

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - March 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	10	89 ?	410 ?	442 ?	723 ?	763	784 ?	718 ?	569 ?	436 ?	206 ?	35	0	0	0	0	0	0	5183 ?
2	0	0	0	0	0	0	8	47	127	192	150	163	233	258	60	25	43	6	0	0	0	0	0	0	1311
3	0	0	0	0	0	0	13	94 ?	?	?	?	?	?	?	?	?	?	41	0	0	0	0	0	0	148 ?
4	0	0	0	0	0	0	17	92 ?	?	629 ?	694 ?	824 ?	810 ?	747 ?	641 ?	?	?	35	0	0	0	0	0	0	4488 ?
5	0	0	0	0	0	0	1	5	22	75	84	320 ?	416 ?	459 ?	174	124	66	11	0	0	0	0	0	0	1756
6	0	0	0	0	0	0	7	44	144	206	273	313	279	277	270	218	126	39	0	0	0	0	0	0	2196
7	0	0	0	0	0	0	22	95 ?	?	?	?	?	482 ?	465 ?	?	?	145	36	0	0	0	0	0	0	1246 ?
8	0	0	0	0	0	0	5	48	99	167	200	92	307	305	224	122	101	26	0	0	0	0	0	0	1697
9	0	0	0	0	0	0	23	105 ?	?	?	707 ?	?	?	784 ?	?	?	318 ?	47	0	0	0	0	0	0	1985 ?
10	0	0	0	0	0	0	23	94 ?	?	?	?	811 ?	825 ?	?	642 ?	402 ?	?	34	0	0	0	0	0	0	2830 ?
11	0	0	0	0	0	0	18	93	111	206	377 ?	?	?	?	?	?	?	48	0	0	0	0	0	0	852 ?
12	0	0	0	0	0	0	29	108 ?	?	?	?	507 ?	401	340	132	116	17	5	0	0	0	0	0	0	1654 ?
13	0	0	0	0	0	0	1	11	19	18	137	98	133	52	108	54	12	11	0	0	0	0	0	0	652
14	0	0	0	0	0	0	4	16	23	67	106	93	72	63	59	32	17	2	0	0	0	0	0	0	552
15	0	0	0	0	0	0	36	118 ?	?	?	?	?	?	809 ?	709 ?	?	?	50 ?	0	0	0	0	0	0	1722 ?
16	0	0	0	0	0	0	39	122 ?	436 ?	616 ?	789 ?	?	865 ?	809 ?	630 ?	?	?	29 ?	0	0	0	0	0	0	4336 ?
17	0	0	0	0	0	0	35	?	?	283 ?	449 ?	407 ?	411 ?	?	?	?	?	49 ?	0	0	0	0	0	0	1634 ?
18	0	0	0	0	0	0	29	143	372	558 ?	518 ?	570 ?	567 ?	601 ?	427 ?	286 ?	106 ?	32	0	0	0	0	0	0	4207 ?
19	0	0	0	0	0	0	28	161	392 ?	?	688 ?	591	592	425	394	?	126	63	1	0	0	0	0	0	3460 ?
20	0	0	0	0	0	0	2	53	39	83	221	203	586	438	299	236 ?	161 ?	34	0	0	0	0	0	0	2356
21	0	0	0	0	0	0	51	227	425	588 ?	770 ?	?	859 ?	?	575 ?	477	286	84	1	0	0	0	0	0	4343 ?
22	0	0	0	0	0	0	52	239	451	639 ?	764 ?	873 ?	874	814	668 ?	483	276	78	0	0	0	0	0	0	6213 ?
23	0	0	0	0	0	0	36	156	190	234	629 ?	441	520 ?	579 ?	437 ?	391	200	59	1	0	0	0	0	0	3875
24	0	0	0	0	0	0	9	18	44	73	229	256	179	395	338	225	99	15	1	0	0	0	0	0	1881
25	0	0	0	0	0	0	12	99	195	433 ?	702 ?	?	737 ?	687 ?	474 ?	381	267	81	1	0	0	0	0	0	4069 ?
26	0	0	0	0	0	0	66	263	419 ?	?	861 ?	?	921 ?	789 ?	712 ?	459 ?	296	89	1	0	0	0	0	0	4875 ?
27	0	0	0	0	0	0	68	265	446 ?	?	839 ?	914	920 ?	841	705	513	292	107	1	0	0	0	0	0	5911 ?
28	0	0	0	0	0	0	69	268	464	633 ?	760 ?	900 ?	816 ?	794 ?	571	432 ?	201	52	1	0	0	0	0	0	5961 ?
29	0	0	0	0	0	0	19	56	110	216	240	496	659	685	636 ?	340	236	63	2	0	0	0	0	0	3757
30	0	0	0	0	0	0	8	43	138	169	217	246	251	135	115	114	71	32	1	0	0	0	0	0	1540
31	0	0	0	0	0	0	6	19	51	124	178	101	210	146	71	64	46	21	1	0	0	0	0	0	1039
Avg	0	0	0	0	0	0	24	106	223	302	473	454	545	516	409	270	155	42	0	0	0	0	0	0	2830
S/D	0	0	0	0	0	0	20	77	168	214	270	283	268	255	229	164	98	26	0	0	0	0	0	0	1732
S/A	0	0	0	0	0	2.91	0.83	0.73	0.76	0.71	0.57	0.62	0.49	0.49	0.56	0.61	0.64	0.61	1.24	0	0	0	0	0	0.61
Min	0	0	0	0	0	0	1	5	19	18	84	92	72	52	59	25	12	2	0	0	0	0	0	0	148
Max	0	0	0	0	0	0	69	268	464	639	861	914	921	841	712	513	318	107	2	0	0	0	0	0	6213

Daylight Data Recovery: 0% missing; 35% exceed the 15% QC threshold -- 4451 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
Note: Instrument was changed during month.

Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - March 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	0 ?	?	?	?	?	?	?	?	?	?	0 ?	0	0	0	0	0	0	0 ?
2	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
3	0	0	0	0	0	0	0	0 ?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0 ?
4	0	0	0	0	0	0	0	0 ?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0 ?
5	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
6	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
7	0	0	0	0	0	0	0	0 ?	?	?	?	?	0 ?	0 ?	?	?	?	0	0	0	0	0	0	0	0 ?
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
9	0	0	0	0	0	0	0	0 ?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0 ?
10	0	0	0	0	0	0	0	0 ?	?	?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0 ?
11	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 ?
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0 ?	?	?	?	?	?	?	?	?	?	0 ?	0	0	0	0	0	0	0 ?
16	0	0	0	0	0	0	0	0 ?	?	?	?	?	?	?	?	?	?	0 ?	0	0	0	0	0	0	0 ?
17	0	0	0	0	0	0	0	?	?	0 ?	0 ?	0 ?	0 ?	?	?	?	?	0 ?	0	0	0	0	0	0	0 ?
18	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 ?
19	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	0	0	0	0	0 ?	0	0	0	0 ?	0 ?	0	0	0	0	0	0	0	1
21	0	0	0	0	0	0	0	0	0	0 ?	?	?	?	?	0 ?	0	0	0	0	0	0	0	0	0	0 ?
22	0	0	0	0	0	0	0	0	0 ?	?	?	?	?	?	?	?	0	0	0	0	0	0	0	0	0 ?
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 ?
26	0	0	0	0	0	0	0	0	0 ?	?	?	?	?	?	?	0 ?	0	0	0	0	0	0	0	0	0 ?
27	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 ?
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	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	0	0
Avg	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
S D	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
S/A	0	0	0	0	0	0	4.2	3.57	3.78	2.86	2.47	3.64	2.32	0	4.12	3.31	4.35	4.36	0	0	0	0	0	0	2.36
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	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1

Daylight Data Recovery: 0% missing; 41% exceed the 15% QC threshold -- 4451 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
Note: Instrument was changed during month.

Diffuse Solar Radiation on a Horizontal Surface (Shadow Band PSP)
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - March 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	6	30 ?	59 ?	61 ?	74 ?	80	88 ?	88 ?	83 ?	72 ?	52 ?	17	0	0	0	0	0	0	711 ?
2	0	0	0	0	0	0	7	43	119	178	141	152	217	235	58	24	40	5	0	0	0	0	0	0	1219
3	0	0	0	0	0	0	8	35 ?	?	?	?	?	?	?	?	?	?	17	0	0	0	0	0	0	60 ?
4	0	0	0	0	0	0	8	35 ?	?	80 ?	89 ?	96 ?	111 ?	83 ?	81 ?	?	?	26	0	0	0	0	0	0	608 ?
5	0	0	0	0	0	0	1	5	20	68	77	290 ?	352 ?	401 ?	164	114	61	10	0	0	0	0	0	0	1563
6	0	0	0	0	0	0	7	42	134	191	254	289	260	257	250	199	114	32	0	0	0	0	0	0	2027
7	0	0	0	0	0	0	18	83 ?	?	?	?	?	430 ?	424 ?	?	?	121	32	0	0	0	0	0	0	1108 ?
8	0	0	0	0	0	0	4	45	92	155	186	86	274	280	204	113	93	24	0	0	0	0	0	0	1556
9	0	0	0	0	0	0	10	30 ?	?	?	95 ?	?	77 ?	?	?	?	74 ?	26	0	0	0	0	0	0	311 ?
10	0	0	0	0	0	0	14	44 ?	?	?	?	119 ?	125 ?	?	115 ?	99 ?	?	27	0	0	0	0	0	0	544 ?
11	0	0	0	0	0	0	17	83	102	188	334 ?	?	?	?	?	?	?	29	0	0	0	0	0	0	754 ?
12	0	0	0	0	0	0	19	55 ?	?	?	?	458 ?	367	310	124	108	15	5	0	0	0	0	0	0	1461 ?
13	0	0	0	0	0	0	1	10	17	17	128	93	125	49	100	51	11	10	0	0	0	0	0	0	612
14	0	0	0	0	0	0	3	15	21	63	98	87	67	58	55	29	15	2	0	0	0	0	0	0	513
15	0	0	0	0	0	0	18	46 ?	?	?	?	?	?	107 ?	101 ?	?	?	26 ?	0	0	0	0	0	0	299 ?
16	0	0	0	0	0	0	19	45 ?	77 ?	87 ?	92 ?	?	91 ?	87 ?	79 ?	?	?	21 ?	0	0	0	0	0	0	598 ?
17	0	0	0	0	0	0	26	?	?	263 ?	389 ?	349 ?	348 ?	?	?	?	?	29 ?	0	0	0	0	0	0	1405 ?
18	0	0	0	0	0	0	28	127	329 ?	484 ?	445 ?	520 ?	316 ?	357 ?	249 ?	252 ?	93 ?	29	0	0	0	0	0	0	3229 ?
19	0	0	0	0	0	0	25	144	378 ?	?	587 ?	543	555	397	348	?	115	57	1	0	0	0	0	0	3149 ?
20	0	0	0	0	0	0	2	50	37	75	201	189	492 ?	375	280	217 ?	141 ?	31	0	0	0	0	0	0	2090
21	0	0	0	0	0	0	46	212	365 ?	?	?	?	?	?	487 ?	443 ?	249	71	1	0	0	0	0	0	1874 ?
22	0	0	0	0	0	0	48	185 ?	?	?	?	?	?	?	?	?	254 ?	75	0	0	0	0	0	0	563 ?
23	0	0	0	0	0	0	36	142	175	211	531 ?	402	415 ?	498 ?	398 ?	353	185	55	1	0	0	0	0	0	3403 ?
24	0	0	0	0	0	0	8	17	42	69	213	234	167	362	313	209	93	15	1	0	0	0	0	0	1742
25	0	0	0	0	0	0	12	92	180	398 ?	?	?	668 ?	585 ?	385 ?	361	259	76	1	0	0	0	0	0	3017 ?
26	0	0	0	0	0	0	61	196 ?	?	?	?	?	?	?	?	?	218 ?	86	1	0	0	0	0	0	563 ?
27	0	0	0	0	0	0	63	200 ?	?	?	?	?	?	?	?	?	190 ?	103	1	0	0	0	0	0	556 ?
28	0	0	0	0	0	0	65	240 ?	381 ?	?	?	?	712 ?	628 ?	444 ?	321 ?	191	49	1	0	0	0	0	0	3032 ?
29	0	0	0	0	0	0	17	52	104	202	224	451	591	594 ?	534 ?	296	202	58	1	0	0	0	0	0	3327
30	0	0	0	0	0	0	7	40	129	158	203	229	234	126	107	106	66	30	1	0	0	0	0	0	1436
31	0	0	0	0	0	0	5	17	48	116	167	95	196	137	66	60	43	19	1	0	0	0	0	0	971
Avg	0	0	0	0	0	0	20	79	140	161	226	251	313	283	219	180	121	35	0	0	0	0	0	0	1429
S/D	0	0	0	0	0	0	19	67	121	116	150	156	188	182	149	123	78	25	0	0	0	0	0	0	1009
S/A	0	0	0	0	0	3.01	0.94	0.85	0.86	0.72	0.66	0.62	0.6	0.64	0.68	0.68	0.65	0.71	1.2	0	0	0	0	0	0.71
Min	0	0	0	0	0	0	1	5	17	17	74	80	67	49	55	24	11	2	0	0	0	0	0	0	60
Max	0	0	0	0	0	0	65	240	381	484	587	543	712	628	534	443	259	103	1	0	0	0	0	0	3403

Daylight Data Recovery: 0% missing; 41% exceed the 15% QC threshold -- 4451 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
Note: Instrument was changed during month.