

**Global Solar Radiation on a Horizontal Surface  
Hourly Integrated and Daily Totals  
Watt-Hours per Square Meter  
Mississippi Valley State Unive - October 1997**

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	63	247	465	647	791	855	838	751	605	403	181	23	0	0	0	0	0	0	5869
2	0	0	0	0	0	0	65	252	464	641	769	827	811	730	586	386	171	19	0	0	0	0	0	0	5723
3	0	0	0	0	0	0	61	241	448	625	752	807	792	708	560	364	157	15	0	0	0	0	0	0	5533
4	0	0	0	0	0	0	57	234	439	611	736	794	744	751	643	382	123	13	0	0	0	0	0	0	5529
5	0	0	0	0	0	0	37	142	403	599	717	693	844	615	570	334	136	12	0	0	0	0	0	0	5102
6	0	0	0	0	0	0	45	217	370	532	706	726	570	391	474	259	118	7	0	0	0	0	0	0	4415
7	0	0	0	0	0	0	70	200	382	588	704	765	597	502	347	156	125	11	0	0	0	0	0	0	4447
8	0	0	0	0	0	0	17	101	96	255	634	693	750	685	539	348	141	10	0	0	0	0	0	0	4268
9	0	0	0	0	0	0	26	76	164	145	398	707	574	436	278	225	50	5	0	0	0	0	0	0	3085
10	0	0	0	0	0	0	28	100	259	355	359	346	303	378	224	93	42	2	0	0	0	0	0	0	2491
11	0	0	0	0	0	0	49	217	404	595	723	739	591	561	445	243	128	8	0	0	0	0	0	0	4704
12	0	0	0	0	0	0	51	227	412	590	711	627	527	442	241	241	71	7	0	0	0	0	0	0	4146
13	0	0	0	0	0	0	43	58	35	121	121	130	85	61	46	17	14	1	0	0	0	0	0	0	732
14	0	0	0	0	0	0	56	254	439	620	746	800	779	691	541	346	133	7	0	0	0	0	0	0	5412
15	0	0	0	0	0	0	45	232	440	614	740	799	781	690	539	336	125	4	0	0	0	0	0	0	5345
16	0	0	0	0	0	0	42	218	419	596	719	776	755	670	520	324	116	5	0	0	0	0	0	0	5159
17	0	0	0	0	0	0	39	208	406	578	697	754	734	647	503	308	104	4	0	0	0	0	0	0	4982
18	0	0	0	0	0	0	50	224	403	579	708	733	665	615	454	311	105	3	0	0	0	0	0	0	4851
19	0	0	0	0	0	0	26	146 ?	431 ?	620 ?	702	757	737	647	496	304	101	3 ?	0	0	0	0	0	0	4971
20	0	0	0	0	0	0	32	178	359	522	642	545	641	589	441	259	82	1	0	0	0	0	0	0	4291
21	0	0	0	0	0	0	32	123	323	484	663	335	467	446	355	47	10	1	0	0	0	0	0	0	3285
22	0	0	0	0	0	0	31	203	388	564	687	742	726	634	484	292	96	1	0	0	0	0	0	0	4849
23	0	0	0	0	0	0	30	190	382	551	669	723	675	483	283	119	38	0	0	0	0	0	0	0	4144
24	0	0	0	0	0	0	36	112	303	388	239	393	499	596	402	237	74	0	0	0	0	0	0	0	3279
25	0	0	0	0	0	0	11	24	48	91	247	243	280	263	110	62	37	1	0	0	0	0	0	0	1416
26	0	0	0	0	0	0	6	77	166	480	353	224	114	128	158	126	53	0	0	0	0	0	0	0	1886
27	0	0	0	0	0	0	8	41	74	104	180	195	182	162	147	87	27	1	0	0	0	0	0	0	1207
28	0	0	0	0	0	0	20	117	218	368	611	579	499	328	441	260	56	0	0	0	0	0	0	0	3498
29	0	0	0	0	0	0	14	89 ?	312 ?	539	694 ?	706	690	597	453	253	70	0 ?	0	0	0	0	0	0	4417
30	0	0	0	0	0	0	7	65	187	309	552	648	515	502	425	240	68	0	0	0	0	0	0	0	3519
31	0	0	0	0	0	0	6	109	250	55	13	62	368	436	383 ?	158	59	0	0	0	0	0	0	0	1901
Avg	0	0	0	0	0	0	36	159	319	463	580	604	585	521	409	243	91	5	0	0	0	0	0	0	4015
S D	0	0	0	0	0	0	18	71	130	186	216	230	210	183	153	107	45	6	0	0	0	0	0	0	1400
S/A	0	0	0	0	0	2.31	0.51	0.44	0.41	0.4	0.37	0.38	0.36	0.35	0.37	0.44	0.5	1.12	0	0	0	0	0	0	0.35
Min	0	0	0	0	0	0	6	24	35	55	13	62	85	61	46	17	10	0	0	0	0	0	0	0	732
Max	0	0	0	0	0	0	70	254	465	647	791	855	844	751	643	403	181	23	0	0	0	0	0	0	5869

Daylight Data Recovery: 0% missing; 18% exceed the 15% QC threshold -- 45898 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 1997**

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	249	568	722	789	854	874	866	844	805	737	570	157	0	0	0	0	0	0	8035
2	0	0	0	0	0	0	333	649	762	814	834	842	833	818	780	704	546	137	0	0	0	0	0	0	8053
3	0	0	0	0	0	0	304	605	713	766	789	793	794	768	718	639	476	107	0	0	0	0	0	0	7473
4	0	0	0	0	0	0	241	540	669	720	750	749	666	608	623	505	202	32	0	0	0	0	0	0	6306
5	0	0	0	0	0	0	38	144	304	543	628	475	652	422	504	443	271	27	0	0	0	0	0	0	4453
6	0	0	0	0	0	0	116	281	432	459	646	574	392	195	401	264	219	1	0	0	0	0	0	0	3980
7	0	0	0	0	0	0	151	286	470	658	642	641	320	261	184	9	47	0	0	0	0	0	0	0	3671
8	0	0	0	0	0	0	0	2	1	7	303	469	701	748	702	615	424	48	0	0	0	0	0	0	4019
9	0	0	0	0	0	0	6	2	3	1	52	321	145	68	26	23	0	0	0	0	0	0	0	0	647
10	0	0	0	0	0	0	2	7	68	78	5	4	66	4	0	0	0	0	0	0	0	0	0	0	237
11	0	0	0	0	0	0	135	463	574	716	724	661	463	495	457	293	252	15	0	0	0	0	0	0	5247
12	0	0	0	0	0	0	154	429	638	717	742	493	231	236	49	108	43	0	0	0	0	0	0	0	3840
13	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
14	0	0	0	0	0	0	312	690	805	851	875	878	866	846	807	727	539	78	0	0	0	0	0	0	8276
15	0	0	0	0	0	0	327	700	802	829	861	880	882	859	817	675	452	19	0	0	0	0	0	0	8102
16	0	0	0	0	0	0	278	638	761	819	845	856	853	835	790	697	470	50	0	0	0	0	0	0	7892
17	0	0	0	0	0	0	224	583	715	776	798	807	802	783	749	632	378	37	0	0	0	0	0	0	7283
18	0	0	0	0	0	0	241	596	727	788	816	759	642	603	549	542	389	31	0	0	0	0	0	0	6684
19	0	0	0	0	0	0	4	221	? 728	? 817	? 840	838	836	816	771	677	455	27	0	0	0	0	0	0	7030
20	0	0	0	0	0	0	127	419	536	602	611	273	502	653	600	471	242	5	0	0	0	0	0	0	5041
21	0	0	0	0	0	0	74	125	321	440	393	95	153	151	206	0	0	0	0	0	0	0	0	0	1958
22	0	0	0	0	0	0	120	496	698	783	827	845	842	820	769	677	447	26	0	0	0	0	0	0	7349
23	0	0	0	0	0	0	207	580	698	759	788	794	668	298	46	2	0	0	0	0	0	0	0	0	4842
24	0	0	0	0	0	0	68	112	261	239	5	89	307	622	380	298	220	2	0	0	0	0	0	0	2603
25	0	0	0	0	0	0	0	0	0	0	11	6	34	27	1	2	1	0	0	0	0	0	0	0	83
26	0	0	0	0	0	0	0	9	19	278	87	2	0	0	2	0	1	0	0	0	0	0	0	0	398
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	1
28	0	0	0	0	0	0	4	16	72	182	552	405	291	123	589	573	127	4	0	0	0	0	0	0	2938
29	0	0	0	0	0	0	1	30	? 499	? 798	840	? 844	854	834	783	689	436	7	0	0	0	0	0	0	6615
30	0	0	0	0	0	0	4	1	5	35	432	535	113	431	687	585	322	2	0	0	0	0	0	0	3152
31	0	0	0	0	0	0	0	74	50	1	0	1	71	256	455	? 126	48	0	0	0	0	0	0	0	1082
Avg	0	0	0	0	0	0	120	299	421	492	534	510	477	467	460	378	244	26	0	0	0	0	0	0	4429
S D	0	0	0	0	0	0	118	262	308	330	333	330	326	315	308	288	200	40	0	0	0	0	0	0	2815
S/A	0	0	0	0	0	5.48	0.98	0.88	0.73	0.67	0.62	0.65	0.68	0.67	0.67	0.76	0.82	1.54	0	0	0	0	0	0	0.64
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	1
Max	0	0	0	0	0	0	333	700	805	851	875	880	882	859	817	737	570	157	0	0	0	0	0	0	8276

Daylight Data Recovery: 0% missing; 19% exceed the 15% QC threshold -- 45898 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 1997**

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	30	63	73	79	68	68	68	65	61	54	40	11	0	0	0	0	0	0	680
2	0	0	0	0	0	0	24	46	56	61	67	71	73	70	64	56	40	9	0	0	0	0	0	0	638
3	0	0	0	0	0	0	25	54	71	82	92	98	96	91	84	69	45	8	0	0	0	0	0	0	815
4	0	0	0	0	0	0	28	66	88	106	115	127	156	267	238	151	75	10	0	0	0	0	0	0	1428
5	0	0	0	0	0	0	29	95	244	213	193	266	279	269	240	133	74	9	0	0	0	0	0	0	2046
6	0	0	0	0	0	0	33	121	142	203	170	210	219	225	213	140	70	7	0	0	0	0	0	0	1752
7	0	0	0	0	0	0	53	108	130	127	168	194	296	276	203	139	114	10	0	0	0	0	0	0	1816
8	0	0	0	0	0	0	15	91	88	233	340	253	135	96	86	72	48	7	0	0	0	0	0	0	1463
9	0	0	0	0	0	0	24	67	148	131	335	379	409	362	244	206	44	4	0	0	0	0	0	0	2355
10	0	0	0	0	0	0	26	91	210	284	327	310	277	305	209	83	38	2	0	0	0	0	0	0	2162
11	0	0	0	0	0	0	33	74	101	100	127	151	181	180	152	116	80	7	0	0	0	0	0	0	1303
12	0	0	0	0	0	0	38	93	85	98	111	178	316	255	204	195	56	7	0	0	0	0	0	0	1635
13	0	0	0	0	0	0	42	53	32	111	110	118	77	56	42	16	13	1	0	0	0	0	0	0	670
14	0	0	0	0	0	0	16	39	48	58	69	73	74	71	65	56	36	4	0	0	0	0	0	0	608
15	0	0	0	0	0	0	15	39	57	75	77	73	68	66	61	67	42	4	0	0	0	0	0	0	642
16	0	0	0	0	0	0	16	42	55	64	70	72	70	66	61	52	34	3	0	0	0	0	0	0	605
17	0	0	0	0	0	0	18	49	67	79	88	94	93	86	75	64	41	3	0	0	0	0	0	0	755
18	0	0	0	0	0	0	16	48	63	75	88	114	147	172	142	105	40	2	0	0	0	0	0	0	1012
19	0	0	0	0	0	0	24	63	62	62 ?	69	80	77	72	64	52	28	1 ?	0	0	0	0	0	0	654
20	0	0	0	0	0	0	21	68	113	142	179	307	237	132	105	85	42	1	0	0	0	0	0	0	1433
21	0	0	0	0	0	0	26	86	181	199	361	259	333	344	230	43	10	1	0	0	0	0	0	0	2072
22	0	0	0	0	0	0	17	58	68	76	78	76	74	70	64	51	28	1	0	0	0	0	0	0	662
23	0	0	0	0	0	0	14	45	67	81	90	97	149	255	254	109	34	0	0	0	0	0	0	0	1197
24	0	0	0	0	0	0	26	97	175	235	223	311	258	158	172	132	40	0	0	0	0	0	0	0	1828
25	0	0	0	0	0	0	11	22	43	83	229	230	243	234	105	58	33	1	0	0	0	0	0	0	1293
26	0	0	0	0	0	0	7	71	149	283	274	207	104	118	146	114	49	0	0	0	0	0	0	0	1521
27	0	0	0	0	0	0	8	37	68	95	165	178	167	148	135	80	24	1	0	0	0	0	0	0	1105
28	0	0	0	0	0	0	19	108	176	253	199	224	245	228	136	62	32	0	0	0	0	0	0	0	1680
29	0	0	0	0	0	0	14	71 ?	101 ?	64	62 ?	66	58	53	47	38	18	0	0	0	0	0	0	0	591
30	0	0	0	0	0	0	7	60	178	277	231	211	381	206	73	55	26	0	0	0	0	0	0	0	1706
31	0	0	0	0	0	0	6	85	226	51	12	58	299	248	144 ?	105	50	0	0	0	0	0	0	0	1284
Avg	0	0	0	0	0	0	22	68	109	132	154	166	183	169	133	89	43	4	0	0	0	0	0	0	1271
S/D	0	0	0	0	0	0	11	24	58	76	94	90	104	93	69	45	21	4	0	0	0	0	0	0	535
S/A	0	0	0	0	0	2.56	0.48	0.35	0.53	0.57	0.61	0.54	0.57	0.55	0.52	0.51	0.48	0.96	0	0	0	0	0	0	0.42
Min	0	0	0	0	0	0	6	22	32	51	12	58	58	53	42	16	10	0	0	0	0	0	0	0	591
Max	0	0	0	0	0	0	53	121	244	284	361	379	409	362	254	206	114	11	0	0	0	0	0	0	2355

Daylight Data Recovery: 0% missing; 20% exceed the 15% QC threshold -- 45898 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