

**Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Univ. - February 2000**

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	0	0	0	28 ?	135 ?	156 ?	197	241 ?	?	?	?	?	131 ?	0 ?	0	0	0	0	0	888 ?
2	0	0	0	0	0	0	0	0	36 ?	?	?	243 ?	?	?	?	?	?	145 ?	0 ?	0	0	0	0	0	424 ?
3	0	0	0	0	0	0	0	0	40 ?	?	?	?	?	?	?	?	?	128 ?	0 ?	0	0	0	0	0	168 ?
4	0	0	0	0	0	0	0	0	31 ?	?	?	?	?	?	?	?	?	142 ?	0 ?	0	0	0	0	0	173 ?
5	0	0	0	0	0	0	0	0	37 ?	?	?	?	?	?	?	?	?	158 ?	0 ?	0	0	0	0	0	195 ?
6	0	0	0	0	0	0	0	0	29 ?	?	?	?	?	?	?	?	?	133 ?	0 ?	0	0	0	0	0	162 ?
7	0	0	0	0	0	0	0	0	60	141	258 ?	334 ?	?	236	303 ?	232 ?	187 ?	124 ?	0 ?	0	0	0	0	0	1874 ?
8	0	0	0	0	0	0	0	0	43	154 ?	?	?	?	?	?	?	?	121 ?	0 ?	0	0	0	0	0	317 ?
9	0	0	0	0	0	0	0	0	37 ?	?	?	?	?	?	?	?	?	115 ?	0 ?	0	0	0	0	0	152 ?
10	0	0	0	0	0	0	0	0	25 ?	192 ?	493 ?	548	646	621	541	349 ?	142	52 ?	0 ?	0	0	0	0	0	3609 ?
11	0	0	0	0	0	0	0	0	22	26	63	118	70	113	174	235	88	98 ?	0 ?	0	0	0	0	0	1007
12	0	0	0	0	0	0	0	0 ?	17	81	124	157	206	238	267	221	140	89 ?	0 ?	0	0	0	0	0	1539
13	0	0	0	0	0	0	0	0	16	45	124	183	370	155	82	66	5	1	0 ?	0	0	0	0	0	1049
14	0	0	0	0	0	0	0	0 ?	47 ?	?	453 ?	598	656	669	640	?	?	127 ?	0 ?	0	0	0	0	0	3191 ?
15	0	0	0	0	0	0	0	1	13 ?	?	499 ?	581	656	684	619	388 ?	?	129 ?	0 ?	0	0	0	0	0	3570 ?
16	0	0	0	0	0	0	0	0	27	125	269	256	316	339	357	235	68	27 ?	0	0	0	0	0	0	2021
17	0	0	0	0	0	0	0	1	56	83	185	323	605	401	386	205 ?	228 ?	111 ?	0 ?	0	0	0	0	0	2583
18	0	0	0	0	0	0	0	2	40 ?	173 ?	360	281	371	408	490	452 ?	93	23	0	0	0	0	0	0	2692
19	0	0	0	0	0	0	0	1	26	67	102	159	203	191	152	107	83	37	0	0	0	0	0	0	1129
20	0	0	0	0	0	0	0	1 ?	?	?	562 ?	634	724	750	698	603 ?	?	135 ?	0 ?	0	0	0	0	0	4107 ?
21	0	0	0	0	0	0	0	2	56	299 ?	423 ?	598	692	715	668 ?	570 ?	?	126 ?	0 ?	0	0	0	0	0	4150 ?
22	0	0	0	0	0	0	0	3	38 ?	?	504 ?	599	685	711	628 ?	521 ?	158 ?	155 ?	0 ?	0	0	0	0	0	4003 ?
23	0	0	0	0	0	0	0	3	47	202	455	561	501	599 ?	647	301	182	93 ?	0 ?	0	0	0	0	0	3590
24	0	0	0	0	0	0	0	3	86	177	420	287	554 ?	458 ?	503 ?	481 ?	182 ?	128 ?	0 ?	0	0	0	0	0	3279 ?
25	0	0	0	0	0	0	0	4	63	156	347	540	700 ?	744 ?	676	451	151 ?	67 ?	0 ?	0	0	0	0	0	3900 ?
26	0	0	0	0	0	0	0	4	84	215	444 ?	461 ?	710 ?	476	78 ?	81	20	7	0	0	0	0	0	0	2580 ?
27	0	0	0	0	0	0	0	1 ?	?	?	?	695 ?	765	787	730	646 ?	?	149 ?	0 ?	0	0	0	0	0	3774 ?
28	0	0	0	0	0	0	0	0 ?	?	?	?	694	767	786	736 ?	?	?	127 ?	0 ?	0 ?	0	0	0	0	3110 ?
29	0	0	0	0	0	0	0	8	46 ?	?	392 ?	663	764	779	720	?	?	146 ?	0 ?	0	0	0	0	0	3518 ?
Avg	0	0	0	0	0	0	0	1	40	142	332	422	533	517	481	341	123	104	0	0	0	0	0	0	2164
S D	0	0	0	0	0	0	0	2	18	68	154	195	215	227	221	176	63	46	0	0	0	0	0	0	1445
S/A	0	0	0	0	0	0	5.29	1.38	0.45	0.48	0.46	0.46	0.4	0.44	0.46	0.52	0.51	0.44	0	0	0	0	0	0	0.67
Min	0	0	0	0	0	0	0	0	13	26	63	118	70	113	78	66	5	1	0	0	0	0	0	0	152
Max	0	0	0	0	0	0	0	8	86	299	562	695	767	787	736	646	228	158	0	0	0	0	0	0	4150

Daylight Data Recovery: 0% missing; 41% exceed the 15% QC threshold -- 3822 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: 5/15/1998

Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Univ. - February 2000

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	0	0	0	1 ?	12 ?	8 ?	5	5 ?	?	?	7 ?	6	2	0	0	0	0	0	0	44 ?
2	0	0	0	0	0	0	0	0	2 ?	?	?	6 ?	?	?	?	8 ?	7	2	0	0	0	0	0	0	25 ?
3	0	0	0	0	0	0	0	0	1 ?	?	?	?	?	?	?	5 ?	5	2	0	0	0	0	0	0	13 ?
4	0	0	0	0	0	0	0	0	3 ?	?	?	?	?	?	7 ?	5 ?	4	2	0	0	0	0	0	0	19 ?
5	0	0	0	0	0	0	0	0	2 ?	?	?	?	?	?	?	7 ?	4 ?	0	0	0	0	0	0	0	13 ?
6	0	0	0	0	0	0	0	0	0 ?	?	?	?	?	?	?	5 ?	6	3	0	0	0	0	0	0	14 ?
7	0	0	0	0	0	0	0	0	2	5	7 ?	5 ?	?	1	3 ?	2 ?	4	3	0	0	0	0	0	0	31 ?
8	0	0	0	0	0	0	0	0	0	7 ?	?	?	?	?	?	6 ?	6	3	0	0	0	0	0	0	22 ?
9	0	0	0	0	0	0	0	0	2 ?	?	?	?	?	?	?	5 ?	346	213 ?	0	0	0	0	0	0	567 ?
10	0	0	0	0	0	0	0	1	66 ?	381 ?	793 ?	768	833	656	529	204 ?	7	0	0	0	0	0	0	0	4238 ?
11	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	3	0	0	0	0	0	0	0	0	7
12	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0 ?	0 ?	0	0	0	0	0	2
13	0	0	0	0	0	0	0	0	1	1	4	6	40	3	0	0	0	0	0 ?	0 ?	0	0	0	0	54
14	0	0	0	0	0	0	0	0	122 ?	?	578 ?	742	734	684	703	701 ?	597	522 ?	0 ?	0	0	0	0	0	5383 ?
15	0	0	0	0	0	0	0	4	98 ?	?	827 ?	843	815	850	771	553 ?	694	450 ?	0 ?	0	0	0	0	0	5906 ?
16	0	0	0	0	0	0	0	0	0	14	81	34	13	4	72	1	0	0	0	0	0	0	0	0	218
17	0	0	0	0	0	0	0	0	0	0	18	98	555	65	45	101	222	17	0 ?	0	0	0	0	0	1123
18	0	0	0	0	0	0	0	2	127 ?	135 ?	218	39	81	111	387	452 ?	38	0	0	0	0	0	0	0	1589
19	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
20	0	0	0	0	0	0	0	8	?	?	860 ?	896	934	961	958	908 ?	845 ?	710	0 ?	0	0	0	0	0	7080 ?
21	0	0	0	0	0	0	0	6	20	190 ?	531 ?	760	816	818	809 ?	793	672	500	0 ?	0	0	0	0	0	5918 ?
22	0	0	0	0	0	0	0	4	145 ?	?	729 ?	778	805	822	750 ?	685	479	194	0 ?	0	0	0	0	0	5391 ?
23	0	0	0	0	0	0	0	0	1	127	484	456	177	473 ?	684	22	4	1	0	0	0	0	0	0	2428
24	0	0	0	0	0	0	0	0	108	68	387	50	300 ?	199 ?	268 ?	608 ?	255 ?	120	0 ?	0	0	0	0	0	2366
25	0	0	0	0	0	0	0	1	6	14	173	345	562 ?	696 ?	723	457	167 ?	1	0	0	0	0	0	0	3145
26	0	0	0	0	0	0	0	0	17	231	602 ?	291 ?	607 ?	140	1 ?	0	0	0	0	0	0	0	0	0	1889
27	0	0	0	0	0	0	0	4	?	?	?	955 ?	973	980	962	937 ?	854 ?	758	0 ?	0	0	0	0	0	6423 ?
28	0	0	0	0	0	0	0	0 ?	?	?	?	978	989	983	971 ?	?	818 ?	574	0 ?	0	0	0	0	0	5313 ?
29	0	0	0	0	0	0	0	22	69 ?	?	567 ?	876	939	921	871	839 ?	788	642	0 ?	0	0	0	0	0	6535 ?
Avg	0	0	0	0	0	0	0	2	31	74	343	388	485	446	433	261	235	163	0	0	0	0	0	0	2267
S D	0	0	0	0	0	0	0	4	48	108	316	386	383	394	383	339	317	254	0	0	0	0	0	0	2548
S/A	0	0	0	0	0	0	4.2	2.4	1.56	1.46	0.92	0.99	0.79	0.88	0.89	1.3	1.35	1.56	0	0	0	0	0	0	1.12
Min	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
Max	0	0	0	0	0	0	0	22	145	381	860	978	989	983	971	937	854	758	0	0	0	0	0	0	7080

Daylight Data Recovery: 0% missing; 29% exceed the 15% QC threshold -- 3822 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: 5/15/1998

Diffuse Solar Radiation on a Horizontal Surface (Shadow Band PSP)
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Univ. - February 2000

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	0	0	0	18 ?	76 ?	102 ?	134	193 ?	?	?	98 ?	82	53 ?	0 ?	0	0	0	0	0	756 ?
2	0	0	0	0	0	0	0	0	19 ?	?	?	151 ?	?	?	?	63 ?	51	44 ?	0 ?	0	0	0	0	0	328 ?
3	0	0	0	0	0	0	0	0	20 ?	?	?	?	?	?	?	91 ?	81	58 ?	0 ?	0	0	0	0	0	251 ?
4	0	0	0	0	0	0	0	0	12 ?	?	?	?	?	?	167 ?	82 ?	72	51 ?	0 ?	0	0	0	0	0	384 ?
5	0	0	0	0	0	0	0	0	17 ?	?	?	?	?	?	?	275 ?	?	91 ?	0 ?	0	0	0	0	0	383 ?
6	0	0	0	0	0	0	0	0	8 ?	?	?	?	?	?	?	72 ?	65	51 ?	0 ?	0	0	0	0	0	195 ?
7	0	0	0	0	0	0	0	0	50	115	195 ?	309 ?	?	226	283 ?	?	213 ?	150 ?	64 ?	0 ?	0	0	0	0	1606 ?
8	0	0	0	0	0	0	0	0	40	127 ?	?	?	?	?	?	94 ?	79	60 ?	0 ?	0	0	0	0	0	400 ?
9	0	0	0	0	0	0	0	0	18 ?	?	?	?	?	?	?	70 ?	68	99 ?	0 ?	0	0	0	0	0	255 ?
10	0	0	0	0	0	0	0	0	27	67 ?	85 ?	108	111	186	214	235 ?	124	51 ?	0 ?	0	0	0	0	0	1208 ?
11	0	0	0	0	0	0	0	0	21	25	60	113	67	109	165	216 ?	85	76 ?	0 ?	0	0	0	0	0	938
12	0	0	0	0	0	0	0	0 ?	16	77	119	150	196	227	255	211	134	61 ?	0 ?	0	0	0	0	0	1446
13	0	0	0	0	0	0	0	0	15	43	115	173	334	149	79	64	5	1	0 ?	0	0	0	0	0	980
14	0	0	0	0	0	0	0	0 ?	34 ?	75 ?	158 ?	157	168	201	190	147 ?	123	79 ?	0 ?	0	0	0	0	0	1333 ?
15	0	0	0	0	0	0	0	1	28	56	71	86	115	109	127	132 ?	86	76 ?	0 ?	0	0	0	0	0	888
16	0	0	0	0	0	0	0	0	26	118	222	232	299	318	299	227	65	27 ?	0	0	0	0	0	0	1835
17	0	0	0	0	0	0	0	1	53	79	168	249	229	360	350	191 ?	200 ?	45 ?	0 ?	0	0	0	0	0	1925 ?
18	0	0	0	0	0	0	0	2	29 ?	126 ?	249	252	317	330	233	222 ?	86	22	0	0	0	0	0	0	1868
19	0	0	0	0	0	0	0	1	25	64	97	152	194	182	146	103	79	34 ?	0	0	0	0	0	0	1077
20	0	0	0	0	0	0	0	2	35	68	85 ?	94	95	89	93	198 ?	?	135 ?	0 ?	0	0	0	0	0	894 ?
21	0	0	0	0	0	0	0	2	49	142 ?	153 ?	130	137	149	187 ?	?	?	123 ?	0 ?	0	0	0	0	0	1071 ?
22	0	0	0	0	0	0	0	3	29 ?	?	115 ?	123	135	167	?	206 ?	111 ?	143 ?	0 ?	0	0	0	0	0	1035 ?
23	0	0	0	0	0	0	0	3	42	162	215	285	398	392 ?	322 ?	278	172	73 ?	0 ?	0	0	0	0	0	2341 ?
24	0	0	0	0	0	0	0	2	67	150	220	252	375 ?	270 ?	327 ?	?	100 ?	113 ?	0 ?	0	0	0	0	0	1877 ?
25	0	0	0	0	0	0	0	4	57	142	262	344	455 ?	?	?	206 ?	142 ?	64 ?	0 ?	0	0	0	0	0	1677 ?
26	0	0	0	0	0	0	0	4	76	127	150 ?	356 ?	437 ?	369 ?	75 ?	78	19	7	0	0	0	0	0	0	1699 ?
27	0	0	0	0	0	0	0	4 ?	42	64	210	?	?	?	?	92 ?	60	46 ?	0 ?	0	0	0	0	0	519 ?
28	0	0	0	0	0	0	0	4 ?	30	45	54	60	65	69	64 ?	52 ?	55	46 ?	0 ?	0	0	0	0	0	545
29	0	0	0	0	0	0	0	7	38	64	84 ?	94	90	98	110	83 ?	76	63 ?	0 ?	0	0	0	0	0	809 ?
Avg	0	0	0	0	0	0	0	1	33	91	145	182	221	211	194	148	91	64	0	0	0	0	0	0	1052
S D	0	0	0	0	0	0	0	2	17	39	63	86	124	100	90	72	43	34	0	0	0	0	0	0	598
S/A	0	0	0	0	0	0	5.29	1.23	0.51	0.42	0.43	0.47	0.56	0.47	0.46	0.48	0.47	0.53	0	0	0	0	0	0	0.57
Min	0	0	0	0	0	0	0	0	8	25	54	60	65	69	64	52	5	1	0	0	0	0	0	0	195
Max	0	0	0	0	0	0	0	7	76	162	262	356	455	392	350	278	200	143	0	0	0	0	0	0	2341

Daylight Data Recovery: 0% missing; 34% exceed the 15% QC threshold -- 3822 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: 5/15/1998