

Mississippi Valley State University
33.5 N Latitude 90.33 W Longitude 52 Meters AMSL Time Zone -6

March 2003

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

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	6	34	80	115	123	123	86	113	91	76	58	10	0	0	0	0	0	0	913
2	0	0	0	0	0	0	2	41	104	242	292	203	193	144	128	151	84	43	0	0	0	0	0	0	1626
3	0	0	0	0	0	0	16	128	331	523	672	511	502	467	146	41 ?	25 ?	7	0	0	0	0	0	0	3369
4	0	0	0	0	0	0	20	89	150 ?	244 ?	181	198	261	126	96	91	56	12	0	0	0	0	0	0	1525
5	0	0	0	0	0	0	1	17 ?	47 ?	81 ?	85 ?	113 ?	108 ?	111	55 ?	46 ?	34 ?	2	0	0	0	0	0	0	699 ?
6	0	0	0	0	0	0	1	16 ?	49	67	164	158	193	216	284	318	138	50	0	0	0	0	0	0	1654
7	0	0	0	0	0	0	22	148	361	468	456	743	790	727	611	436	223	47	0	0	0	0	0	0	5032
8	0	0	0	0	0	0	27	152	337	519	583	582	459	430	329	199	132	36	0	0	0	0	0	0	3786
9	0	0	0	0	0	0	9	64	290	432	682	772	795	726	622	440	235	59	0	0	0	0	0	0	5127
10	0	0	0	0	0	0	29	159	369	558	696	777	801	733	609	435	229	55	0	0	0	0	0	0	5451
11	0	0	0	0	0	0	20	101	173	294	545	631	657	729	610	436	228	53	0	0	0	0	0	0	4478
12	0	0	0	0	0	0	28	150	348	566	687	755	798	744	622	413	192	82	1	0	0	0	0	0	5387
13	0	0	0	0	0	0	17	36	79 ?	?	343	545	365	305	126	171	126	33	6	0	0	0	0	0	2154
14	0	0	0	0	0	0	16	80	204	350	314	409	306	339	471	328	216	68	5	0	0	0	0	0	3105
15	0	0	0	0	0	0	25	173	363	546	703	785	772	670	614	450	282	57	1	0	0	0	0	0	5442
16	0	0	0	0	0	0	8	39	86	194	399	736	772	643	543	298	120	29	0	0	0	0	0	0	3867
17	0	0	0	0	0	0	2	28	88	117	109	244	522	470	232	94	71	80	9	0	0	0	0	0	2067
18	0	0	0	0	0	0	15	78	183	320	441	691	685	755	625	418	167	34	1	0	0	0	0	0	4412
19	0	0	0	0	0	0	42	209	423	597	730	811	839	793	671	487	270	75	5	0	0	0	0	0	5951
20	0	0	0	0	0	0	43	213	429	620	755	822	832	719	659	484	274	82	7	0	0	0	0	0	5940
21	0	0	0	0	0	0	7	30	73	155	221	230	210	148	97	68	45	8	0	0	0	0	0	0	1291
22	0	0	0	0	0	0	33	209	409	614	773	774	801	777	745	378	134	23	1	0	0	0	0	0	5670
23	0	0	0	0	0	0	18	151	360	614	755	849	817	799	663	488	279	79	5	0	0	0	0	0	5877
24	0	0	0	0	0	0	48	229	445	634	779	856	869	810	679	499	289	87	7	0	0	0	0	0	6232
25	0	0	0	0	0	0	36	149	429	515	729	838	808	748	524	384	165	50	4	0	0	0	0	0	5378
26	0	0	0	0	0	0	8	32	50	107	177	247	351	238	309	193	160	97	14	0	0	0	0	0	1981
27	0	0	0	0	0	2	54	202	444	646	784	856	860	796	668	483	279	89	8	0	0	0	0	0	6171
28	0	0	0	0	0	2	19	72	415	472	485	627	859	772	397	107	144	54	3	0	0	0	0	0	4430
29	0	0	0	0	0	1	64	234	230	511	639	727	307	241	248	161	152	47	5	0	0	0	0	0	3568
30	0	0	0	0	0	1	70	270	496	699	770	850	621	623	623	601	327	95	11	0	0	0	0	0	6057
31	0	0	0	0	0	2	73	233	426	675	813	886	893	837	706	523	311	102	14	0	0	0	0	0	6493
Avg	0	0	0	0	0	0	25	122	267	416	512	592	585	540	445	313	176	53	3	0	0	0	0	0	4037
S D	0	0	0	0	0	1	20	78	152	205	247	266	270	262	232	172	89	29	4	0	0	0	0	0	1849
S/A	0	0	0	0	0	2.52	0.8	0.64	0.57	0.49	0.48	0.45	0.46	0.48	0.52	0.55	0.51	0.55	1.23	0	0	0	0	0	0.46
Min	0	0	0	0	0	0	1	16	47	67	85	113	86	111	55	41	25	2	0	0	0	0	0	0	699
Max	0	0	0	0	0	2	73	270	496	699	813	886	893	837	745	601	327	102	14	0	0	0	0	0	6493
n	0	0	0	0	0	9	303	356	361	348	368	366	367	372	366	361	363	364	40	0	0	0	0	0	4345

Daylight Data Recovery: 0.0% missing; 2.1% exceed the 15% QC threshold -- 4439 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18036F3 Calibration Factor: 7.430 μV/W/m² Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

March 2003

Direct Normal Solar Radiation
 Hourly Integrated and Daily Totals
 Instrument: Eppley NIP
 Watt-Hours per Square Meter

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	0	0	*	
2	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
3	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
4	0	0	0	0	0	0	*	?	?	?	?	?	?	?	?	?	*	0	0	0	0	0	0	0	?	
5	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
6	0	0	0	0	0	0	304 ?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
7	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	636 **	753 *	*	*	0	0	0	0	0	*	
8	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	*	
10	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
11	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
12	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
13	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
14	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
15	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
16	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
17	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
20	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
21	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
22	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
23	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
24	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
25	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
26	0	0	0	0	0	0	*	64 ?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
27	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
28	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
29	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
30	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
31	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
Avg	0	0	0	0	0	0	304	64	N/A	N/A	N/A	N/A	N/A	N/A	636	753	N/A	N/A	0	0	0	0	0	0	N/A	*
SD	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	0
S/A	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	0
Min	0	0	0	0	0	0	304	64	N/A	N/A	N/A	N/A	N/A	N/A	636	753	N/A	N/A	0	0	0	0	0	0	N/A	
Max	0	0	0	0	0	0	304	64	N/A	N/A	N/A	N/A	N/A	N/A	636	753	N/A	N/A	0	0	0	0	0	0	N/A	
n	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 94.8% missing; 4.9% exceed the 15% QC threshold -- 4439 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25796E6 Calibration Factor: 8.670 μV/W/m² Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Mississippi Valley State University
33.5 N Latitude 90.33 W Longitude 52 Meters AMSL Time Zone -6

March 2003

Diffuse Solar Radiation (Shadow Band) on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

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	6	34	82	117	125	125	87	115	92	77	59	10	0	0	0	0	0	0	928
2	0	0	0	0	0	0	2	41	105	243	295	205	195	146	129	153	85	45	0	0	0	0	0	0	1645
3	0	0	0	0	0	0	17	140	?	?	?	398 ?	441 ?	440	149	36	24	7	0	0	0	0	0	0	1652 ?
4	0	0	0	0	0	0	22	93	149	220	183	198	264	128	98	87	57	12	0	0	0	0	0	0	1510
5	0	0	0	0	0	0	0	16	42	75	70	140	105	114	44	39	31 ?	1	0	0	0	0	0	0	676
6	0	0	0	0	0	0	1	15	48	69	166	161	196	219	292	300	141	56	0	0	0	0	0	0	1664
7	0	0	0	0	0	0	22	151	?	423 ?	462	?	?	?	?	?	185 ?	60	0	0	0	0	0	0	1303 ?
8	0	0	0	0	0	0	28	143 ?	256 ?	?	601 ?	590 ?	481	449	342	204	136	37	0	0	0	0	0	0	3266 ?
9	0	0	0	0	0	0	9	65	223 ?	396 ?	?	?	?	?	?	?	183 ?	68	0	0	0	0	0	0	945 ?
10	0	0	0	0	0	0	29	155	?	?	?	?	?	?	?	?	204 ?	64	0	0	0	0	0	0	452 ?
11	0	0	0	0	0	0	20	103	177	302	546	629 ?	592 ?	?	?	?	196 ?	64	0	0	0	0	0	0	2628 ?
12	0	0	0	0	0	0	29	151	239 ?	?	?	?	?	?	?	371 ?	209	70 ?	1	0	0	0	0	0	1069 ?
13	0	0	0	0	0	0	18	37	76	47 ?	325	469 ?	378	317	131	175	131	34	7	0	0	0	0	0	2144 ?
14	0	0	0	0	0	0	16	82	209	336	322	421	317	348	442 ?	320 ?	178 ?	70	5	0	0	0	0	0	3067
15	0	0	0	0	0	0	25	179	328 ?	?	?	?	?	521 ?	?	?	203 ?	63	1	0	0	0	0	0	1322 ?
16	0	0	0	0	0	0	8	40	89	201	390	577 ?	?	378 ?	528 ?	285	126	30	0	0	0	0	0	0	2654 ?
17	0	0	0	0	0	0	2	27	90	121	113	251	499	421 ?	201	98	74	67 ?	10	0	0	0	0	0	1974
18	0	0	0	0	0	0	16	81	190	330	437	547 ?	559 ?	615 ?	?	293 ?	177	35	1	0	0	0	0	0	3280 ?
19	0	0	0	0	0	0	43	162 ?	?	?	?	?	?	?	?	?	?	89	5	0	0	0	0	0	299 ?
20	0	0	0	0	0	0	45	176 ?	?	?	?	?	?	?	?	?	?	66 ?	7	0	0	0	0	0	294 ?
21	0	0	0	0	0	0	7	31	76	161	230	240	219	154	100	70	46	9	0	0	0	0	0	0	1343
22	0	0	0	0	0	0	33	175 ?	?	?	?	424 ?	?	590 ?	?	318 ?	140	24	1	0	0	0	0	0	1703 ?
23	0	0	0	0	0	0	18	133	307 ?	?	?	?	?	?	?	?	?	94	4	0	0	0	0	0	556 ?
24	0	0	0	0	0	0	50	173 ?	?	?	?	?	?	?	?	?	?	94	5	0	0	0	0	0	322 ?
25	0	0	0	0	0	0	37	142	?	428 ?	?	?	684 ?	?	467 ?	349 ?	174	53	4	0	0	0	0	0	2337 ?
26	0	0	0	0	0	0	8	33	52	111	184	258	368	249	323	201	167	102	12	0	0	0	0	0	2068
27	0	0	0	0	0	1	60	182 ?	?	?	?	?	?	?	?	?	235 ?	101	7	0	0	0	0	0	586 ?
28	0	0	0	0	0	2	20	76	255 ?	453 ?	484	586 ?	?	?	378	113	137	57	3	0	0	0	0	0	2564 ?
29	0	0	0	0	0	1	68	244 ?	237	380 ?	566 ?	527 ?	322	252	259	169	159	49	5	0	0	0	0	0	3238 ?
30	0	0	0	0	0	1	75	?	?	?	618 ?	711 ?	553 ?	462 ?	374 ?	?	136 ?	89	7	0	0	0	0	0	3027 ?
31	0	0	0	0	0	1	78	242 ?	309 ?	?	?	?	?	?	?	?	?	98	10	0	0	0	0	0	739 ?
Avg	0	0	0	0	0	0	26	111	169	245	340	392	368	329	256	193	138	55	3	0	0	0	0	0	1653 ?
S D	0	0	0	0	0	1	22	68	95	139	180	189	177	165	151	112	60	30	4	0	0	0	0	0	969
S/A	0	0	0	0	0	2.53	0.83	0.61	0.56	0.57	0.53	0.48	0.48	0.5	0.59	0.58	0.43	0.54	1.19	0	0	0	0	0	0.59
Min	0	0	0	0	0	0	0	15	42	47	70	125	87	114	44	36	24	1	0	0	0	0	0	0	294
Max	0	0	0	0	0	2	78	244	328	453	618	711	684	615	528	371	235	102	12	0	0	0	0	0	3280
n	0	0	0	0	0	9	303	305	202	181	184	159	171	166	178	192	248	347	40	0	0	0	0	0	2700

Daylight Data Recovery: 0.0% missing; 39.2% exceed the 15% QC threshold -- 4439 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18039F3 Calibration Factor: 7.470 μV/W/m² Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.