

**Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - December 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	0	0	1	?	?	464 ?	500	520	556	509 ?	?	99 ?	0 ?	0 ?	0	0	0	0	0	2650 ?
2	0	0	0	0	0	0	0	2	45 ?	98 ?	390	474	472	493	422	279 ?	128 ?	0 ?	0	0	0	0	0	0	2803 ?
3	0	0	0	0	0	0	0	0	5	78	138	403	445	436	235	213	88 ?	0 ?	0	0	0	0	0	0	2040
4	0	0	0	0	0	0	0	1	23	109	92	141	413	464	374 ?	124 ?	99 ?	0 ?	0	0	0	0	0	0	1838 ?
5	0	0	0	0	0	0	0	0	14	112	155	90	264	195	106	87	34	0 ?	0	0	0	0	0	0	1058
6	0	0	0	0	0	0	0	0	32	133 ?	454 ?	509	552	556	520 ?	?	121 ?	0 ?	0	0	0	0	0	0	2877 ?
7	0	0	0	0	0	0	0	0	33 ?	?	?	514	584	488	334	235 ?	98 ?	0 ?	0	0	0	0	0	0	2287 ?
8	0	0	0	0	0	0	0	0	30	115	237	395	493	504	378	212	116 ?	0 ?	0	0	0	0	0	0	2480
9	0	0	0	0	0	0	0	0	23	49	71	137	269	296	228	176 ?	77 ?	0 ?	0	0	0	0	0	0	1326
10	0	0	0	0	0	0	0	0	20	62	93	168	186	97	76	82	42	0 ?	0	0	0	0	0	0	827
11	0	0	0	0	0	0	0	0	12	49	117	166	155	205	206	79	64 ?	0 ?	0	0	0	0	0	0	1053
12	0	0	0	0	0	0	0	0	10	58	171	164	53	83	139	22	5	0	0	0	0	0	0	0	705
13	0	0	0	0	0	0	0	0	7	32	59	66	70	75	52	40	15	0	0	0	0	0	0	0	417
14	0	0	0	0	0	0	0	0	22	88	177	417	523	545	502 ?	?	119 ?	0 ?	0	0	0	0	0	0	2392 ?
15	0	0	0	0	0	0	0	0	3 ?	?	?	485	552	551	517 ?	?	125 ?	0 ?	0	0	0	0	0	0	2232 ?
16	0	0	0	0	0	0	0	0	3 ?	?	?	503 ?	548	551	518 ?	?	123 ?	0 ?	0	0	0	0	0	0	2247 ?
17	0	0	0	0	0	0	0	0	17 ?	187 ?	313 ?	354	486	557	581 ?	268 ?	194 ?	0 ?	0	0	0	0	0	0	2956 ?
18	0	0	0	0	0	0	0	0	8	32	60	76	105	120	202	191 ?	131 ?	0 ?	0	0	0	0	0	0	926
19	0	0	0	0	0	0	0	0	12	103	207	260	339	459	220	125	55 ?	0 ?	0	0	0	0	0	0	1780
20	0	0	0	0	0	0	0	0	30	37	58	103	80	54	61	48	36	0 ?	0	0	0	0	0	0	507
21	0	0	0	0	0	0	0	0	10	57	152	143	259	185	195	118	88 ?	0 ?	0	0	0	0	0	0	1206
22	0	0	0	0	0	0	0	0	12 ?	?	419 ?	474	541	542	509 ?	?	115 ?	0 ?	0	0	0	0	0	0	2612 ?
23	0	0	0	0	0	0	0	0	17 ?	?	?	485 ?	536	539	508 ?	?	117 ?	0 ?	0	0	0	0	0	0	2202 ?
24	0	0	0	0	0	0	0	0	9 ?	?	?	471 ?	526	512	419 ?	?	125 ?	0 ?	0	0	0	0	0	0	2062 ?
25	0	0	0	0	0	0	0	0	8 ?	?	?	494 ?	535	540	505 ?	?	122 ?	0 ?	0	0	0	0	0	0	2204 ?
26	0	0	0	0	0	0	0	0	9 ?	?	?	478	534	537	501 ?	?	119 ?	0 ?	0	0	0	0	0	0	2179 ?
27	0	0	0	0	0	0	0	0	1 ?	?	?	503 ?	542	546	515 ?	?	127 ?	0 ?	0	0	0	0	0	0	2234 ?
28	0	0	0	0	0	0	0	0	18 ?	60 ?	?	485 ?	542	554	523 ?	?	131 ?	0 ?	0	0	0	0	0	0	2313 ?
29	0	0	0	0	0	0	0	0	9 ?	?	?	490 ?	527	531	503 ?	?	129 ?	0 ?	0	0	0	0	0	0	2187 ?
30	0	0	0	0	0	0	0	0	34	104	293	438	496	518	457 ?	?	104 ?	0 ?	0	0	0	0	0	0	2445 ?
31	0	0	0	0	0	0	0	0	22	65	67	107	131	264	365	220 ?	83 ?	18 ?	0	0	0	0	0	0	1342
Avg	0	0	0	0	0	0	0	0	17	81	199	338	396	405	361	148	98	1	0	0	0	0	0	0	1883
S D	0	0	0	0	0	0	0	0	11	38	134	168	177	179	165	80	40	3	0	0	0	0	0	0	721
S/A	0	0	0	0	0	0	0	2.74	0.65	0.47	0.67	0.5	0.45	0.44	0.46	0.54	0.41	5.48	0	0	0	0	0	0	0.38
Min	0	0	0	0	0	0	0	0	1	32	58	66	53	54	52	22	5	0	0	0	0	0	0	0	417
Max	0	0	0	0	0	0	0	2	45	187	464	514	584	557	581	279	194	18	0	0	0	0	0	0	2956

Daylight Data Recovery: 0% missing; 29% exceed the 15% QC threshold -- 3714 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 Unive - December 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	0	0	1	?	?	884 ?	768	635	899	912 ?	848	620	0 ?	0	0	0	0	0	0	5568 ?
2	0	0	0	0	0	0	0	0	138 ?	158 ?	676	572	405	542	510	259	42	0	0	0	0	0	0	0	3303
3	0	0	0	0	0	0	0	1	0	1	50	299	419	298	107	154	10	0	0	0	0	0	0	0	1339
4	0	0	0	0	0	0	0	0	1	17	0	1	247	441	398 ?	490	293	0 ?	0	0	0	0	0	0	1887
5	0	0	0	0	0	0	0	0	0	26	9	0	14	11	0	0	0	0	0	0	0	0	0	0	61
6	0	0	0	0	0	0	0	0	0	137 ?	903 ?	847	891	951	917 ?	866	746	0 ?	0	0	0	0	0	0	6258 ?
7	0	0	0	0	0	0	0	0	135 ?	?	?	931	727	429	210	515	602	0 ?	0	0	0	0	0	0	3549 ?
8	0	0	0	0	0	0	0	0	17	27	69	343	624	604	414	134	2	0 ?	0	0	0	0	0	0	2232
9	0	0	0	0	0	0	0	0	0	0	0	1	14	36	7	32	6	0	0	0	0	0	0	0	98
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0 ?	0	0	0	0	0	0	3
12	0	0	0	0	0	0	0	0	0	1	6	5	0	0	12	0	0	0	0	0	0	0	0	0	24
13	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
14	0	0	0	0	0	0	0	0	0	0	13	295	735	894	876 ?	815	679	0 ?	0	0	0	0	0	0	4308
15	0	0	0	0	0	0	0	0	4 ?	?	?	922	958	965	949 ?	895	787	0 ?	0	0	0	0	0	0	5480 ?
16	0	0	0	0	0	0	0	0	2 ?	?	?	962 ?	979	980	967 ?	896	781	0 ?	0	0	0	0	0	0	5568 ?
17	0	0	0	0	0	0	0	0	68 ?	284 ?	374 ?	333	597	527	616 ?	144 ?	144	0 ?	0	0	0	0	0	0	3087 ?
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	104	35	0 ?	0	0	0	0	0	0	143
19	0	0	0	0	0	0	0	0	0	5	11	9	16	275	0	0	0	0	0	0	0	0	0	0	317
20	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
21	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	4
22	0	0	0	0	0	0	0	0	36 ?	?	867 ?	905	950	973	953 ?	894	772	?	0	0	0	0	0	0	6350 ?
23	0	0	0	0	0	0	0	0	34 ?	?	?	919 ?	934	939	878 ?	797	675	?	0	0	0	0	0	0	5177 ?
24	0	0	0	0	0	0	0	0	37 ?	?	?	868 ?	891	796	732 ?	851	751	?	0	0	0	0	0	0	4927 ?
25	0	0	0	0	0	0	0	0	45 ?	?	?	944 ?	957	961	941 ?	881	776	?	0	0	0	0	0	0	5506 ?
26	0	0	0	0	0	0	0	0	40 ?	?	?	914	934	931	913 ?	863	745	0 ?	0	0	0	0	0	0	5340 ?
27	0	0	0	0	0	0	0	0	0 ?	?	?	968 ?	975	967	939 ?	887	766	?	0	0	0	0	0	0	5502 ?
28	0	0	0	0	0	0	0	0	47 ?	188 ?	?	913 ?	932	952	943 ?	888	756	?	0	0	0	0	0	0	5618 ?
29	0	0	0	0	0	0	0	0	37 ?	?	?	939 ?	948	923	920 ?	868	744	?	0	0	0	0	0	0	5379 ?
30	0	0	0	0	0	0	0	0	44	29	366	579	598	749	682 ?	658 ?	436	0 ?	0	0	0	0	0	0	4139
31	0	0	0	0	0	0	0	0	12	3	0	1	1	22	238	103 ?	33	11	0	0	0	0	0	0	426
Avg	0	0	0	0	0	0	0	0	24	44	201	459	496	518	485	447	361	0	0	0	0	0	0	0	2955
S D	0	0	0	0	0	0	0	0	36	79	326	412	405	404	405	388	347	2	0	0	0	0	0	0	2416
S/A	0	0	0	0	0	0	4.14	3.36	1.52	1.8	1.62	0.9	0.82	0.78	0.83	0.87	0.96	4.8	0	0	0	0	0	0	0.82
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	1	138	284	903	968	979	980	967	896	787	11	0	0	0	0	0	0	6350

Daylight Data Recovery: 0% missing; 16% exceed the 15% QC threshold -- 3714 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 Unive - December 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	0	0	0	20	38	52	97	138	73	49 ?	42	38 ?	0 ?	0	0	0	0	0	0	548
2	0	0	0	0	0	0	0	2	48 ?	73 ?	108	178	236	194	173	190 ?	90 ?	0 ?	0	0	0	0	0	0	1291 ?
3	0	0	0	0	0	0	0	0	4	75	113	241	204	265	205	163	84 ?	0 ?	0	0	0	0	0	0	1355
4	0	0	0	0	0	0	0	0	22	103	90	137	262	213	215 ?	117 ?	54 ?	0 ?	0	0	0	0	0	0	1214
5	0	0	0	0	0	0	0	0	14	105	150	90	250	185	104	86	34 ?	0 ?	0	0	0	0	0	0	1017
6	0	0	0	0	0	0	0	0	31	69	50	90	67	51	48 ?	43	34 ?	0 ?	0	0	0	0	0	0	484
7	0	0	0	0	0	0	0	0	24	38	47	53	189	243	221	121 ?	41 ?	0 ?	0	0	0	0	0	0	978
8	0	0	0	0	0	0	0	0	28	104	213	223	155	181	189	158 ?	60 ?	0 ?	0	0	0	0	0	0	1313
9	0	0	0	0	0	0	0	0	22	48	70	135	255	273	217	169 ?	71 ?	0 ?	0	0	0	0	0	0	1261
10	0	0	0	0	0	0	0	0	19	61	91	165	183	96	76	81	43 ?	0 ?	0	0	0	0	0	0	817
11	0	0	0	0	0	0	0	0	12	48	116	164	153	201	203	77	63 ?	0 ?	0	0	0	0	0	0	1037
12	0	0	0	0	0	0	0	0	10	57	164	159	52	82	131	21	5	0	0	0	0	0	0	0	682
13	0	0	0	0	0	0	0	0	7	32	58	65	69	74	52	40	15	0	0	0	0	0	0	0	412
14	0	0	0	0	0	0	0	0	21	85	168	267	131	81	73 ?	62	48 ?	0 ?	0	0	0	0	0	0	936
15	0	0	0	0	0	0	0	0	16	39	49	53	55	51	47 ?	41	32 ?	0 ?	0	0	0	0	0	0	385
16	0	0	0	0	0	0	0	0	14	32	40	43	44	45	44 ?	40	32 ?	0 ?	0	0	0	0	0	0	334
17	0	0	0	0	0	0	0	0	32	95 ?	172 ?	188	162	264	237 ?	222 ?	115 ?	0 ?	0	0	0	0	0	0	1487 ?
18	0	0	0	0	0	0	0	0	8	32	60	76	104	118	188	187 ?	142 ?	0 ?	0	0	0	0	0	0	916
19	0	0	0	0	0	0	0	0	12	97	197	247	323	295	215	123	55 ?	0 ?	0	0	0	0	0	0	1565
20	0	0	0	0	0	0	0	0	28	36	57	101	79	53	60	47	35	0 ?	0	0	0	0	0	0	498
21	0	0	0	0	0	0	0	0	10	56	147	140	249	180	191	117	83 ?	0 ?	0	0	0	0	0	0	1173
22	0	0	0	0	0	0	0	0	15	33	41	46	48	47	45 ?	40	32	0 ?	0	0	0	0	0	0	347
23	0	0	0	0	0	0	0	0	16	37	48	56	59	56	73 ?	58	46 ?	0 ?	0	0	0	0	0	0	449
24	0	0	0	0	0	0	0	0	14	36	50	66 ?	70	101	123 ?	56	43 ?	0 ?	0	0	0	0	0	0	560
25	0	0	0	0	0	0	0	0	14	36	46	49	49	49	46 ?	44	34	0 ?	0	0	0	0	0	0	365
26	0	0	0	0	0	0	0	0	13	41	50	55	56	57	53 ?	45	35	0 ?	0	0	0	0	0	0	404
27	0	0	0	0	0	0	0	0	12	30	37	41	44	47	48 ?	44	35	0 ?	0	0	0	0	0	0	339
28	0	0	0	0	0	0	0	0	18	38	52	58	63	62	54 ?	47	40 ?	0 ?	0	0	0	0	0	0	433
29	0	0	0	0	0	0	0	0	12	32	38	42	44	54	50 ?	44	38	0 ?	0	0	0	0	0	0	356
30	0	0	0	0	0	0	0	0	31	95	146	154	169	116	106 ?	123 ?	100 ?	0 ?	0	0	0	0	0	0	1040 ?
31	0	0	0	0	0	0	0	0	21	63	66	106	128	247	242	172 ?	80 ?	15 ?	0	0	0	0	0	0	1138
Avg	0	0	0	0	0	0	0	0	18	57	90	116	132	131	122	91	54	0	0	0	0	0	0	0	811
S D	0	0	0	0	0	0	0	0	9	25	52	67	81	83	73	56	29	3	0	0	0	0	0	0	394
S/A	0	0	0	0	0	0	0	2.93	0.49	0.45	0.58	0.58	0.61	0.64	0.6	0.62	0.55	5.48	0	0	0	0	0	0	0.49
Min	0	0	0	0	0	0	0	0	4	30	37	41	44	45	44	21	5	0	0	0	0	0	0	0	334
Max	0	0	0	0	0	0	0	2	48	105	213	267	323	295	242	222	142	15	0	0	0	0	0	0	1565

Daylight Data Recovery: 0% missing; 8% exceed the 15% QC threshold -- 3714 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