

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

**June 2001**

**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	24	105	384	650	635	502	705	887	906	819	638	435	214	45	0	0	0	0	0	6949
2	0	0	0	0	1	37	115	184	342	515	649	762	908	585	503	423	179	148	43	0	0	0	0	0	5394
3	0	0	0	0	3	49	205	419	562	601	879	913	739	807	710	521	378	221	57	3	0	0	0	0	7067
4	0	0	0	0	1	50	153	310	345	560	640	810	299	279	169	81	137	85	19	0	0	0	0	0	3938
5	0	0	0	0	0	47	119	188	270	370	578	749	800	722	715	526	247	70	4	1	0	0	0	0	5405
6	0	0	0	0	0	10	51	129	274	211	317	391	433	580	417	282	150	51	8	1	0	0	0	0	3304
7	0	0	0	0	0	10	84	198	391	583	396	229	473	399	410	231	124	41	18	0	0	0	0	0	3588
8	0	0	0	0	2	34	159	309	395	319	270	632	995	884	598	570	358	52	28	1	0	0	0	0	5606
9	0	0	0	0	0	25	187	349	540	747	910	954	934	876	717	531	342	171	50	4	0	0	0	0	7339
10	0	0	0	0	4	44	188	415	621	792	917	983	977	912	755	584	460	254	72	4	0	0	0	0	7981
11	0	0	0	0	1	38	120	391	491	630	696	627	568	685	656	463	423	222	55	2	0	0	0	0	6068
12	0	0	0	0	1	53	220	410	582	762	748	857	848	683	609	555	439	194	47	1	0	0	0	0	7010
13	0	0	0	0	3	55	206	347	582	690	770	921	908	829	756	344	392	213	55	2	0	0	0	0	7075
14	0	0	0	0	3	32	140	311	491	663	739	950	821	776	660	546	427	216	56	3	0	0	0	0	6833
15	0	0	0	0	6	31	89	232	509	563	694	763	1024	939	648	633	343	208	52	8	0	0	0	0	6741
16	0	0	0	0	2	54	230	436	642	819	939	1001	1005	947	822	650	449	234	60	0	0	0	0	0	8291
17	0	0	0	0	8	77	185	366	578	758	818	980	976	908	795	624	435	229	60	1	0	0	0	0	7800
18	0	0	0	0	1	51	217	416	607	775	890	964	914	751	643	565	407	194	49	0	0	0	0	0	7443
19	0	0	0	0	1	50	211	415	612	780	857	862	761	836	586	454	342	200	54	1	0	0	0	0	7022
20	0	0	0	0	2	50	198	398	544	561	698	860	682	721	650	565	428	238	46	1	0	0	0	0	6642
21	0	0	0	0	2	46	183	281	534	732	853	938	911	879	730	548	375	202	48	1	0	0	0	0	7265
22	0	0	0	0	0	15	95	138	325	456	763	988	747	878	790	632	442	226	60	1	0	0	0	0	6557
23	0	0	0	0	2	59	223	402	603	774	895	918	808	374	537	534	405	216	53	0	0	0	0	0	6802
24	0	0	0	0	1	31	177	386	597	736	875	795	854	847	733	640	447	239	64	3	0	0	0	0	7424
25	0	0	0	0	1	17	114	398	591	722	896	963	687	847	698	482	401	206	55	2	0	0	0	0	7079
26	0	0	0	0	2	54	185 ?	359	505	716	837	627	486	404	463	435	162	154	49	2	0	0	0	0	5440
27	0	0	0	0	11	56	156	249	133	528	603 ?	258 ?	30	37	91	158	131	74	39	5	0	0	0	0	2558
28	0	0	0	0	0	19	126	227	535	814	900	848	877	895	816	590	407	227	66	7	0	0	0	0	7356
29	0	0	0	0	1	44	200	403	494	461	612	614	593	654	773	578	339	140	47	3	0	0	0	0	5957
30	0	0	0	0	0	17	75	241	476	366	573	674	897	839	486	375	114	23	3	1	0	0	0	0	5162
Avg	0	0	0	0	2	39	157	323	494	621	724	784	762	723	625	492	337	172	45	2	0	0	0	0	6303
S D	0	0	0	0	2	17	51	93	129	162	182	207	232	224	179	146	118	70	18	2	0	0	0	0	1428
S/A	0	0	0	0	1.23	0.42	0.32	0.29	0.26	0.26	0.25	0.26	0.3	0.31	0.29	0.3	0.35	0.41	0.4	1.05	0	0	0	0	0.23
Min	0	0	0	0	0	10	51	129	133	211	270	229	30	37	91	81	114	23	3	0	0	0	0	0	2558
Max	0	0	0	0	11	77	230	436	650	819	939	1001	1024	947	822	650	460	254	72	8	0	0	0	0	8291
n	0	0	0	0	56	359	349	358	360	360	356	356	360	358	359	359	360	358	360	48	0	0	0	0	5116

Daylight Data Recovery: 0.0% missing; 0.5% exceed the 15% QC threshold -- 5144 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.

June 2001

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	*
2	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
3	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
4	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
12	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
13	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
14	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
15	0	0	0	0	*	*	*	*	*	*	*	*	*	*	?	?	?	?	?	*	*	0	0	0	*
16	0	0	0	0	*	?	?	*	625 ?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
17	0	0	0	0	146 ?	387 ?	75 ?	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	?	*	*	*	356 *?	*	*	*	*	*	*	*	*	0	0	0	0	*
23	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	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	?	112 ?	139 ?	?	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
27	0	0	0	0	*	?	?	?	*	*	*	*	*	*	*	*	*	*	*	?	?	0	0	0	?
28	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
29	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	?	0	0	0	*
30	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	*
Avg	0	0	0	0	146	249	107	N/A	625	N/A	N/A	356	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	N/A	*
SD	0	0	0	0	0	195	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
StA	0	0	0	0	0	0.78	0.42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	146	112	75	N/A	625	N/A	N/A	356	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A
Max	0	0	0	0	146	387	139	N/A	625	N/A	N/A	356	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A
n	0	0	0	0	1	6	6	0	3	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 92.7% missing; 6.8% exceed the 15% QC threshold -- 5144 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 2001**

**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	21	93	331	464 ?	372	407	381	236	166	113	82	68	53	23	0	0	0	0	0	2811
2	0	0	0	0	1	33	102	163	297	343	410	438	331	342	332	264	148	112	37	0	0	0	0	0	3352
3	0	0	0	0	2	44	195	376	483 ?	496	504	452	439	395	323	263	155	108	47	3	0	0	0	0	4285
4	0	0	0	0	1	47	137	273	300	467	406	385	267	248	149	71	121	76	17	0	0	0	0	0	2965
5	0	0	0	0	0	45	106	167	235	320	541	586	525	566	386	284	188	62	4	1	0	0	0	0	4015
6	0	0	0	0	0	9	44	113	239	185	277	330	345	511	374	245	133	45	6	0	511	0	0	0	2859
7	0	0	0	0	0	9	74	174	343	481	344	203	432	348	378	206	109	36	16	0	0	0	0	0	3152
8	0	0	0	0	2	30	145	268	365	285	246	406	251	237	257	156	171	47	25	1	0	0	0	0	2891
9	0	0	0	0	0	22	169	320	487 ?	464 ?	602 ?	245	233	251	300	289	202	136	44	5	0	0	0	0	3770 ?
10	0	0	0	0	3	40	176	342 ?	?	?	675 ?	259	190	188	201	198	185	138	55	5	0	0	0	0	2656 ?
11	0	0	0	0	1	34	107	344 ?	439	545	613	554	472	416	342	249	145	83	56	3	0	0	0	0	4383
12	0	0	0	0	1	49	221	383	499 ?	451 ?	486 ?	441	297	275	264	216	169	107	34	1	0	0	0	0	3894 ?
13	0	0	0	0	3	50	194	323	524 ?	483 ?	603 ?	438	245	206	162	204	136	103	37	2	0	0	0	0	3712 ?
14	0	0	0	0	2	28	124	278	401 ?	549 ?	559 ?	537	343	301	226	196	158	92	40	3	0	0	0	0	3837
15	0	0	0	0	5	28	78	207	368 ?	504	561	509	245	222	216	211	202	121	44	7	0	0	0	0	3528
16	0	0	0	0	2	52	193 ?	?	?	?	484 ?	110	90	85	79	69	57	30	1	0	0	0	0	0	1253 ?
17	0	0	0	0	9 ?	67	165 ?	336	504 ?	703 ?	643 ?	511 ?	137	114	103	90	77	63	33	3	0	0	0	0	3557 ?
18	0	0	0	0	2	51	214	346 ?	?	?	?	553 ?	201	212	200	183	157	97	34	0	0	0	0	0	2248 ?
19	0	0	0	0	1	50	208	353 ?	?	?	711 ?	543 ?	257	235	231	212	164	103	39	1	0	0	0	0	3108 ?
20	0	0	0	0	2	48	196	375	368 ?	406 ?	492 ?	582 ?	332	307	326	203	160	153	34	2	0	0	0	0	3987 ?
21	0	0	0	0	2	41	169	253	480	621 ?	?	678 ?	392	282	309	267	224	155	44	1	0	0	0	0	3917 ?
22	0	0	0	0	0	13	83	120	284	402	614 ?	630 ?	377	263	195	147	130	85	38	2	0	0	0	0	3385
23	0	0	0	0	2	52	210	382	?	?	?	520 ?	302	300	387	252	116	78	36	1	0	0	0	0	2639 ?
24	0	0	0	0	1	28	173	376	?	?	?	444 ?	265	261	203	117	112	92	43	4	0	0	0	0	2120 ?
25	0	0	0	0	1	16	95	346 ?	?	652 ?	?	590 ?	336	269	257	203	172	120	46	3	0	0	0	0	3108 ?
26	0	0	0	0	2	50	168 ?	332	395 ?	667 ?	716 ?	451	342	294	320	278	133	123	43	2	0	0	0	0	4316 ?
27	0	0	0	0	?	51	143	227	118	356 ?	323	179	26	32	80	140	116	65	34	4	0	0	0	0	1896
28	0	0	0	0	1	16	115	199	469	?	?	588	369	291	285	244	160	117	58	7	0	0	0	0	2918 ?
29	0	0	0	0	1	42	198	375 ?	428 ?	390	536	537	497	464	381	333	236	127	41	3	0	0	0	0	4590
30	0	0	0	0	0	15	67	193	352 ?	317	449	484	236	219	219	165	101	20	3	0	0	0	0	0	2840
Avg	0	0	0	0	2	36	145	285	384	455	510	465	301	277	254	202	147	92	34	2	0	0	0	0	3266 ?
S/D	0	0	0	0	2	16	51	86	104	130	134	125	113	115	93	68	42	35	14	2	0	0	0	0	788
S/A	0	0	0	0	1.13	0.43	0.35	0.3	0.27	0.29	0.26	0.27	0.37	0.41	0.37	0.34	0.29	0.38	0.4	0.91	0	0	0	0	0.24
Min	0	0	0	0	0	9	44	113	118	185	246	179	26	32	80	71	68	20	3	0	0	0	0	0	1253
Max	0	0	0	0	9	67	221	383	524	703	716	678	525	566	387	333	236	155	58	7	0	0	0	0	4590
n	0	0	0	0	54	358	341	301	206	211	213	308	360	358	359	360	360	359	360	48	0	0	0	0	4561

Daylight Data Recovery: 0.0% missing; 11.3% exceed the 15% QC threshold -- 5144 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.