

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Unive - October 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	Daily
1	0	0	0	0	0	0	52	206	415	356	605	742	735	642	393	250	127	30	0	0	0	0	0	0	4552
2	0	0	0	0	0	0	58	237	430	591	686	699	733	611	379	244	68	8	0	0	0	0	0	0	4744
3	0	0	0	0	0	0	51	76	257	406	327	249	194	261	259	210	105	19	0	0	0	0	0	0	2414
4	0	0	0	0	0	0	74	202	294	585	711	754 ?	692 ?	533 ?	349	191	144	26	0	0	0	0	0	0	4553
5	0	0	0	0	0	0	10	109	258	388	360	620 ?	620	383	278 ?	301	75	13	0	0	0	0	0	0	3416
6	0	0	0	0	0	0	78	219 ?	424	501 ?	554	581	498	390	260 ?	71	19	5	0	0	0	0	0	0	3599
7	0	0	0	0	0	0	4	34	140	188	145	174	263	269	298	342 ?	151	12	0	0	0	0	0	0	2019
8	0	0	0	0	0	0	44	233	320 ?	581 ?	602 ?	614 ?	571 ?	443 ?	514	283	139	11	0	0	0	0	0	0	4356 ?
9	0	0	0	0	0	0	56	243	441	612	736	784	769	682	535	351	144	9	0	0	0	0	0	0	5362
10	0	0	0	0	0	0	57	253	428	593	720	774	758	674	523	340	135	12 ?	0 ?	0	0	0	0	0	5268
11	0	0	0	0	0	0	62	239	399	595	717	764	748	661	507	326	128	9 ?	0	0	0	0	0	0	5154
12	0	0	0	0	0	0	51	197	401	559	688	738	719	634	487	311	103	5	0	0	0	0	0	0	4894
13	0	0	0	0	0	0	44	195	350	556	631	681	586	535	468	274	123	5	0	0	0	0	0	0	4448
14	0	0	0	0	0	0	47	212	353	563	677	738	718	636	487	303	110	6 ?	0 ?	0	0	0	0	0	4851
15	0	0	0	0	0	0	42	185	332	533	652	690	686	607	461	204	134	4	0	0	0	0	0	0	4528
16	0	0	0	0	0	0	33	183	303	504	661	722	678	621	477	300	111	3	0	0	0	0	0	0	4597
17	0	0	0	0	0	0	42	196	332	545	659	726	720	621	447	240	68	5	0	0	0	0	0	0	4600
18	0	0	0	0	0	0	31	92	114	140	192	327	366	481	349	189	53	1	0	0	0	0	0	0	2335
19	0	0	0	0	0	0	7	33	79	92	91	168	113	115	83	48	11	0	0	0	0	0	0	0	842
20	0	0	0	0	0	0	6	81	184	258 ?	459 ?	501	541 ?	?	352 ?	108 ?	55	2	0	0	0	0	0	0	2546 ?
21	0	0	0	0	0	0	8	85	205	296 ?	421 ?	469 ?	427 ?	?	?	?	61 ?	3	0	0	0	0	0	0	1973 ?
22	0	0	0	0	0	0	40	113 ?	?	?	?	?	?	?	?	?	64 ?	2	0	0	0	0	0	0	219 ?
23	0	0	0	0	0	0	36	121 ?	?	?	?	?	?	?	?	120 ?	71 ?	1	0	0	0	0	0	0	350 ?
24	0	0	0	0	0	0	35	112 ?	?	?	?	?	?	?	?	201	97	1 ?	0	0	0	0	0	0	446 ?
25	0	0	0	0	0	0	18	113 ?	?	?	?	?	?	?	?	?	47 ?	0 ?	0	0	0	0	0	0	178 ?
26	0	0	0	0	0	0	30	99 ?	?	?	?	?	?	?	?	?	44 ?	0 ?	0	0	0	0	0	0	173 ?
27	0	0	0	0	0	0	32	121 ?	?	?	?	?	?	?	?	?	46 ?	0 ?	0	0	0	0	0	0	199 ?
28	0	0	0	0	0	0	24	99 ?	?	?	?	?	?	?	?	232	65	0	0	0	0	0	0	0	421 ?
29	0	0	0	0	0	0	22	90 ?	?	?	?	?	333 ?	535 ?	403	239	68	0	0	0	0	0	0	0	1691 ?
30	0	0	0	0	0	0	22	85 ?	?	?	?	617 ?	636	527	387	175	58	0	0	0	0	0	0	0	2506 ?
31	0	0	0	0	0	0	13	111 ?	178	356	531	608	541	365	414	215	57	0	0	0	0	0	0	0	3389
Avg	0	0	0	0	0	0	36	148	302	445	538	597	569	510	396	233	86	6	0	0	0	0	0	0	2923
S D	0	0	0	0	0	0	20	65	109	159	194	189	187	152	107	81	39	8	0	0	0	0	0	0	1827
S/A	0	0	0	0	0	2.34	0.54	0.44	0.36	0.36	0.36	0.32	0.33	0.3	0.27	0.35	0.45	1.22	0	0	0	0	0	0	0.62
Min	0	0	0	0	0	0	4	33	79	92	91	168	113	115	83	48	11	0	0	0	0	0	0	0	173
Max	0	0	0	0	0	0	78	253	441	612	736	784	769	682	535	351	151	30	0	0	0	0	0	0	5362

Daylight Data Recovery: 0% missing; 26% exceed the 15% QC threshold -- 4235 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 - October 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	2	6	8	4	8	9	8	8	6	4	1	0	0	0	0	0	0	0	63
2	0	0	0	0	0	0	3	9	9	9	8	8	7	6	4	2	0	0	0	0	0	0	0	0	66
3	0	0	0	0	0	0	1	1	4	9	2	2	3	3	2	2	1	0	0	0	0	0	0	0	29
4	0	0	0	0	0	0	4	9	7	11	8	7 ?	6 ?	4 ?	3	1	3	1	0	0	0	0	0	0	65
5	0	0	0	0	0	0	0	2	4	6	3	6 ?	6	2	2 ?	4	1	0	0	0	0	0	0	0	37
6	0	0	0	0	0	0	2	4 ?	7	6 ?	5	5	4	2	1 ?	0	0	0	0	0	0	0	0	0	36
7	0	0	0	0	0	0	0	0	1	1	1	2	2	2	3	6 ?	5	1	0	0	0	0	0	0	25
8	0	0	0	0	0	0	4	14	17 ?	10 ?	8 ?	6 ?	6 ?	6 ?	604	442	405	74	0	0	0	0	0	0	1595 ?
9	0	0	0	0	0	0	242	555	691	758	791	807	805	781	747	672	484	87	0	0	0	0	0	0	7420
10	0	0	0	0	0	0	267	567	689	741	779	806	806	792	752	675	502	81	0	0	0	0	0	0	7458
11	0	0	0	0	0	0	236	546	663	736	770	781	787	765	720	635	459	68	0	0	0	0	0	0	7166
12	0	0	0	0	0	0	176	476	624	696	738	751	729	702	660	569	270	23	0	0	0	0	0	0	6414
13	0	0	0	0	0	0	123	398	552	629	547	473	349	338	473	373	335	14	0	0	0	0	0	0	4605
14	0	0	0	0	0	0	205	541	677	704	739	802	800	771	718	618	406	39	0	0	0	0	0	0	7020
15	0	0	0	0	0	0	107	345	512	605	616	616	654	626	532	128	197	10	0	0	0	0	0	0	4948
16	0	0	0	0	0	0	31	200	276	502	668	703	665	711	678	588	383	21	0	0	0	0	0	0	5427
17	0	0	0	0	0	0	140	484	636	709	712	756	761	699	575	248	18	0	0	0	0	0	0	0	5738
18	0	0	0	0	0	0	17	3	2	1	1	7	48	262	179	120	0	0	0	0	0	0	0	0	641
19	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	4
20	0	0	0	0	0	0	0	0	2	3 ?	19 ?	12	16 ?	?	16 ?	4 ?	0	0	0	0	0	0	0	0	73 ?
21	0	0	0	0	0	0	0	1	4	11 ?	15 ?	14 ?	15 ?	?	?	?	8 ?	1	0	0	0	0	0	0	69 ?
22	0	0	0	0	0	0	4	12 ?	?	?	?	?	?	?	?	?	7 ?	1	0	0	0	0	0	0	24 ?
23	0	0	0	0	0	0	4	9 ?	?	?	?	?	?	?	?	9 ?	10 ?	1	0	0	0	0	0	0	33 ?
24	0	0	0	0	0	0	5	14 ?	?	?	?	?	?	?	?	12	9	0	0	0	0	0	0	0	40 ?
25	0	0	0	0	0	0	3	11 ?	?	?	?	?	?	?	?	?	9 ?	0	0	0	0	0	0	0	23 ?
26	0	0	0	0	0	0	4	13 ?	?	?	?	?	?	?	?	?	8 ?	0	0	0	0	0	0	0	26 ?
27	0	0	0	0	0	0	4	15 ?	?	?	?	?	?	?	?	?	8 ?	0	0	0	0	0	0	0	27 ?
28	0	0	0	0	0	0	4	13 ?	?	?	?	?	?	?	?	12	7	0	0	0	0	0	0	0	36 ?
29	0	0	0	0	0	0	4	13 ?	?	?	?	?	9 ?	18 ?	15	13	8	0	0	0	0	0	0	0	80 ?
30	0	0	0	0	0	0	3	12 ?	?	?	?	20 ?	20	16	14	9	6	0	0	0	0	0	0	0	100 ?
31	0	0	0	0	0	0	0	8 ?	7	27	34	30	27	12	18	14	7	0	0	0	0	0	0	0	186
Avg	0	0	0	0	0	0	51	138	245	281	294	288	272	297	292	198	115	14	0	0	0	0	0	0	1918
S D	0	0	0	0	0	0	85	213	299	332	347	354	347	340	318	261	179	26	0	0	0	0	0	0	2837
S/A	0	0	0	0	0	0	1.65	1.54	1.22	1.18	1.18	1.23	1.27	1.15	1.09	1.31	1.56	1.91	0	0	0	0	0	0	1.48
Min	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4
Max	0	0	0	0	0	0	267	567	691	758	791	807	806	792	752	675	502	87	0	0	0	0	0	0	7458

Daylight Data Recovery: 0% missing; 26% exceed the 15% QC threshold -- 4235 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 - October 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	46	186	376 ?	319	508 ?	?	?	599 ?	356	232	114	30	0	0	0	0	0	0	2766 ?
2	0	0	0	0	0	0	54	229	418	?	640 ?	645 ?	670 ?	467 ?	344	224	61	7	0	0	0	0	0	0	3759 ?
3	0	0	0	0	0	0	45	69	205	372	289	220	171	231	230	188	94	18	0	0	0	0	0	0	2132
4	0	0	0	0	0	0	68	199	240	?	?	?	637 ?	482 ?	319	172	128	24	0	0	0	0	0	0	2270 ?
5	0	0	0	0	0	0	9	98	238	356	319	555 ?	555 ?	342	254 ?	292	65	11	0	0	0	0	0	0	3094
6	0	0	0	0	0	0	80 ?	195 ?	364 ?	428 ?	503	528	438	351	237 ?	63	17	4	0	0	0	0	0	0	3208
7	0	0	0	0	0	0	3	31	124	167	129	155	235	240	266	339 ?	155	14	0	0	0	0	0	0	1857
8	0	0	0	0	0	0	35 ?	218	289 ?	363 ?	541 ?	564 ?	572 ?	437 ?	129	85	50	7	0	0	0	0	0	0	3292 ?
9	0	0	0	0	0	0	24	58	72	81	88	89	90	86	75	61	41	5	0	0	0	0	0	0	770
10	0	0	0	0	0	0	22	54	68	83	90	87	86	78	68	55	33	4 ?	0	0	0	0	0	0	728
11	0	0	0	0	0	0	23	57	72	88	99	103	97	91	79	63	37	4	0	0	0	0	0	0	812
12	0	0	0	0	0	0	25	66	83	92	105	111	121	117	99	78	44	5	0	0	0	0	0	0	945
13	0	0	0	0	0	0	27	82	116	148	197	281	293	276	189	120	57	4	0	0	0	0	0	0	1790
14	0	0	0	0	0	0	22	56	76	111	103	90	88	84	77	60	34	2 ?	0	0	0	0	0	0	803
15	0	0	0	0	0	0	29	85	124	148	183	193	172	162	152	146	101	3	0	0	0	0	0	0	1498
16	0	0	0	0	0	0	29	125	189	173	146	150	150	115	93	72	41	2	0	0	0	0	0	0	1285
17	0	0	0	0	0	0	23	60	85	100	116	115	126	127	121	139	63	4	0	0	0	0	0	0	1080
18	0	0	0	0	0	0	27	83	106	132	181	303	316	284	242	134	48	1	0	0	0	0	0	0	1857
19	0	0	0	0	0	0	7	31	74	86	85	158	106	107	77	45	10	0	0	0	0	0	0	0	788
20	0	0	0	0	0	0	6	75	170	230 ?	371 ?	450	458 ?	?	270 ?	93 ?	49	2	0	0	0	0	0	0	2174 ?
21	0	0	0	0	0	0	7	79	186	243 ?	347 ?	387 ?	334 ?	?	?	?	28 ?	2	0	0	0	0	0	0	1613 ?
22	0	0	0	0	0	0	23	50 ?	?	?	?	?	?	?	?	?	?	24 ?	1	0	0	0	0	0	99 ?
23	0	0	0	0	0	0	12	29 ?	?	?	?	?	?	?	?	92 ?	36 ?	1	0	0	0	0	0	0	171 ?
24	0	0	0	0	0	0	13	31 ?	?	?	?	?	?	?	?	181	74	1	0	0	0	0	0	0	300 ?
25	0	0	0	0	0	0	11	38 ?	?	?	?	?	?	?	?	?	15 ?	0	0	0	0	0	0	0	63 ?
26	0	0	0	0	0	0	15	39 ?	?	?	?	?	?	?	?	?	20 ?	0 ?	0	0	0	0	0	0	75 ?
27	0	0	0	0	0	0	14	38 ?	?	?	?	?	?	?	?	?	28 ?	0 ?	0	0	0	0	0	0	79 ?
28	0	0	0	0	0	0	12	35 ?	?	?	?	?	?	?	?	200	60	0	0	0	0	0	0	0	308 ?
29	0	0	0	0	0	0	14	41 ?	?	?	?	?	?	270 ?	476 ?	374	229	63	0	0	0	0	0	0	1466 ?
30	0	0	0	0	0	0	14	43 ?	?	?	?	549 ?	576 ?	501	371	165	53	0	0	0	0	0	0	0	2273 ?
31	0	0	0	0	0	0	12	97 ?	167	285	483	572	484	314 ?	365 ?	207	53	0	0	0	0	0	0	0	3038
Avg	0	0	0	0	0	0	24	83	175	200	263	300	306	271	208	144	55	5	0	0	0	0	0	0	1497
S D	0	0	0	0	0	0	18	58	105	112	176	195	196	162	109	78	33	7	0	0	0	0	0	0	1077
S/A	0	0	0	0	0	2.37	0.73	0.7	0.6	0.56	0.67	0.65	0.64	0.6	0.52	0.54	0.61	1.39	0	0	0	0	0	0	0.72
Min	0	0	0	0	0	0	3	29	68	81	85	87	86	78	68	45	10	0	0	0	0	0	0	0	63
Max	0	0	0	0	0	0	80	229	418	428	640	645	670	599	374	339	155	30	0	0	0	0	0	0	3759

Daylight Data Recovery: 0% missing; 30% exceed the 15% QC threshold -- 4235 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