

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Mississippi Valley State Univ. - May 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	8	124	249	472	583	673	749	878	555	334	250	224	82	7	0	0	0	0	0	5188						
2	0	0	0	0	0	34	154	291	516	653	741	635	637	338	624	200	70	25	0	0	0	0	0	0	4918						
3	0	0	0	0	0	4	56	23	130	266	255	344	326	250	346	158	80	29	16	0	0	0	0	0	2283						
4	0	0	0	0	0	26	154	336	573	747	790	772	705	713	409	282	122	20	5	0	0	0	0	0	5654						
5	0	0	0	0	0	12	58	258	244	493	712	439	639	650	722	547	307	163	17	0	0	0	0	0	5261						
6	0	0	0	0	0	27	111	344	592	764	888	966	761	620	635	483	334	149	24	0	0	0	0	0	6696						
7	0	0	0	0	0	19	121	347	489	724	628	624	768	591	622	330	366	169	23	0	0	0	0	0	5821						
8	0	0	0	0	0	34	109	201	368	630	837	716	692	637	610	597	370	164	24	0	0	0	0	0	5987						
9	0	0	0	0	0	33	181	277	359	579	566	409	907	825	742	559	368	88	6	0	0	0	0	0	5898						
10	0	0	0	0	0	24	191	415	626	638	608	764	629	575	735	372	274	180	19	0	0	0	0	0	6051						
11	0	0	0	0	0	34	139	314	316	456	578	641	661	666	500	586	409	169	27	0	0	0	0	0	5496						
12	0	0	0	0	0	17	56	179	601	760	872	900	876	679	618	457	345	157	23	0	0	0	0	0	6538						
13	0	0	0	0	0	9	75	206	482	756	907	966	986	885	636	446	239	127	35	0	0	0	0	0	6755						
14	0	0	0	0	0	45	219	433	644	820	944	1002	997	926	796	598	406	200	30	0	0	0	0	0	8058						
15	0	0	0	0	0	40	219	435	642	814	935	984	913	823	660	269	218	95	17	0	0	0	0	0	7065						
16	0	0	0	0	0	32	183	412	432	499	714	346	293	271	275	271	255	130	19	0	0	0	0	0	4131						
17	0	0	0	0	0	26	132	266	453	657	680	622	923	902	651	454	323	159	42	0	0	0	0	0	6290						
18	0	0	0	0	0	44	167	303	380	669	784	870	699	721	568	408	371	197	18	0	0	0	0	0	6200						
19	0	0	0	0	0	9	111	160	93	240	261	361	566	622	324	255	299	199	21	0	0	0	0	0	3520						
20	0	0	0	0	0	10	38	93	210	193	246	272	345	650	498	373	227	154	?	45	0	0	0	0	3354						
21	0	0	0	0	0	10	53	171	103	376	389	615	737	853	814	533	401	186	?	40	0	0	0	0	5281						
22	0	0	0	0	0	46	232	404	621	791	794	743	862	872	560	420	?	292	?	165	?	35	0	0	0	6836					
23	0	0	0	0	0	48	149	398	625	392	442	664	708	?	385	?	592	?	?	138	?	31	0	0	0	4573					
24	0	0	0	0	0	40	196	387	405	446	279	632	947	?	888	769	628	?	?	138	?	35	0	0	0	5791					
25	0	0	0	0	0	32	150	356	548	701	?	628	?	717	?	659	637	?	612	?	658	?	241	?	125	?	28	0	0	0	6092
26	0	0	0	0	0	37	156	255	248	314	594	?	666	?	712	?	896	803	614	482	?	79	?	35	0	0	0	0	0	5892	
27	0	0	0	0	0	47	225	315	403	?	512	?	944	?	970	?	939	922	?	672	?	277	?	17	?	5	0	0	0	0	6681
28	0	0	0	0	0	51	118	267	421	?	627	?	777	?	980	938	805	633	437	289	?	39	0	0	0	0	0	0	0	6861	
29	0	0	0	0	0	41	152	?	?	649	?	806	923	977	963	905	780	607	441	?	?	35	0	0	0	0	0	0	0	7278	
30	0	0	0	0	0	47	148	?	514	?	671	?	777	?	904	955	947	881	791	620	?	461	?	?	39	0	0	0	0	0	7756
31	0	0	0	0	0	40	148	?	?	636	?	780	905	974	982	930	779	?	613	?	476	?	314	?	34	0	0	0	0	0	7613
Avg	0	0	0	0	0	30	139	297	450	596	674	712	762	710	622	455	314	142	25	0	0	0	0	0	0	5865					
S D	0	0	0	0	0	14	53	109	170	182	219	214	193	197	153	148	108	69	12	0	0	0	0	0	0	1287					
S/A	0	0	0	0	1.92	0.47	0.38	0.37	0.38	0.31	0.33	0.3	0.25	0.28	0.25	0.32	0.34	0.49	0.48	0	0	0	0	0	0	0.22					
Min	0	0	0	0	0	4	38	23	93	193	246	272	293	250	275	158	70	17	0	0	0	0	0	0	0	2283					
Max	0	0	0	0	0	51	232	514	671	820	944	1002	997	938	814	658	482	314	45	0	0	0	0	0	0	8058					

Daylight Data Recovery: 0% missing; 8% exceed the 15% QC threshold -- 5162 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. - May 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	1	92	140	274	244	327	314	552	154	19	22	115	55	2	0	0	0	0	0	2312							
2	0	0	0	0	0	45	100	170	379	310	236	148	139	9	262	90	0	0	0	0	0	0	0	0	1887							
3	0	0	0	0	0	0	1	0	1	4	2	5	4	2	30	4	0	0	0	0	0	0	0	0	53							
4	0	0	0	0	0	1	170	382	582	675	476	348	301	367	58	26	1	0	0	0	0	0	0	0	3387							
5	0	0	0	0	0	0	3	91	17	94	295	93	170	300	626	418	292	152	0	0	0	0	0	0	2552							
6	0	0	0	0	0	13	19	338	686	756	790	817	363	150	394	308	285	136	20	0	0	0	0	0	5076							
7	0	0	0	0	0	9	43	301	361	586	307	266	413	262	441	202	465	329	66	0	0	0	0	0	4052							
8	0	0	0	0	0	2	5	15	100	312	484	293	308	286	379	631	585	376	75	0	0	0	0	0	3851							
9	0	0	0	0	0	84	320	125	120	356	220	96	592	626	673	613	545	72	0	0	0	0	0	0	4442							
10	0	0	0	0	0	11	370	658	741	196	29	124	66	130	661	86	214	389	19	0	0	0	0	0	3693							
11	0	0	0	0	0	78	122	217	71	74	168	281	298	374	278	612	572	365	66	0	0	0	0	0	3576							
12	0	0	0	0	0	0	0	16	631	632	576	545	543	331	347	245	286	118	8	0	0	0	0	0	4276							
13	0	0	0	0	0	1	1	30	347	684	795	793	834	656	335	234	43	78	102	0	0	0	0	0	4933							
14	0	0	0	0	0	226	563	718	820	876	898	904	906	891	852	754	736	589	183	0	0	0	0	0	9914							
15	0	0	0	0	0	167	562	743	824	867	878	785	501	530	385	31	32	59	0	0	0	0	0	0	6364							
16	0	0	0	0	0	3	242	433	67	76	233	8	3	1	1	32	91	35	0	0	0	0	0	0	1226							
17	0	0	0	0	0	1	17	49	161	340	280	134	709	782	396	234	239	133	43	0	0	0	0	0	3518							
18	0	0	0	0	0	48	86	154	183	463	457	504	236	293	169	136	315	397	8	0	0	0	0	0	3449							
19	0	0	0	0	0	0	14	8	0	3	3	8	55	149	8	43	174	304	54	0	0	0	0	0	823							
20	0	0	0	0	0	0	0	1	2	2	4	3	7	182	118	86	18	53	?	108	0	0	0	0	584							
21	0	0	0	0	0	0	0	1	0	10	7	190	401	618	767	424	553	367	178	0	0	0	0	0	3517							
22	0	0	0	0	0	140	461	587	701	772	544	446	606	696	312	412	?	271	?	384	?	123	0	0	6453							
23	0	0	0	0	0	166	211	549	633	85	33	145	315	?	31	?	233	?	?	399	?	124	0	0	2924							
24	0	0	0	0	0	9	253	437	170	143	12	134	737	?	710	671	661	?	?	357	?	123	0	0	4416							
25	0	0	0	0	0	5	21	229	354	455	?	210	?	393	?	279	364	?	424	?	651	?	185	?	226	?	40	0	0	0	0	3836
26	0	0	0	0	0	3	69	67	6	13	210	?	217	?	347	?	716	751	756	710	?	154	?	126	0	0	0	0	0	0	4144	
27	0	0	0	0	0	38	335	241	181	?	242	?	694	?	730	?	709	728	?	468	?	276	?	246	?	0	?	0	0	0	0	4888
28	0	0	0	0	0	67	12	94	117	?	281	82	404	862	911	873	826	789	697	?	275	0	0	0	0	0	0	0	0	6289		
29	0	0	0	0	0	183	439	?	?	833	?	871	881	891	881	855	819	764	701	?	?	179	0	0	0	0	0	0	0	8298		
30	0	0	0	0	0	169	383	?	714	?	762	?	789	811	828	819	754	696	677	?	654	?	?	189	0	0	0	0	0	8243		
31	0	0	0	0	0	142	369	?	?	747	788	794	822	759	758	656	?	647	579	?	483	?	99	0	0	0	0	0	7642			
Avg	0	0	0	0	0	52	170	259	351	387	379	376	443	439	423	363	334	231	71	0	0	0	0	0	0	4214						
S D	0	0	0	0	0	69	181	243	300	303	305	297	283	290	266	276	252	189	73	0	0	0	0	0	0	2275						
S/A	0	0	0	0	0	1.33	1.06	0.94	0.85	0.78	0.81	0.79	0.64	0.66	0.63	0.76	0.75	0.82	1.03	0	0	0	0	0	0	0.54						
Min	0	0	0	0	0	0	0	0	0	2	2	3	3	1	1	4	0	0	0	0	0	0	0	0	0	53						
Max	0	0	0	0	0	226	563	743	833	876	898	904	906	911	873	826	789	697	275	0	0	0	0	0	0	9914						

Daylight Data Recovery: 0% missing; 8% exceed the 15% QC threshold -- 5162 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. - May 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	7	106	189	315	404	392	454	362	427	300	222	178	63	6	0	0	0	0	0	3424	
2	0	0	0	0	0	31	135	210	277	411	531	490	505	297	442	134	62	22	0	0	0	0	0	0	3547	
3	0	0	0	0	0	4	48	20	114	232	224	300	285	221	309	143	70	26	14	0	0	0	0	0	2009	
4	0	0	0	0	0	22	109	156	210	215	359	445	422	390	368	257	107	19	4	0	0	0	0	0	3084	
5	0	0	0	0	0	10	51	216	216	413	435	342	446	378	247	298	188	128	15	0	0	0	0	0	3382	
6	0	0	0	0	0	24	97	183	159	168	177	192	402	489	335	302	222	117	22	0	0	0	0	0	2888	
7	0	0	0	0	0	17	105	202	255	254	352	370	365	364	284	203	171	105	22	0	0	0	0	0	3069	
8	0	0	0	0	0	29	95	178	298	384	398	439	402	388	321	214	124	85	21	0	0	0	0	0	3376	
9	0	0	0	0	0	27	105	230	276	300	367	322	342	266	229	188	138	63	5	0	0	0	0	0	2858	
10	0	0	0	0	0	22	96	114	150	476	553	639	528	441	220	302	192	100	17	0	0	0	0	0	3850	
11	0	0	0	0	0	30	113	212	263	377	430	380	383	340	289	216	170	92	24	0	0	0	0	0	3320	
12	0	0	0	0	0	15	49	152	192	256	343	370	350	379	350	315	228	138	20	0	0	0	0	0	3158	
13	0	0	0	0	0	8	67	183	251	206	183	199	184	292	375	303	213	110	35	0	0	0	0	0	2609	
14	0	0	0	0	0	27	73	102	112	118	125	130	128	126	128	137	92	67	21	0	0	0	0	0	1385	
15	0	0	0	0	0	25	72	94	109	120	133	214	411	352	345	227	189	80	15	0	0	0	0	0	2386	
16	0	0	0	0	0	27	114	217	391	424	501	312	258	242	244	238	208	116	17	0	0	0	0	0	3309	
17	0	0	0	0	0	23	116	237	350	382	422	503	258	211	340	312	232	129	37	0	0	0	0	0	3553	
18	0	0	0	0	0	41	145	232	261	295	367	383	485	476	455	335	249	106	16	0	0	0	0	0	3846	
19	0	0	0	0	0	8	105	141	81	210	230	323	501	483	289	209	230	139	17	0	0	0	0	0	2966	
20	0	0	0	0	0	9	34	82	184	169	216	239	300	503	416	311	203	139	?	39	0	0	0	0	2842	
21	0	0	0	0	0	9	47	150	91	331	346	422	358	329	230	271	175	103	32	0	0	0	0	0	2895	
22	0	0	0	0	0	35	93	135	164	170	312	325	326	349	364	257	?	192	?	97	?	30	0	0	2849	
23	0	0	0	0	0	33	97	145	220	314	388	546	477	?	359	?	448	?	?	76	?	28	0	0	3132	
24	0	0	0	0	0	35	117	191	294	334	249	534	?	?	?	?	?	?	87	?	34	0	0	0	1876	
25	0	0	0	0	0	28	134	257	344	409	?	527	?	432	?	382	?	351	?	373	?	218	?	103	?	3584
26	0	0	0	0	0	32	142	222	221	280	472	?	468	?	411	?	?	?	?	74	?	34	0	0	0	2357
27	0	0	0	0	0	42	134	233	349	?	409	?	?	?	?	373	?	263	?	201	?	16	5	0	0	2027
28	0	0	0	0	0	44	104	232	402	?	447	?	411	?	486	?	?	?	?	?	46	0	0	0	0	2171
29	0	0	0	0	0	29	61	?	?	?	?	?	?	?	?	?	?	?	?	?	39	0	0	0	0	129
30	0	0	0	0	0	36	70	?	?	?	?	?	?	?	?	?	?	?	?	?	43	0	0	0	0	150
31	0	0	0	0	0	36	76	?	?	?	?	?	?	?	?	?	?	?	?	?	35	0	0	0	0	147
Avg	0	0	0	0	0	25	94	176	234	304	350	380	371	352	323	246	177	89	23	0	0	0	0	0	2651	
S D	0	0	0	0	0	11	30	56	89	103	120	119	97	93	78	59	51	36	12	0	0	0	0	0	1006	
S/A	0	0	0	0	1.97	0.45	0.32	0.32	0.38	0.34	0.34	0.31	0.26	0.26	0.24	0.24	0.29	0.4	0.52	5.48	0	0	0	0	0.38	
Min	0	0	0	0	0	4	34	20	81	118	125	130	128	126	128	134	62	16	0	0	0	0	0	0	129	
Max	0	0	0	0	0	44	145	257	402	476	553	639	528	503	455	335	249	139	46	0	0	0	0	0	3850	

Daylight Data Recovery: 0% missing; 18% exceed the 15% QC threshold -- 5162 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