

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Univ. - October 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	56	173	315	598	718	762 ?	545 ?	508 ?	470 ?	386	167	20	0	0	0	0	0	0	4719	
2	0	0	0	0	0	0	54	230	433	603	725	773 ?	744 ?	681	544	367	165	20	0	0	0	0	0	0	5340	
3	0	0	0	0	0	0	55	231	431	597	717	763 ?	747 ?	677	534	359	155	16	0	0	0	0	0	0	5284	
4	0	0	0	0	0	0	53	228	428	591	704	764	750	670	529	351	125	12	0	0	0	0	0	0	5207	
5	0	0	0	0	0	0	48	213	423	604	610	656 ?	479 ?	437 ?	523	193	73	8	0	0	0	0	0	0	4266	
6	0	0	0	0	0	0	2	27	93	119	75	56	79	69	125	176	82	12	0	0	0	0	0	0	915	
7	0	0	0	0	0	0	31	213	437	491	584	706	248	119	104	95	36	9	0	0	0	0	0	0	3072	
8	0	0	0	0	0	0	56	188	403	574	698	776	784	588 ?	531 ?	371	155	10	0	0	0	0	0	0	5135	
9	0	0	0	0	0	0	53	231	414	583	754	772	718	617	460	288	119	12	0	0	0	0	0	0	5021	
10	0	0	0	0	0	0	50	236	444	614	730	784	768	630	495	325	134	9	0	0	0	0	0	0	5217	
11	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Avg	0	0	0	0	0	0	46	197	382	538	632	681	586	499	432	291	121	13	0	0	0	0	0	0	4016	
S/D	0	0	0	0	0	0	16	60	102	143	193	212	235	216	161	96	42	4	0	0	0	0	0	0	1801	
S/A	0	0	0	0	0	1.31	0.35	0.3	0.27	0.27	0.3	0.31	0.4	0.43	0.37	0.33	0.35	0.32	0	0	0	0	0	0	0.45	
Min	0	0	0	0	0	0	2	27	93	119	75	56	79	69	104	95	36	8	0	0	0	0	0	0	0	
Max	0	0	0	0	0	0	56	236	444	614	754	784	784	681	544	386	167	20	0	0	0	0	0	0	5340	

Daylight Data Recovery: 66% missing; 2% exceed the 15% QC threshold -- 4105 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. - October 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	*	*	*	*		8 ?	6 ?	11 ?	9 ?	7	7	1	0	0	0	0	0	0	47 *?	
2	0	0	0	0	0	0	*			*		?	7 ?	7	7	7	7	2	0	0	0	0	0	0	38 *?	
3	0	0	0	0	0	0	*	*	*	*		?	9 ?	8	8	8	7	1	0	0	0	0	0	0	40 *?	
4	*	*		0 ?	0 ?	0 ?	*	*	*	*		8 ?	8	7	8	9	5	0	0	0	0	0	0	0	46 *?	
5	*	*	*	*	*	*	*	*	*	*	*	8	7 ?	6 ?	8	3	0 ?	*	*	0 *	0 ?	0 ?	0 ?	0	33 *?	
6	0 ?	0 ?	0 ?		*			*	*	*	*	*	0	0	0	3		*	*	0 ?	0 ?	0 ?	0	0	3 *?	
7	0	?	?	0 ?		0 *	667 *	*	*	*	*	*	0 *	0	0	0	0	0 ?			0 ?	0 ?	0 *	0 *	667 *?	
8	0	0 *	0 ?	0 ?	0	0	*	*	*	*	*	*	*	14 ?	7	*	12			?	*	0	0	0	32 *?	
9	0	0 *	0 ?	0 ?	0	0	*	*	*	*	*	*	*	11 *	6		5 ?	3 ?	0 ?	0	0	0	0	0	26 *?	
10	0	0	0	0	0	0	*	*	*	*	*	*	*	14 *	10 ?	10	5	2 *	0	0	0	0	0	0	41 *	
11	0	0 *		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	*
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Avg	0	0	0	0	0	0	667	0	0	0	0	8	5	8	6	7	5	2	0	0	0	0	0	0	0	89
S/D	0	0	0	0	0	0	0	0	0	0	0	0	3	5	3	3	3	1	0	0	0	0	0	0	0	184
S/A	0	0	0	0	0	0	0	0	0	0	0	0.04	0.64	0.61	0.52	0.39	0.65	0.7	0	0	0	0	0	0	0	2.07
Min	0	0	0	0	0	0	667	0	0	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	0
Max	0	0	0	0	0	0	667	0	0	0	0	8	9	14	10	10	12	3	0	0	0	0	0	0	0	667

Daylight Data Recovery: 85% missing; 5% exceed the 15% QC threshold -- 4105 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. - October 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	50	161	289	?	?	?	499	?	451	?	416	?	333	?	164	20	0	0	0	0	2383	?
2	0	0	0	0	0	0	48	219	404	?	?	?	?	?	?	?	375	164	20	0	0	0	0	0	0	1229	?	
3	0	0	0	0	0	0	50	222	405	?	?	?	?	?	?	472	?	365	153	17	0	0	0	0	0	1684	?	
4	0	0	0	0	0	0	49	219	402	?	?	?	?	?	?	460	?	352	122	12	0	0	0	0	0	1615	?	
5	0	0	0	0	0	0	42	201	401	534	?	526	?	569	?	460	?	395	?	408	?	181	66	7	0	0	3790	?
6	0	0	0	0	0	0	2	24	83	104	66	50	69	61	110	153	73	11	0	0	0	0	0	0	0	805	?	
7	0	0	0	0	0	0	29	175	395	?	360	?	443	?	544	?	217	104	91	83	31	8	0	0	0	2480	?	
8	0	0	0	0	0	0	51	173	291	?	506	?	574	?	611	?	?	598	?	?	261	?	153	10	0	0	3228	?
9	0	0	0	0	0	0	48	196	?	388	?	479	?	?	?	611	?	569	?	432	?	278	99	12	0	0	3113	?
10	0	0	0	0	0	0	47	191	?	357	?	?	?	?	?	498	?	442	?	290	?	134	10	0	0	1969	?	
11	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	*
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Avg	0	0	0	0	0	0	42	178	341	397	402	444	371	382	354	267	116	13	0	0	0	0	0	0	0	2027		
S/D	0	0	0	0	0	0	15	55	96	158	200	229	198	200	148	94	44	4	0	0	0	0	0	0	0	0	1070	
S/A	0	0	0	0	0	1.35	0.35	0.31	0.28	0.4	0.5	0.52	0.53	0.52	0.42	0.35	0.38	0.34	0	0	0	0	0	0	0	0	0.53	
Min	0	0	0	0	0	0	2	24	83	104	66	50	69	61	91	83	31	7	0	0	0	0	0	0	0	0	0	
Max	0	0	0	0	0	0	51	222	405	534	574	611	611	598	472	375	164	20	0	0	0	0	0	0	0	0	3790	

Daylight Data Recovery: 66% missing; 14% exceed the 15% QC threshold -- 4105 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