52	237	248	363	381	312	445	550	377	221	159	39	0	0	0	0	0	3426
14	0	0	0	0	0	42	192	431	644	815	942	1005	1005	915	742	624	392	183	36	0	0	0	0	0	7968
15	0	0	0	0	0	45	208	424	639	821	936	994	991	924	791	609	399	173	39	0	0	0	0	0	7993
16	0	0	0	0	0	42	195	400	606	740	866	736	844	755	734	560	340	179	31	0	0	0	0	0	7029
17	0	0	0	0	0	13	96	236	256	346	425	407	330	60	74	33	90	62	10	0	0	0	0	0	2437
18	0	0	0	0	0	17	50	107	394	824	870	969	993	873	740	640	428	177	39	0	0	0	0	0	7119
19	0	0	0	0	0	46	218	440	655	835	957	1011	1005	936	805	626	416	193	39	0	0	0	0	0	8184
20	0	0	0	0	1	53	155	293	590	755	855	896	974	838	736	446	397	196	32	0	0	0	0	0	7217
21	0	0	0	0	0	47	216	429	641	820	942	998	1002	940	727	637	423	196	41	0	0	0	0	0	8059
22	0	0	0	0	0	49	221	438	649	824	944	995	985	923	797	619	412	193	41	0	0	0	0	0	8089
23	0	0	0	0	0	46	211	423	626	804	917	972	972	872	784	511	400	170	37	0	0	0	0	0	7745
24	0	0	0	0	0	44	171	341	607	809	926	981	981	915	674	538	233	159	43	0	0	0	0	0	7423
25	0	0	0	0	0	47	179	230	407	749	800	819	419	515	525	513	391	85	15	0	0	0	0	0	5694
26	0	0	0	0	0	40	178	292	522	573	670	929	847	419	431	339	169	12	2	0	0	0	0	0	5422
27	0	0	0	0	0	25	187?	420	603	764	882	903	912	842	261	325	309	131	34	0	0	0	0	0	6597
28	0	0	0	0	0	19	149	259	358	532	869	371	224	357	60	85	108	81	19	0	0	0	0	0	3491
29	0	0	0	0	0	30	203	196	226	534	607	175	376	650	629	433	350	135	29	0	0	0	0	0	4572
30	0	0	0	0	0	23	75	120	307	600	578	937	927	893	649	621	275	180	29	0	0	0	0	0	6214
31	0	0	0	0	1	50	210	406	607	728	739	949	912	737	522	433	366	168	47	0	0	0	0	0	6875
Avg	0	0	0	0	0	31	141	271	421	590	699	723	728	665	581	470	309	140	29	0	0	0	0	0	5823
S D	0	0	0	0	0	15	63	138	194	229	236	280	275	253	196	143	100	56	12	0	0	0	0	0	1834
S/A	0	0	0	0	3.39	0.47	0.45	0.51	0.46	0.39	0.34	0.39	0.38	0.38	0.34	0.3	0.32	0.4	0.41	0	0	0	0	0	0.31
Min	0	0	0	0	0	3	10	29	45	66	42	86	166	60	60	33	90	0	1	0	0	0	0	0	1926
Max	0	0	0	0	1	53	221	440	655	835	957	1011	1005	940	805	640	428	214	47	0	0	0	0	0	8184
n	0	0	0	0	16	346	354	355	354	359	360	367	372	370	371	372	370	366	317	0	0	0	0	0	4968

Daylight Data Recovery: 1.4% missing; 0.6% exceed the 15% QC threshold -- 5154 total daylight measurements.

Instrument: Eppley PSP    Serial Number: 18036F3    Calibration Factor: 7.430 μV/W/m<sup>2</sup>    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.

May 2002

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	*	*	*	*	*	*	?	?	*	*	*	*	*	*	0	0	0	0	0	*	
3	0	0	0	0	0	*	*	*	*	*	*	?	?	*	*	*	?	276 ?	551 ?	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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
19	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
20	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
21	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
22	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
23	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
24	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
25	0	0	0	0	?	?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
26	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
27	0	0	0	0	?	?	?	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
28	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
29	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
30	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
31	0	0	0	0	*	?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
Avg	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	276	551	0	0	0	0	0	N/A	*
SD	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
S/A	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
Min	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	276	551	0	0	0	0	0	0	N/A
Max	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	276	551	0	0	0	0	0	0	N/A
n	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0	0

Daylight Data Recovery: 95.1% missing; 4.7% exceed the 15% QC threshold -- 5154 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.

**May 2002**

**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	26	73	150	280	299	319	206	206	216	205	188	141	84	23	0	0	0	0	0	2415
2	0	0	0	0	0	*	*	*	*	*	*	433*	321	366	330	264	92	1?	0	0	0	0	0	0	1807*
3	0	0	0	0	0	3	9	25	39	57	36	75	144	212	380	237	153	22	11	0	0	0	0	0	1405
4	0	0	0	0	0	21	54	80	132	206	230	286	297	252	252	284	247	132	24	0	0	0	0	0	2497
5	0	0	0	0	0	38	81	104	255	306	418	460	442	426	323	219	128	82	21	0	0	0	0	0	3301
6	0	0	0	0	0	19	110	254	329	359	452	452	431	457	382	285	187	97	19	0	0	0	0	0	3833
7	0	0	0	0	0	21	96	156	260	328	475	401	438	386	359	321	182	124	23	0	0	0	0	0	3569
8	0	0	0	0	0	23	88	166	319	294	319	283	188	173	305	256	173	72	17	0	0	0	0	0	2676
9	0	0	0	0	0	23	97	71	93	187	406	254	417	135	233	232	168	101	30?	0	0	0	0	0	2447
10	0	0	0	0	0	3	38	71	50?	210	318	365	481	417	364	182	119	79	22	0	0	0	0	0	2718
11	0	0	0	0	0	23	124	176	301	395	372	468	355	300	260	254	233	111	33	0	0	0	0	0	3404
12	0	0	0	0	0	25	91	149	231	256	265	335	349	363	331	261	185	151	33	0	0	0	0	0	3026
13	0	0	0	0	0	2	35	46	207	222	323	332	273	388	423	264	160	77	24	0	0	0	0	0	2776
14	0	0	0	0	0	27	68	74	75	85	92	95	97	111	128	111	103	72	23	0	0	0	0	0	1161
15	0	0	0	0	0	25	58	69	82	88	90	90	91	91	88	81	65	27	0	0	0	0	0	0	1035
16	0	0	0	0	0	28	83	110	148	229	315	419	424	332	259	214	140	95	25	0	0	0	0	0	2821
17	0	0	0	0	0	11	84	208	221	313	373	344	262	55	62	29	79	54	9	0	0	0	0	0	2104
18	0	0	0	0	0	15	43	93	222	227	242	221	254	223	167	118	102	83	30	0	0	0	0	0	2040
19	0	0	0	0	0	27	68	86	100	107	111	110	110	105	98	90	80	62	25	0	0	0	0	0	1178
20	0	0	0	0	1	42	115	215	162	191	376	251	171	217	211	172	152	96	24	0	0	0	0	0	2397
21	0	0	0	0	0	28	68	82	91	94	102	111	111	117	157	91	78	61	26	0	0	0	0	0	1216
22	0	0	0	0	0	27	67	84	96	103	107	111	116	105	98	89	79	61	24	0	0	0	0	0	1169
23	0	0	0	0	0	30	80	113	126	138	158	162	179	234	165	189	164	88	33	0	0	0	0	0	1857
24	0	0	0	0	0	39	139	151	146	151	172	156	134	167	331	286	200	139	38	0	0	0	0	0	2247
25	0	0	0	0	0	39	151	210	334	397	421	428	303	339	355	274	168	58	14	0	0	0	0	0	3491
26	0	0	0	0	0	35	144	235	306	372	337	265	330	345	348	277	150	11	2	0	0	0	0	0	3157
27	0	0	0	0	0	22	123	185	197	186	196	236	281	281	175	228	207	115	29	0	0	0	0	0	2462
28	0	0	0	0	0	16	135	215	288	416	399	317	180	317	55	77	96	71	16	0	0	0	0	0	2599
29	0	0	0	0	0	26	169	171	197	427	535	153	332	449	311	320	188	102	26	0	0	0	0	0	3407
30	0	0	0	0	0	20	66	106	269	477	409	249	366	220	228	183	183	129	26	0	0	0	0	0	2931
31	0	0	0	0	1	40	172	357	319	164	219	209	236	193	202	163	123	88	33	0	0	0	0	0	2520
Avg	0	0	0	0	0	24	91	140	196	243	286	267	268	258	245	202	146	83	23	0	0	0	0	0	2462
S/D	0	0	0	0	0	10	40	73	93	117	134	123	118	117	106	81	47	35	9	0	0	0	0	0	798
S/A	0	0	0	0	3.47	0.43	0.44	0.52	0.47	0.48	0.47	0.46	0.44	0.45	0.43	0.4	0.32	0.42	0.39	0	0	0	0	0	0.32
Min	0	0	0	0	0	2	9	25	39	57	36	75	90	55	55	29	78	1	0	0	0	0	0	0	1035
Max	0	0	0	0	1	42	172	357	334	477	535	468	481	457	423	321	247	151	38	0	0	0	0	0	3833
n	0	0	0	0	16	346	357	360	355	359	360	367	372	372	372	372	371	367	316	0	0	0	0	0	4980

Daylight Data Recovery: 1.4% missing; 0.3% exceed the 15% QC threshold -- 5154 total daylight measurements.

Instrument: Eppley PSP    Serial Number: 18039F3    Calibration Factor: 7.470 μV/W/m<sup>2</sup>    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.