

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - December 1998

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	Dayly
1	0	0	0	0	0	0	2	76 ?	294 ?	403 ?	497	548	533	459	333	190 ?	29	0	0	0	0	0	0	0	3363
2	0	0	0	0	0	0	1	61 ?	288 ?	365 ?	424 ?	383	445 ?	471 ?	228 ?	100 ?	18	0	0	0	0	0	0	0	2782 ?
3	0	0	0	0	0	0	1	49	101	108	105	196	434 ?	422 ?	219 ?	110 ?	23	0	0	0	0	0	0	0	1768
4	0	0	0	0	0	0	1	55	151	407 ?	462	541 ?	301	377 ?	325 ?	68 ?	26	0	0	0	0	0	0	0	2714 ?
5	0	0	0	0	0	0	1	20	69	117	193	285	300	264 ?	327 ?	174 ?	29	0	0	0	0	0	0	0	1780
6	0	0	0	0	0	0	0	37	166 ?	232 ?	201 ?	415 ?	468 ?	406	134	16	4	0	0	0	0	0	0	0	2080
7	0	0	0	0	0	0	0	6	48	35	91	89	115	208	65	39	3	0	0	0	0	0	0	0	699
8	0	0	0	0	0	0	0	5	46	43	82	77	121	62	52	30	6	0	0	0	0	0	0	0	524
9	0	0	0	0	0	0	0	58	275 ?	406	509	568	543	491	341	150 ?	27	0	0	0	0	0	0	0	3368
10	0	0	0	0	0	0	0	67	135	137	175	54	51	49	35	12	4	0	0	0	0	0	0	0	719
11	0	0	0	0	0	0	0	6	14	18	40	52	47	64	46	16	3	0	0	0	0	0	0	0	306
12	0	0	0	0	0	0	0	4	21	25	48	68	61	54	32	19	4	0	0	0	0	0	0	0	335
13	0	0	0	0	0	0	0	8	24	98	72	80	94	115	55	23	3	0	0	0	0	0	0	0	572
14	0	0	0	0	0	0	0	47	262 ?	371	475	537	526	458	331	96 ?	30	0	0	0	0	0	0	0	3132
15	0	0	0	0	0	0	0	72	237	380	481	548	542	471	345	209 ?	31	0	0	0	0	0	0	0	3315
16	0	0	0	0	0	0	0	47	288 ?	367	476	543	536	467	345	207 ?	34	0	0	0	0	0	0	0	3310
17	0	0	0	0	0	0	0	51	252 ?	378	480	547	540	469	346	207 ?	33	0	0	0	0	0	0	0	3303
18	0	0	0	0	0	0	0	41	149	228	298 ?	301	262	217	172	53	11	0	0	0	0	0	0	0	1733
19	0	0	0	0	0	0	0	10	29	118	185	324	282	298	201 ?	90	25	0	0	0	0	0	0	0	1561
20	0	0	0	0	0	0	0	19	66	89	190	212	197	106	66	40	13	0	0	0	0	0	0	0	999
21	0	0	0	0	0	0	0	20	61	113	249	382 ?	288 ?	289 ?	186	101	21	0	0	0	0	0	0	0	1710
22	0	0	0	0	0	0	0	18	71	163	231	401	279	191	125	57	8	0	0	0	0	0	0	0	1544
23	0	0	0	0	0	0	0	6	20	47	65	81	70	72	34	15	3	0	0	0	0	0	0	0	413
24	0	0	0	0	0	0	0	4	31	72	112	164	119	76	52	25	5	0	0	0	0	0	0	0	660
25	0	0	0	0	0	0	0	18	73	127	185	279	217	190	143	47	5	0	0	0	0	0	0	0	1284
26	0	0	0	0	0	0	0	11	56	133	184	232	235	408	197	107	35	0	0	0	0	0	0	0	1598
27	0	0	0	0	0	0	0	16	48	101	123	215	167	201	150	87	16	0	0	0	0	0	0	0	1123
28	0	0	0	0	0	0	0	6	35	101	148	182	127	87	58	43	6	0	0	0	0	0	0	0	792
29	0	0	0	0	0	0	0	9	44	84	151	176	178	152	140	91	38	0	0	0	0	0	0	0	1063
30	0	0	0	0	0	0	0	38	193	371 ?	441	545 ?	534	469	333	174	47	0	0	0	0	0	0	0	3145
31	0	0	0	0	0	0	0	36	179	340	457	527	532	469	354	195	45	0	0	0	0	0	0	0	3131
Avg	0	0	0	0	0	0	0	30	120	193	253	308	295	275	186	90	19	0	0	0	0	0	0	0	1769
S D	0	0	0	0	0	0	0	23	95	137	161	181	177	162	118	66	14	0	0	0	0	0	0	0	1065
S/A	0	0	0	0	0	0	2.05	0.77	0.79	0.71	0.64	0.59	0.6	0.59	0.64	0.73	0.73	0	0	0	0	0	0	0	0.6
Min	0	0	0	0	0	0	0	4	14	18	40	52	47	49	32	12	3	0	0	0	0	0	0	0	306
Max	0	0	0	0	0	0	2	76	294	407	509	568	543	491	354	209	47	0	0	0	0	0	0	0	3368

Daylight Data Recovery: 0% missing; 9% 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: 8.50 uV/Wm-2
Serial Number: 18038F3
Calibration Date: 9/13/96

**Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - December 1998**

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	10	359 ?	737 ?	806 ?	851	864	831	791	739	635 ?	267	0	0	0	0	0	0	0	6890
2	0	0	0	0	0	0	4	284 ?	675 ?	703 ?	531 ?	161	442 ?	599 ?	150 ?	86 ?	16	0	0	0	0	0	0	0	3650 ?
3	0	0	0	0	0	0	0	7	1	0	0	3	337 ?	442 ?	86 ?	138 ?	27	0	0	0	0	0	0	0	1040
4	0	0	0	0	0	0	0	113	63	630 ?	709	644 ?	81	291 ?	581 ?	106 ?	67	0	0	0	0	0	0	0	3285 ?
5	0	0	0	0	0	0	0	0	0	1	7	35	58	110 ?	411 ?	440 ?	151	0	0	0	0	0	0	0	1213
6	0	0	0	0	0	0	0	1	123 ?	230 ?	19 ?	272 ?	535 ?	508	8	0	0	0	0	0	0	0	0	0	1696
7	0	0	0	0	0	0	0	0	7	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	10
8	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
9	0	0	0	0	0	0	0	250	650 ?	736	796	822	781	770	709	534 ?	168	0	0	0	0	0	0	0	6215
10	0	0	0	0	0	0	0	148	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268
11	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
12	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
13	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
14	0	0	0	0	0	0	0	299	737 ?	803	858	866	843	803	715	451 ?	209	0	0	0	0	0	0	0	6583
15	0	0	0	0	0	0	0	369	754	859	909	917	898	856	792	698 ?	300	0	0	0	0	0	0	0	7352
16	0	0	0	0	0	0	0	189	788 ?	839	896	897	877	845	790	679 ?	294	0	0	0	0	0	0	0	7096
17	0	0	0	0	0	0	0	343	789 ?	865	907	922	905	865	808	708 ?	326	0	0	0	0	0	0	0	7439
18	0	0	0	0	0	0	0	49	59	42	71 ?	38	36	19	13	0	0	0	0	0	0	0	0	0	328
19	0	0	0	0	0	0	0	0	0	3	3	248	45	134	41 ?	26	5	0	0	0	0	0	0	0	504
20	0	0	0	0	0	0	0	0	1	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	6
21	0	0	0	0	0	0	0	1	0	0	22	135 ?	80 ?	75 ?	4	12	0	0	0	0	0	0	0	0	331
22	0	0	0	0	0	0	0	0	0	1	16	108	67	6	0	0	0	0	0	0	0	0	0	0	198
23	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
24	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
25	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
26	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
27	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
28	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
29	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
30	0	0	0	0	0	0	0	0	0	0 ?	0	0 ?	0 ?	?	0 ?	0 ?	0	0	0	0	0	0	0	0	0 ?
31	0	0	0	0	0	0	0	0	0	?	0	0	0	0 ?	?	0 ?	0	0	0	0	0	0	0	0	0 ?
Avg	0	0	0	0	0	0	0	78	178	217	213	224	220	237	195	146	59	0	0	0	0	0	0	0	1745
S D	0	0	0	0	0	0	2	127	302	344	356	347	337	332	309	249	106	0	0	0	0	0	0	0	2693
S/A	0	0	0	0	0	0	4.2	1.63	1.7	1.58	1.67	1.55	1.53	1.4	1.58	1.71	1.79	0	0	0	0	0	0	0	1.54
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	10	369	789	865	909	922	905	865	808	708	326	0	0	0	0	0	0	0	7439

Daylight Data Recovery: 0% missing; 11% 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: 7.46 uV/Wm-2
Serial Number: 25792E6
Calibration Date: 9/13/96

Diffuse Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - December 1998

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	2	73 ?	?	?	?	?	?	?	?	89 ?	28	0	0	0	0	0	0	0	192 ?
2	0	0	0	0	0	0	1	67 ?	?	?	314 ?	335 ?	251 ?	?	210 ?	94 ?	17	0	0	0	0	0	0	0	1289 ?
3	0	0	0	0	0	0	1	47	95	101	98	184	321 ?	238 ?	213 ?	87 ?	21	0	0	0	0	0	0	0	1408 ?
4	0	0	0	0	0	0	1	32	132	?	?	?	262 ?	265 ?	?	65 ?	25	0	0	0	0	0	0	0	783 ?
5	0	0	0	0	0	0	1	19	64	109	182	271	288	216 ?	223 ?	92 ?	28	0	0	0	0	0	0	0	1493
6	0	0	0	0	0	0	0	35	144 ?	174 ?	190 ?	293 ?	306 ?	255 ?	126	16	3	0	0	0	0	0	0	0	1543 ?
7	0	0	0	0	0	0	0	6	46	33	85	84	107	197	62	37	3	0	0	0	0	0	0	0	659
8	0	0	0	0	0	0	0	5	43	40	77	71	113	58	48	27	5	0	0	0	0	0	0	0	487
9	0	0	0	0	0	0	0	56	?	?	?	?	?	?	?	94 ?	26	0	0	0	0	0	0	0	176 ?
10	0	0	0	0	0	0	0	54	110 ?	131	166	51	48	46	32	11	3	0	0	0	0	0	0	0	653
11	0	0	0	0	0	0	0	5	13	17	38	49	44	60	43	15	3	0	0	0	0	0	0	0	288
12	0	0	0	0	0	0	0	4	19	23	45	63	57	50	30	17	4	0	0	0	0	0	0	0	313
13	0	0	0	0	0	0	0	7	23	92	67	75	88	107	52	22	4	0	0	0	0	0	0	0	536
14	0	0	0	0	0	0	0	46	?	?	?	?	?	?	?	88 ?	29	0	0	0	0	0	0	0	163 ?
15	0	0	0	0	0	0	0	41 ?	?	?	?	?	?	?	?	94 ?	31	0	0	0	0	0	0	0	166 ?
16	0	0	0	0	0	0	0	48	122 ?	?	?	?	?	?	?	95 ?	33	0	0	0	0	0	0	0	298 ?
17	0	0	0	0	0	0	0	49	?	?	?	?	?	?	?	96 ?	33	0	0	0	0	0	0	0	178 ?
18	0	0	0	0	0	0	0	39	143	223	292 ?	297	253	205	165	49	11	0	0	0	0	0	0	0	1676
19	0	0	0	0	0	0	0	9	27	114	178	218 ?	273	218 ?	195 ?	86	24	0	0	0	0	0	0	0	1341
20	0	0	0	0	0	0	0	18	62	83	180	198	183	99	62	37	12	0	0	0	0	0	0	0	935
21	0	0	0	0	0	0	0	19	57	105	236	352 ?	277 ?	281 ?	179	95	21	0	0	0	0	0	0	0	1622
22	0	0	0	0	0	0	0	17	67	159	225	326 ?	237	178	122	53	8	0	0	0	0	0	0	0	1391
23	0	0	0	0	0	0	0	6	19	44	61	76	65	68	32	14	3	0	0	0	0	0	0	0	388
24	0	0	0	0	0	0	0	4	29	67	105	151	112	71	49	23	5	0	0	0	0	0	0	0	616
25	0	0	0	0	0	0	0	17	71	123	178	265	210	184	136	45	5	0	0	0	0	0	0	0	1234
26	0	0	0	0	0	0	0	10	53	125	172	218	227	381	147 ?	105	33	0	0	0	0	0	0	0	1471
27	0	0	0	0	0	0	0	15	45	93	114	200	155	190	141	84	15	0	0	0	0	0	0	0	1053
28	0	0	0	0	0	0	0	5	33	94	137	168	118	81	54	40	5	0	0	0	0	0	0	0	736
29	0	0	0	0	0	0	0	9	41	78	142	165	165	142	133	86	36	0	0	0	0	0	0	0	997
30	0	0	0	0	0	0	0	38	161 ?	?	394 ?	?	?	?	297 ?	143 ?	45	0	0	0	0	0	0	0	1079 ?
31	0	0	0	0	0	0	0	35	168	369 ?	?	?	?	?	?	173 ?	43	0	0	0	0	0	0	0	787 ?
Avg	0	0	0	0	0	0	0	27	71	109	160	187	181	163	120	67	18	0	0	0	0	0	0	0	837
S D	0	0	0	0	0	0	0	20	48	75	88	98	89	89	74	40	13	0	0	0	0	0	0	0	496
S/A	0	0	0	0	0	0	2.06	0.76	0.66	0.69	0.55	0.52	0.49	0.55	0.62	0.59	0.73	0	0	0	0	0	0	0	0.59
Min	0	0	0	0	0	0	0	4	13	17	38	49	44	46	30	11	3	0	0	0	0	0	0	0	163
Max	0	0	0	0	0	0	2	73	168	369	394	352	321	381	297	173	45	0	0	0	0	0	0	0	1676

Daylight Data Recovery: 0% missing; 28% 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: 9.04 uV/Wm-2
Serial Number: 25818F3
Calibration Date: 9/13/96