

**Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - August 1999**

Field: GHI

Hour 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	23	154	352	550	722	840	851	907	828	727	576	364	184	36	0	0	0	0	0	7113	
2	0	0	0	0	0	20	152	346	545	713	846	919	924	860	733	592	433	243	42	0	0	0	0	0	7368	
3	0	0	0	0	0	24	153	317	551	713	853	925	936	836	755	572	357	178	38	0	0	0	0	0	7208	
4	0	0	0	0	0	23	161	363	566	738	865	930	940	880	753	581	380	182	33	0	0	0	0	0	7394	
5	0	0	0	0	0	18	150	341	515	710	798	907	842	891	764	590	381	183	31	0	0	0	0	0	7119	
6	0	0	0	0	0	15	131	318	509	682	789	803	895	734	730	534	352	165	28	0	0	0	0	0	6685	
7	0	0	0	0	0	16	93	292	499	673	791	821	870	692	716	524	335	151	25	0	0	0	0	0	6497	
8	0	0	0	0	0	13	128	293	429	393	526	757	886	818	369	395	223	104	17	0	0	0	0	0	5349	
9	0	0	0	0	0	11	119	300	493	666	614	582	529	476	531	414	320	109	3	0	0	0	0	0	5167	
10	0	0	0	0	0	14	101	237	322	573	647	622	668	813	575	420	298	97	28	0	0	0	0	0	5418	
11	0	0	0	0	0	16	132	328	533	707	835	905	919	862	744	536	315	142	7	0	0	0	0	0	6982	
12	0	0	0	0	0	16	140	341	506	696	830	902	880	886	742	564	366	161	25	0	0	0	0	0	7056	
13	0	0	0	0	0	16	137	286	522	702	845	910	919	876	658	359	293	109	10	0	0	0	0	0	6643	
14	0	0	0	0	0	15	150	358	560	743	880	954	945	883	763										6251 ?	
15	0	0	0	0	0	0	2 ?	134 ?		605 ?	774 ?	884	960	971	949 ?											5279 ?
16	0	0	0	0	0	0	4 ?	132 ?			750 ?	868	944	947	896 ?											4542 ?
17	0	0	0	0	0	0	12 ?	122 ?			738	860	937	949	877	824 ?										5318 ?
18	0	0	0	0	0	0	6 ?	125 ?			716	849	914	919	859	795 ?										5182 ?
19	0	0	0	0	0	0	9	115 ?		574 ?	684	819	892	895	837	751 ?										5576 ?
20	0	0	0	0	0	0	9	70 ?		561 ?	670	820	907	917	857	765 ?										5575 ?
21	0	0	0	0	0	0	6 ?	51 ?		577 ?	688	804	906	883	854	691	560 ?									6019 ?
22	0	0	0	0	0	0	8	66 ?		592 ?	688	808	871	892	836	711	567 ?									6038 ?
23	0	0	0	0	0	0	9 ?	95	181	340	595	604	854	878	741	485	568 ?			94 ?						5443 ?
24	0	0	0	0	0	0	0 ?	3 ?	14	20	70	230	525	717	828	617	357	51	26 ?							3458 ?
25	0	0	0	0	0	0	6	76 ?	194	302	541	602	748	517 ?	817	645 ?	468 ?									4915 ?
26	0	0	0	0	0	0	6	73 ?			703	821	896	891 ?	839	701	582 ?	148 ?								5660 ?
27	0	0	0	0	0	0	9	57	172	163	266	617	774 ?	898	839	602 ?	486 ?	134 ?								5016 ?
28	0	0	0	0	0	0	4 ?	85	256	410	608	772 ?	876 ?	880	684	690	547 ?									5812 ?
29	0	0	0	0	0	0	4	65	253	463 ?	604 ?	836 ?	874	885	831 ?	682	504 ?									6000 ?
30	0	0	0	0	0	0	5	60 ?					825 ?	864	874	815	691 ?									4133 ?
31	0	0	0	0	0	0	5 ?	53 ?					811 ?	856	846	369 ?	482	414 ?	115 ?	38 ?	0	0	0	0	0	3989 ?
Avg	0	0	0	0	0	8	65	189	409	561	691	794	860	842	751	599	412	144	30	0	0	0	0	0	0	5813
S D	0	0	0	0	0	9	66	123	165	188	176	146	106	109	133	120	102	43	20	0	0	0	0	0	0	1018
S/A	0	0	0	0	0	1.15	1.02	0.65	0.4	0.34	0.25	0.18	0.12	0.13	0.18	0.2	0.25	0.3	0.66	0	0	0	0	0	0	0.18
Min	0	0	0	0	0	0	0	3	14	20	70	230	525	476	369	359	223	51	3	0	0	0	0	0	0	3458
Max	0	0	0	0	0	24	161	363	566	743	880	954	960	971	949	824	582	243	94	0	0	0	0	0	0	7394

Daylight Data Recovery: 0% missing; 22% exceed the 15% QC threshold -- 4985 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: MV
Latitude: 33.50° N
Longitude: 90.33° W
Elevation: 52 Meters AMSL
Time Zone: -6

Instrument: PSP
Calibration Constant: 7.43 uV/Wm-2
Serial Number: 18036F3
Calibration Date: 5/15/98

**Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - August 1999**

Field: DNI

Hour 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	82	359	557	654	711	709	586	634	631	627	647	522	427	141	0	0	0	0	0	7286
2	0	0	0	0	0	65	333	535	646	696	748	754	716	684	652	681	579	343	69	0	0	0	0	0	7502
3	0	0	0	0	0	63	275	426	627	666	745	775	737	685	684	610	470	338	126	0	0	0	0	0	7228
4	0	0	0	0	0	114	452	653	753	801	823	823	834	827	784	716	608	449	150	0	0	0	0	0	8785
5	0	0	0	0	0	55	357	502	518	621	577	623	551	645	675	665	573	446	141	0	0	0	0	0	6950
6	0	0	0	0	0	6	142	336	481	546	583	538	649	499	535	429	391	281	78	0	0	0	0	0	5494
7	0	0	0	0	0	15	55	268	431	506	491	440	501	368	474	416	344	221	53	0	0	0	0	0	4584
8	0	0	0	0	0	12	109	202	179	27	79	327	506	503	123	176	129	69	6	0	0	0	0	0	2445
9	0	0	0	0	0	5	129	293	404	441	181	91	78	81	141	120	190	25	0	0	0	0	0	0	2178
10	0	0	0	0	0	1	27	95	90	213	175	155	256	493	297	267	256	32	6	0	0	0	0	0	2362
11	0	0	0	0	0	38	287	512	651	731	747	758	756	717	673	567	392	278	4	0	0	0	0	0	7111
12	0	0	0	0	0	45	315	537	586	680	729	735	640	685	696	658	597	417	102	0	0	0	0	0	7421
13	0	0	0	0	0	70	372	456	638	715	795	807	800	755	587	226	181	69	3	0	0	0	0	0	6475
14	0	0	0	0	0	81	471	695	782	843	886	896	869	859	825		815	654	520	0	0	0	0	0	9194
15	0	0	0	0	0	0	?	286	?	?	893	901	?	?	?	?	833	?	630	0	0	0	0	0	3550
16	0	0	0	0	0	0	15	291	?	?	864	885	886	875	863	?	?	671	550	0	0	0	0	0	5899
17	0	0	0	0	0	0	37	225	?	?	832	859	874	882	844	837	?	669	578	?	0	0	0	0	6639
18	0	0	0	0	0	0	18	269	?	?	821	849	843	842	821	804	706	629	452	?	0	0	0	0	7054
19	0	0	0	0	0	0	28	223	?	?	711	739	766	773	762	745	717	607	565	?	381	?	0	0	7018
20	0	0	0	0	0	0	15	160	?	?	627	631	731	785	800	786	759	665	598	?	454	?	0	0	7012
21	0	0	0	0	0	0	6	79	?	?	639	675	671	658	677	720	540	364	534	372	?	0	0	0	5934
22	0	0	0	0	0	0	22	166	?	?	686	716	739	726	745	720	687	630	524	414	?	0	0	0	6774
23	0	0	0	0	0	0	20	70	40	245	315	183	598	566	470	237	467	371	3	0	0	0	0	0	3585
24	0	0	0	0	0	0	0	0	0	0	1	9	60	253	537	381	191	1	1	?	0	0	0	0	1434
25	0	0	0	0	0	0	6	150	40	40	271	172	281	165	671	507	579	667	518	?	0	0	0	0	4068
26	0	0	0	0	0	0	23	213	?	?	779	804	809	797	779	708	597	315	198	?	0	0	0	0	6023
27	0	0	0	0	0	0	0	2	13	1	25	286	507	640	595	445	464	288	295	?	0	0	0	0	3562
28	0	0	0	0	0	0	1	108	301	316	422	591	652	652	475	597	517	403	272	?	0	0	0	0	5308
29	0	0	0	0	0	0	2	54	298	496	632	723	711	733	632	632	528	423	276	?	0	0	0	0	6139
30	0	0	0	0	0	0	11	165	?	?	?	684	704	742	708	654	637	571	441	?	0	0	0	0	5318
31	0	0	0	0	0	0	14	174	?	?	?	738	722	682	149	209	279	134	0	0	0	0	0	0	3101
Avg	0	0	0	0	0	21	126	281	407	498	582	610	637	642	610	532	487	380	233	0	0	0	0	0	5595
S D	0	0	0	0	0	32	156	190	260	266	271	260	215	199	201	203	184	206	207	0	0	0	0	0	1978
S/A	0	0	0	0	0	1.54	1.24	0.68	0.64	0.53	0.47	0.43	0.34	0.31	0.33	0.38	0.38	0.54	0.89	0	0	0	0	0	0.35
Min	0	0	0	0	0	0	0	0	0	0	1	9	60	81	123	120	129	1	0	0	0	0	0	0	1434
Max	0	0	0	0	0	114	471	695	782	843	893	901	886	882	863	837	833	671	630	0	0	0	0	0	9194

Daylight Data Recovery: 0% missing; 16% exceed the 15% QC threshold -- 4985 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: MV
Latitude: 33.50° N
Longitude: 90.33° W
Elevation: 52 Meters AMSL
Time Zone: -6

Instrument: NIP
Calibration Constant: 8.67 uV/Wm-2
Serial Number: 25796E6
Calibration Date: 5/15/98

Diffuse Solar Radiation on a Horizontal Surface (Shadow Band PSP)
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - August 1999

Field: DHI

Hour 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	19	79	123	151	171	206	291	292	257	228	161	126	82	27	0	0	0	0	0	2212						
2	0	0	0	0	0	17	83	126	153	176	176	197	236	240	216	155	171	159	39	0	0	0	0	0	2142						
3	0	0	0	0	0	22	97	140	174	201	193	189	232	211	213	183	145	98	30	0	0	0	0	0	2129						
4	0	0	0	0	0	17	66	94	109	121	132	145	139	129	128	122	108	76	23	0	0	0	0	0	1411						
5	0	0	0	0	0	15	76	140	205	239	290	322	323	320	238	172	130	80	22	0	0	0	0	0	2574						
6	0	0	0	0	0	14	105	187	228	269	276	293	278	287	320	274	189	107	24	0	0	0	0	0	2849						
7	0	0	0	0	0	14	85	195	252	301	372	421	410	373	360	276	195	107	22	0	0	0	0	0	3383						
8	0	0	0	0	0	12	113	220	333	362	468	458	420	385	261	290	170	93	15	0	0	0	0	0	3600						
9	0	0	0	0	0	10	99	192	264	346	459	504	449	387	426	339	249	96	3	0	0	0	0	0	3823						
10	0	0	0	0	0	14	92	201	264	410	495	475	415	379	344	251	190	86	25	0	0	0	0	0	3640						
11	0	0	0	0	0	14	78	122	143	152	173	185	195	217	215	183	153	80	7	0	0	0	0	0	1917						
12	0	0	0	0	0	14	80	126	153	181	185	206	270	275	198	156	110	74	19	0	0	0	0	0	2046						
13	0	0	0	0	0	13	67	99	136	149	136	139	149	192	188	206	220	83	8	0	0	0	0	0	1784						
14	0	0	0	0	0	11	56	79	92	98	98	106	112	107	107	87	84	76	?	0	?	0	0	0	1115						
15	0	0	0	0	0	0	10	52	73	83	91	97	100	98	?	?	81	?	74	64	?	0	?	0	0	921					
16	0	0	0	0	0	0	10	53	72	85	94	?	101	112	117	118	?	?	94	?	82	71	?	0	?	1010					
17	0	0	0	0	0	0	10	?	63	92	105	?	111	116	118	114	123	121	?	92	?	78	66	?	0	?	1208				
18	0	0	0	0	0	0	9	54	78	91	?	103	112	123	123	126	126	?	107	?	97	86	?	0	?	1236					
19	0	0	0	0	0	0	8	61	90	114	?	138	156	171	181	179	177	?	146	?	127	?	?	0	?	1547					
20	0	0	0	0	0	0	8	52	?	?	176	?	207	193	179	172	169	164	?	148	?	143	?	?	0	?	1610				
21	0	0	0	0	0	0	5	?	42	?	?	186	?	203	238	302	261	236	292	347	?	?	?	0	?	0	?	2111			
22	0	0	0	0	0	0	7	47	?	?	157	?	168	183	208	210	220	241	318	?	?	?	?	0	?	0	?	1759			
23	0	0	0	0	0	0	8	?	83	157	179	357	426	313	370	354	348	?	?	?	?	?	?	0	?	0	?	2596			
24	0	0	0	0	0	0	0	?	2	?	12	18	60	201	452	494	511	?	396	?	214	?	46	24	?	0	?	0	?	2430	
25	0	0	0	0	0	0	6	56	?	170	256	343	452	501	373	?	?	323	?	268	?	?	?	?	0	?	0	?	0	?	2749
26	0	0	0	0	0	0	6	54	92	?	136	152	219	?	?	?	?	?	?	?	?	?	?	?	0	?	0	?	0	?	659
27	0	0	0	0	0	0	8	50	146	146	235	397	407	?	?	439	?	272	?	?	?	?	?	?	0	?	0	?	0	?	2100
28	0	0	0	0	0	0	3	?	70	160	250	319	346	?	?	?	308	?	?	?	?	?	?	?	0	?	0	?	0	?	1456
29	0	0	0	0	0	0	3	56	159	207	?	213	?	?	?	?	?	?	?	?	?	?	?	?	0	?	0	?	0	?	639
30	0	0	0	0	0	0	4	44	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	0	?	0	?	0	?	48
31	0	0	0	0	0	0	4	?	47	?	?	?	?	?	?	?	208	?	332	?	278	?	87	?	35	?	0	0	0	0	991
Avg	0	0	0	0	0	7	41	94	152	187	222	254	264	251	242	232	173	93	34	0	0	0	0	0	0	0	1926				
S D	0	0	0	0	0	8	40	56	71	90	118	129	121	108	106	80	72	24	24	0	0	0	0	0	0	0	921				
S/A	0	0	0	0	0	1.15	0.96	0.59	0.47	0.48	0.53	0.51	0.46	0.43	0.44	0.34	0.42	0.26	0.7	0	0	0	0	0	0	0	0.48				
Min	0	0	0	0	0	0	0	2	12	18	60	97	97	100	98	121	81	46	3	0	0	0	0	0	0	0	48				
Max	0	0	0	0	0	22	113	220	333	410	495	504	501	494	511	396	347	159	86	0	0	0	0	0	0	0	3823				

Daylight Data Recovery: 0% missing; 22% exceed the 15% QC threshold -- 4985 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: MV
Latitude: 33.50° N
Longitude: 90.33° W
Elevation: 52 Meters AMSL
Time Zone: -6

Instrument: PSP
Calibration Constant: 7.47 uV/Wm-2
Serial Number: 18039F3
Calibration Date: 5/15/98