

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Univ - January 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	0	16	74	79	152	237	108	145	131	22	12	0	0	0	0	0	0	0	976
2	0	0	0	0	0	0	0	20	142	190	141	218	276	153	88	63	60	0	0	0	0	0	0	0	1350
3	0	0	0	0	0	0	0	13	78	150	273	300	338	279 ?	149	93	31	0	0	0	0	0	0	0	1704
4	0	0	0	0	0	0	0	20	98	156	81	195	165	265	190	140	60	0	0	0	0	0	0	0	1371
5	0	0	0	0	0	0	0	34	182	? ? ?	? ? ?	? ? ?	? ? ?	? ? ?	222	125	25	0	0	0	0	0	0	0	589 ?
6	0	0	0	0	0	0	0	1	10	27	60	79	99	86	57	32	10	0	0	0	0	0	0	0	460
7	0	0	0	0	0	0	0	6	53	125	136	119	175	256	188	63	14	0	0	0	0	0	0	0	1134
8	0	0	0	0	0	0	0	8	18	40	62	90	73	38	33	17	3	0	0	0	0	0	0	0	383
9	0	0	0	0	0	0	0	1	15	30	37	42	154	42	25	27	23	1	0	0	0	0	0	0	395
10	0	0	0	0	0	0	0	39	159	118	207	187	202	104	77	139	60	1	0	0	0	0	0	0	1294
11	0	0	0	0	0	0	0	31	204	410	506	624	512	387	317	154	62	1	0	0	0	0	0	0	3205
12	0	0	0	0	0	0	0	29	204	349	500	571	586 ?	523	410	238	53	1	0	0	0	0	0	0	3465
13	0	0	0	0	0	0	0	13	109	109	173	227	255	264	123	88	26	1	0	0	0	0	0	0	1388
14	0	0	0	0	0	0	0	31	101	207	301	303	224	142	168	123	44	2	0	0	0	0	0	0	1644
15	0	0	0	0	0	0	0	16	19	57	212	178	26 ?	11	32	37	82	2	0	0	0	0	0	0	673
16	0	0	0	0	0	0	0	40	204	167	228	535	622	557	451	286	99	2	0	0	0	0	0	0	3191
17	0	0	0	0	0	0	0	39	163	313	517	617	471	464	338	198	53	1	0	0	0	0	0	0	3174
18	0	0	0	0	0	0	0	45	225	302	454	566	461	434	443	270	101	2	0	0	0	0	0	0	3304
19	0	0	0	0	0	0	0	46	221	369	494	582	605	536	444	277	97	1	0	0	0	0	0	0	3673
20	0	0	0	0	0	0	0	47	206	383	517	596	607	555	443	278	99	2	0	0	0	0	0	0	3733
21	0	0	0	0	0	0	0	50	111	224	272	341	261	87	55	31	2	0	0	0	0	0	0	0	1786
22	0	0	0	0	0	0	0	12	54	211	404	480	619	499	363	240	57	2	0	0	0	0	0	0	2940
23	0	0	0	0	0	0	0	34	88	115	129	141	75	100	66	33	9	0	0	0	0	0	0	0	790
24	0	0	0	0	0	0	0	13	135	332	360	473	532	534	418	281	85	5	0	0	0	0	0	0	3168
25	0	0	0	0	0	0	0	47	219	404	548	632	642	592	473	305	117	5	0	0	0	0	0	0	3984
26	0	0	0	0	0	0	0	42	205	353	398	500	627	546	361	127	50	3	0	0	0	0	0	0	3212
27	0	0	0	0	0	0	0	20	77	183	365	377	300	185	172	93	21	1	0	0	0	0	0	0	1795
28	0	0	0	0	0	0	0	29	110	203	323	406	440	509	388	349 ?	85 ?	8	0	0	0	0	0	0	2849
29	0	0	0	0	0	0	0	57	235	405	535	500	666	610	513 ?	329	83 ?	8	0	0	0	0	0	0	3941
30	0	0	0	0	0	0	0	104	305 ?	456	510	639	656	621 ?	469 ?	327	108 ?	8	0	0	0	0	0	0	4204
31	0	0	0	0	0	0	0	60	239	425	567	661	673	622	496	333	143	14	0	0	0	0	0	0	4234
Avg	0	0	0	0	0	0	0	31	137	230	315	380	385	344	262	166	58	2	0	0	0	0	0	0	2258
S/D	0	0	0	0	0	0	0	21	78	132	170	197	215	204	165	111	36	3	0	0	0	0	0	0	1275
S/A	0	0	0	0	0	0	5.48	0.68	0.56	0.57	0.54	0.52	0.56	0.59	0.63	0.67	0.62	1.37	0	0	0	0	0	0	0.56
Min	0	0	0	0	0	0	0	1	10	27	37	42	26	11	25	17	3	0	0	0	0	0	0	0	383
Max	0	0	0	0	0	0	0	104	305	456	567	661	673	622	513	349	143	14	0	0	0	0	0	0	4234

Daylight Data Recovery: 0% missing; 3% exceed the 15% QC threshold -- 3797 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 Univ - January 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	0	0	0	0	1	2	0	1	1	0	0	0	0	0	0	0	0	0	5
2	0	0	0	0	0	0	0	0	0	53	5	1	3	20	0	2	37	0	0	0	0	0	0	0	120
3	0	0	0	0	0	0	0	0	1	18	46	60	50	46 ?	0	1	0	0	0	0	0	0	0	0	223
4	0	0	0	0	0	0	0	0	13	33	0	17	3	13	5	28	90	0	0	0	0	0	0	0	202
5	0	0	0	0	0	0	0	149	530	?	?	?	?	?	56	8	0	0	0	0	0	0	0	0	743 ?
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	2	0	4	1	0	0	4	9	0	0	0	0	0	0	0	0	0	21
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	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
10	0	0	0	0	0	0	0	156	285	0	0	0	0	0	0	119	187	10	0	0	0	0	0	0	757
11	0	0	0	0	0	0	0	49	387	575	526	569	336	163	178	29	56	0	0	0	0	0	0	0	2867
12	0	0	0	0	0	0	0	75	401	541	714	726	721 ?	709	665	425	4	0	0	0	0	0	0	0	4982
13	0	0	0	0	0	0	0	0	10	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	13
14	0	0	0	0	0	0	0	0	0	2	9	2	0	0	4	0	0	0	0	0	0	0	0	0	16
15	0	0	0	0	0	0	0	0	0	0	51	14	0 ?	0	0	0	230	8	0	0	0	0	0	0	304
16	0	0	0	0	0	0	0	267	567	0	113	429	842	741	709	722	477	30	0	0	0	0	0	0	4896
17	0	0	0	0	0	0	0	171	292	407	724	769	331	384	437	347	146	1	0	0	0	0	0	0	4009
18	0	0	0	0	0	0	0	337	722	433	464	519	69	71	376	649	523	43	0	0	0	0	0	0	4206
19	0	0	0	0	0	0	0	252	599	666	730	786	744	681	784	711	495	20	0	0	0	0	0	0	6468
20	0	0	0	0	0	0	0	292	665	791	837	851	847	826	794	712	494	39	0	0	0	0	0	0	7148
21	0	0	0	0	0	0	0	26	1	45	26	43	31	22	0	0	0	0	0	0	0	0	0	0	194
22	0	0	0	0	0	0	0	0	1	44	315	294	681	390	244	188	7	0	0	0	0	0	0	0	2163
23	0	0	0	0	0	0	0	21	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
24	0	0	0	0	0	0	0	1	71	304	222	276	454	538	498	565	161	21	0	0	0	0	0	0	3111
25	0	0	0	0	0	0	0	242	623	780	843	859	859	847	808	728	511	65	0	0	0	0	0	0	7166
26	0	0	0	0	0	0	0	74	399	334	175	215	547	476	183	10	0	1	0	0	0	0	0	0	2414
27	0	0	0	0	0	0	0	0	4	9	123	58	4	0	3	0	0	0	0	0	0	0	0	0	202
28	0	0	0	0	0	0	0	0	1	5	36	70	109	333	310	756 ?	470 ?	80	0	0	0	0	0	0	2169
29	0	0	0	0	0	0	0	256	667	759	766	523	871	868	834 ?	746	460 ?	84	0	0	0	0	0	0	6833
30	0	0	0	0	0	0	0	292	510 ?	668	811	860	879	874 ?	825 ?	769	538 ?	99	0	0	0	0	0	0	7124
31	0	0	0	0	0	0	0	376	701	832	879	893	892	877	788	690	338	68	0	0	0	0	0	0	7335
Avg	0	0	0	0	0	0	0	98	242	242	280	295	310	296	275	265	169	18	0	0	0	0	0	0	2443
S/D	0	0	0	0	0	0	0	124	274	307	334	337	360	343	327	320	209	30	0	0	0	0	0	0	2710
S/A	0	0	0	0	0	0	0	1.26	1.13	1.27	1.19	1.14	1.16	1.16	1.19	1.21	1.24	1.6	0	0	0	0	0	0	1.11
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	376	722	832	879	893	892	877	834	769	538	99	0	0	0	0	0	0	7335

Daylight Data Recovery: 0% missing; 3% exceed the 15% QC threshold -- 3797 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 - January 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	0	15	70	76	146	224	104	139	125	21	12	0	0	0	0	0	0	0	932
2	0	0	0	0	0	0	0	19	121	179	134	204	248	146	84	61	54	0	0	0	0	0	0	0	1249
3	0	0	0	0	0	0	0	13	74	137	236	238	284	232 ?	143	89	29	0	0	0	0	0	0	0	1476
4	0	0	0	0	0	0	0	19	93	136	77	180	158	247	178	127	37	0	0	0	0	0	0	0	1252
5	0	0	0	0	0	0	0	14	34	? ?	? ?	? ?	? ?	? ?	175	116	25	0	0	0	0	0	0	0	364 ?
6	0	0	0	0	0	0	0	1	9	26	57	75	95	82	55	30	9	0	0	0	0	0	0	0	439
7	0	0	0	0	0	0	0	6	52	119	131	114	168	243	176	61	15	0	0	0	0	0	0	0	1086
8	0	0	0	0	0	0	0	7	17	37	59	86	70	37	32	16	3	0	0	0	0	0	0	0	365
9	0	0	0	0	0	0	0	1	15	29	35	40	147	40	24	25	22	1	0	0	0	0	0	0	380
10	0	0	0	0	0	0	0	20	85	114	198	180	194	100	74	99	35	1	0	0	0	0	0	0	1100
11	0	0	0	0	0	0	0	27	96	154	187	244	261	269	219	138	54	1	0	0	0	0	0	0	1650
12	0	0	0	0	0	0	0	19	102	104	86	89	89 ?	86	75	90	51	1	0	0	0	0	0	0	792
13	0	0	0	0	0	0	0	12	103	105	167	220	245	250	118	83	25	1	0	0	0	0	0	0	1330
14	0	0	0	0	0	0	0	30	95	194	284	288	215	136	159	117	42	2	0	0	0	0	0	0	1561
15	0	0	0	0	0	0	0	16	18	55	175	163	25 ?	11	31	36	48	2	0	0	0	0	0	0	579
16	0	0	0	0	0	0	0	18	70	158	161	249	71	104	101	52	29	2	0	0	0	0	0	0	1015
17	0	0	0	0	0	0	0	26	85	125	107	126	225	207	99	68	27	0	0	0	0	0	0	0	1096
18	0	0	0	0	0	0	0	15	49	123	184	202	399	363	241	59	26	1	0	0	0	0	0	0	1662
19	0	0	0	0	0	0	0	25	69	79	78	76	110	112	59	45	25	1	0	0	0	0	0	0	680
20	0	0	0	0	0	0	0	17	38	47	52	57	58	58	52	44	26	1	0	0	0	0	0	0	450
21	0	0	0	0	0	0	0	51	105	199	255	315	327	239	82	52	30	2	0	0	0	0	0	0	1655
22	0	0	0	0	0	0	0	11	52	180	203	268	155	239	224	168	54	2	0	0	0	0	0	0	1556
23	0	0	0	0	0	0	0	31	83	109	122	135	71	96	63	31	9	0	0	0	0	0	0	0	751
24	0	0	0	0	0	0	0	12	113	188	226	275	216	191	163	82	56	5	0	0	0	0	0	0	1528
25	0	0	0	0	0	0	0	22	54	64	69	71	71	70	65	58	54	5	0	0	0	0	0	0	602
26	0	0	0	0	0	0	0	31	86	196	278	333	227	220	255	117	48	3	0	0	0	0	0	0	1792
27	0	0	0	0	0	0	0	19	73	172	289	334	287	175	162	88	19	1	0	0	0	0	0	0	1620
28	0	0	0	0	0	0	0	27	104	188	303	361	364	302	253	? ?	86 ?	8	0	0	0	0	0	0	1996
29	0	0	0	0	0	0	0	27	55	70	89	138	86	79	138 ?	? ?	85 ?	8	0	0	0	0	0	0	775
30	0	0	0	0	0	0	0	42	107 ?	124	78	73	67	108 ?	? ?	? ?	91 ?	9	0	0	0	0	0	0	699 ?
31	0	0	0	0	0	0	0	22	46	54	57	60	62	60	71	68	74	10	0	0	0	0	0	0	582
Avg	0	0	0	0	0	0	0	20	70	118	151	181	170	155	123	73	39	2	0	0	0	0	0	0	1065
S D	0	0	0	0	0	0	0	11	31	54	80	94	99	89	68	38	23	3	0	0	0	0	0	0	483
S/A	0	0	0	0	0	0	5.48	0.53	0.44	0.46	0.53	0.52	0.58	0.57	0.56	0.52	0.59	1.36	0	0	0	0	0	0	0.45
Min	0	0	0	0	0	0	0	1	9	26	35	40	25	11	24	16	3	0	0	0	0	0	0	0	364
Max	0	0	0	0	0	0	0	51	121	199	303	361	399	363	255	168	91	10	0	0	0	0	0	0	1996

Daylight Data Recovery: 0% missing; 4% exceed the 15% QC threshold -- 3797 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