

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Univ. - April 2000

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	1	48	131	271	413	463	321	494	165	6 ?	47	3	1	0	0	0	0	0	0	2364
2	0	0	0	0	0	0	2	3	22	108	421	422	356	452	265	150	30	10	0	0	0	0	0	0	2243
3	0	0	0	0	0	0	2	12	43	68	149	130	136	78	115	41	23	25	2	0	0	0	0	0	824
4	0	0	0	0	0	2	77 ?	319	538	720	867	767	885	854	699	551	334	114	4	0	0	0	0	0	6730
5	0	0	0	0	0	2	102	320	535	714	861	931	929	861	728	549	337	118	5	0	0	0	0	0	6992
6	0	0	0	0	0	3	90	314	506	613	804	799	907	862	730	546	331	118	6	0	0	0	0	0	6629
7	0	0	0	0	0	3	80	176	306	333	596	680	855	820	651	512	287	25	2	0	0	0	0	0	5323
8	0	0	0	0	0	2	102	232	385	534	621	811	701	739	755	509	349	122	6	0	0	0	0	0	5869
9	0	0	0	0	0	7	127	365	558	747	837	933	914	768	498	302	267	75	5	0	0	0	0	0	6402
10	0	0	0	0	0	2	67	307	477	514	846	773	715	586	429	221	161	42	7	0	0	0	0	0	5146
11	0	0	0	0	0	0	6	27	99	218	240	264	243	369	454	406	60	30	2	0	0	0	0	0	2420
12	0	0	0	0	0	5	24	79	77	63	131	143	116	107	82	70	33	8	0	0	0	0	0	0	937
13	0	0	0	0	0	1	19	36	81	176	177	251	249	159	129	66	46	21	2	0	0	0	0	0	1413
14	0	0	0	0	0	2	77	84	177	177	392	290	120	229	294	226	167	121	5	0	0	0	0	0	2361
15	0	0	0	0	0	2	39	75	126	252	401	307	319	490	410	366	343	123	8	0	0	0	0	0	3261
16	0	0	0	0	0	10	88	132	265	492	720	833	895	736	507	409	297	89	13	0	0	0	0	0	5486
17	0	0	0	0	0	11	141	363	568	763	899	967	859	858	743	565	357	130	7	0	0	0	0	0	7230
18	0	0	0	0	0	14	143 ?	367	570	754	888	957	949	864	717	534	327	119	8	0	0	0	0	0	7210
19	0	0	0	0	0	11	122	331	545	728	865	924	933	852	710	527	330	128	8	0	0	0	0	0	7014
20	0	0	0	0	0	6	75	231	178	371	574	813	895	822	732	570	364	148	12	0	0	0	0	0	5791
21	0	0	0	0	0	16	159	384	598	778	916	987	971	894	753	559	363	145	12	0	0	0	0	0	7536
22	0	0	0	0	0	16	162	384	593	771	909	976	954	887	735	536	286	66	3	0	0	0	0	0	7279
23	0	0	0	0	0	5	25	24	88	137	215	313	622	425	171	68	18	11	1	0	0	0	0	0	2121
24	0	0	0	0	0	7	45	67	131	161	133	313	331	306	221	252	199	134	15	0	0	0	0	0	2312
25	0	0	0	0	0	19	165	390	606	796	907	854	975	881	766	563	359	147	13	0	0	0	0	0	7441
26	0	0	0	0	0	2	44	312 ?	585	773	909	977	986	902	765	550	332	131 ?	8	0	0	0	0	0	7273
27	0	0	0	0	0	22	201 ?	276	460	522	517	542	650	739	713	340	178	49	12	0	0	0	0	0	5222
28	0	0	0	0	0	23	177	396	609	784	914	976	965	776	488	489	405	114	17	0	0	0	0	0	7133
29	0	0	0	0	0	25	170	377	596	777	912	963	963	886	725	505	356	146	12	0	0	0	0	0	7412
30	0	0	0	0	0	3	22	91	198	417	355	418	506	476	622	456	197	115	21	0	0	0	0	0	3896
Avg	0	0	0	0	0	7	87	220	360	489	615	654	680	628	520	383	238	88	7	0	0	0	0	0	4976
S D	0	0	0	0	0	7	58	139	212	259	285	299	302	275	245	186	130	50	5	0	0	0	0	0	2274
S/A	0	0	0	0	0	1	0.67	0.63	0.59	0.53	0.46	0.46	0.44	0.44	0.47	0.48	0.55	0.57	0.74	0	0	0	0	0	0.46
Min	0	0	0	0	0	0	2	3	22	63	131	130	116	78	6	41	3	1	0	0	0	0	0	0	824
Max	0	0	0	0	0	25	201	396	609	796	916	987	986	902	766	570	405	148	21	0	0	0	0	0	7536

Daylight Data Recovery: 0% missing; 1% exceed the 15% QC threshold -- 4681 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: 7.43 uV/Wm-2
Serial Number: 18036F3
Calibration Date: 5/15/1998

**Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Univ. - April 2000**

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	1	2	37	66	81	4	122	10	0	0	0	0	0	0	0	0	0	0	324
2	0	0	0	0	0	0	0	0	0	0	74	22	11	45	5	0	0	0	0	0	0	0	0	0	158
3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
4	0	0	0	0	0	22	406 ?	738	851	909	933	629	766	815	752	829	748	507	50	0	0	0	0	0	8955
5	0	0	0	0	0	27	495	779	887	938	969	976	974	960	930	881	780	547	67	0	0	0	0	0	10211
6	0	0	0	0	0	23	337	688	731	544	725	621	886	950	927	864	739	500	51	0	0	0	0	0	8585
7	0	0	0	0	0	3	120	83	27	25	241	297	732	589	511	626	466	0	0	0	0	0	0	0	3719
8	0	0	0	0	0	0	346	285	308	207	257	522	259	446	794	641	710	466	53	0	0	0	0	0	5294
9	0	0	0	0	0	43	482	757	856	904	703	795	794	618	250	28	210	112	8	0	0	0	0	0	6560
10	0	0	0	0	0	0	75	522	349	162	619	357	262	142	62	36	50	0	3	0	0	0	0	0	2639
11	0	0	0	0	0	0	0	0	1	3	4	4	2	16	89	166	0	0	0	0	0	0	0	0	284
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	1	3	3	1	0	0	0	0	0	0	0	0	0	0	10
14	0	0	0	0	0	0	1	0	1	1	39	3	0	5	10	6	121	278	2	0	0	0	0	0	468
15	0	0	0	0	0	0	0	0	0	2	4	2	4	52	49	137	482	388	43	0	0	0	0	0	1163
16	0	0	0	0	0	9	67	0	8	77	236	333	599	385	181	218	269	105	18	0	0	0	0	0	2506
17	0	0	0	0	0	80	506	755	838	915	945	931	726	843	914	866	781	534	59	0	0	0	0	0	9693
18	0	0	0	0	0	52	513 ?	766	859	906	927	938	920	875	805	700	584	360	34	0	0	0	0	0	9237
19	0	0	0	0	0	27	200	449	666	757	814	789	829	799	753	665	544	334	11	0	0	0	0	0	7637
20	0	0	0	0	0	1	36	77	14	50	256	497	618	642	747	821	749	553	94	0	0	0	0	0	5153
21	0	0	0	0	0	82	493	723	817	867	903	917	899	876	847	756	698	484	77	0	0	0	0	0	9438
22	0	0	0	0	0	99	550	773	858	905	929	930	835	861	784	600	380	32	0	0	0	0	0	0	8535
23	0	0	0	0	0	0	0	0	0	2	43	6	234	56	4	0	0	1	0	0	0	0	0	0	347
24	0	0	0	0	0	2	0	0	0	0	0	2	7	4	12	15	75	332	70	0	0	0	0	0	521
25	0	0	0	0	0	92	496	727	828	863	805	625	904	828	833	732	663	447	58	0	0	0	0	0	8901
26	0	0	0	0	0	0	4	533 ?	731	853	886	914	939	909	899	752	526	193 ?	0	0	0	0	0	0	8138
27	0	0	0	0	0	124	450 ?	191	205	133	61	55	133	386	656	83	10	0	12	0	0	0	0	0	2499
28	0	0	0	0	0	148	571	769	847	879	899	898	807	579	352	526	667	220	94	0	0	0	0	0	8256
29	0	0	0	0	0	98	449	677	787	855	877	852	835	816	684	515	660	460	57	0	0	0	0	0	8622
30	0	0	0	0	0	1	0	1	5	60	5	6	59	90	259	384	67	41	16	0	0	0	0	0	996
Avg	0	0	0	0	0	31	220	343	384	396	441	431	472	453	437	395	366	230	29	0	0	0	0	0	4628
S D	0	0	0	0	0	43	226	337	386	408	397	386	382	371	369	342	307	213	31	0	0	0	0	0	3817
S/A	0	0	0	0	0	1.39	1.03	0.98	1.01	1.03	0.9	0.9	0.81	0.82	0.85	0.87	0.84	0.93	1.06	0	0	0	0	0	0.82
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	148	571	779	887	938	969	976	974	960	930	881	781	553	94	0	0	0	0	0	10211

Daylight Data Recovery: 0% missing; 1% exceed the 15% QC threshold -- 4681 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: 8.67 uV/Wm-2
Serial Number: 25796E6
Calibration Date: 5/15/1998

Diffuse Solar Radiation on a Horizontal Surface (Shadow Band PSP)
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Mississippi Valley State Univ. - April 2000

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	44	119	243	369	412	291	380	146	5 ?	43	2	1	0	0	0	0	0	0	2057
2	0	0	0	0	0	0	1	3	20	100	364	374	319	409	237	139	27	9	0	0	0	0	0	0	2004
3	0	0	0	0	0	0	2	11	39	63	136	120	125	71	104	38	21	23	2	0	0	0	0	0	756
4	0	0	0	0	0	2	60 ?	?	?	?	?	242 ?	224	198	179	107	73	43	4	0	0	0	0	0	1133 ?
5	0	0	0	0	0	2	34	57	70	81	88	92	93	90	85	75	62	41	4	0	0	0	0	0	874
6	0	0	0	0	0	2	44	75	118	230	215	262	134	92	84	78	69	46	5	0	0	0	0	0	1453
7	0	0	0	0	0	3	63	140	275	307	392	402	205	322	276	170	107	23	1	0	0	0	0	0	2684
8	0	0	0	0	0	2	44	137	212	383	401	340	465	374	191	153	94	53	5	0	0	0	0	0	2854
9	0	0	0	0	0	4	43	67	87	107	238	218	204	235	306	274	200	57	5	0	0	0	0	0	2044
10	0	0	0	0	0	2	46	112	285	372	311	428	465	457	371	188	132	37	6	0	0	0	0	0	3212
11	0	0	0	0	0	0	6	23	87	193	214	232	218	323	390	307	53	27	2	0	0	0	0	0	2074
12	0	0	0	0	0	5	21	69	69	56	116	126	101	95	71	62	29	7	0	0	0	0	0	0	827
13	0	0	0	0	0	1	17	32	71	155	156	221	220	141	115	59	41	19	2	0	0	0	0	0	1250
14	0	0	0	0	0	2	67	74	158	158	338	255	106	205	260	203	126	79	5	0	0	0	0	0	2039
15	0	0	0	0	0	2	35	67	112	223	354	272	282	436	360	280	170	63	7	0	0	0	0	0	2661
16	0	0	0	0	0	9	72	116	234	426	513	503	342	398	370	283	198	70	12	0	0	0	0	0	3546
17	0	0	0	0	0	8	49	69	83	85	89	113	180	143	81	71	61	42	5	0	0	0	0	0	1079
18	0	0	0	0	0	9	47 ?	62	70	82	92	94	105	120	130	133	106	61	7	0	0	0	0	0	1117
19	0	0	0	0	0	10	88	147	151	162	160	190	171	170	161	145	124	74	7	0	0	0	0	0	1760
20	0	0	0	0	0	5	66	207	156	320	338	342	318	267	185	96	74	52	10	0	0	0	0	0	2436
21	0	0	0	0	0	12	60	89	110	124	129	133	137	139	130	122	94	62	10	0	0	0	0	0	1351
22	0	0	0	0	0	11	52	71	84	91	100	109	177	143	153	196	139	56	3	0	0	0	0	0	1385
23	0	0	0	0	0	5	22	21	77	123	162	276	391	361	152	60	17	9	1	0	0	0	0	0	1677
24	0	0	0	0	0	6	39	59	115	142	117	273	299	267	192	223	162	83	14	0	0	0	0	0	1992
25	0	0	0	0	0	14	62	86	105	140	205	270	143	171	155	147	100	66	11	0	0	0	0	0	1674
26	0	0	0	0	0	1	38	91 ?	138	121	133	130	118	121	103	111	116	96 ?	7	0	0	0	0	0	1323
27	0	0	0	0	0	17	84 ?	199	336	421	476	493	523	374	195	261	155	44	12	0	0	0	0	0	3589
28	0	0	0	0	0	15	55	76	92	111	125	139	218	276	233	187	142	81	13	0	0	0	0	0	1764
29	0	0	0	0	0	18	72	96	115	120	136	164	183	179	212	206	97	63	10	0	0	0	0	0	1669
30	0	0	0	0	0	3	19	80	174	349	313	378	420	383	427	222	167	101	18	0	0	0	0	0	3055
Avg	0	0	0	0	0	6	45	85	134	194	235	249	242	237	197	155	99	50	6	0	0	0	0	0	1911
SD	0	0	0	0	0	5	22	48	77	117	127	116	121	117	106	78	54	26	5	0	0	0	0	0	779
S/A	0	0	0	0	0	0.93	0.5	0.57	0.57	0.6	0.54	0.46	0.5	0.49	0.54	0.5	0.54	0.53	0.73	0	0	0	0	0	0.41
Min	0	0	0	0	0	0	1	3	20	56	88	92	93	71	5	38	2	1	0	0	0	0	0	0	756
Max	0	0	0	0	0	18	88	207	336	426	513	503	523	457	427	307	200	101	18	0	0	0	0	0	3589

Daylight Data Recovery: 0% missing; 2% exceed the 15% QC threshold -- 4681 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: 7.47 uV/Wm-2
Serial Number: 18039F3
Calibration Date: 5/15/1998