

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

April 2001

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	6	89	294	513	706	841	926	927	850	724	532	315	95	5	0	0	0	0	0	6823
2	0	0	0	0	0	4	88	225	267	226	470	700	845	541	567	300	127	61	9	0	0	0	0	0	4431
3	0	0	0	0	0	0	2	10	89	185	141	145	192	249	400	162	113	60	10	0	0	0	0	0	1759
4	0	0	0	0	0	0	41	40	60	245	160	215	131	92	63	95	149	23	8	0	0	0	0	0	1322
5	0	0	0	0	0	11	54	235	222	252	541	418	417	471	373	315	88	39	8	0	0	0	0	0	3445
6	0	0	0	0	0	16	99	286	463	629	823	819	732	669	690	452	267	71	11	0	0	0	0	0	6026
7	0	0	0	0	0	4	68	193	230	389	413	565	453	434	348	246	172	86	11	0	0	0	0	0	3613
8	0	0	0	0	0	2	37	117	216	361	483	407	633	669	567	332	242	73	15	0	0	0	0	0	4155
9	0	0	0	0	0	5	47	175	344	420	420	453	713	564	601	431	251	96	13	0	0	0	0	0	4534
10	0	0	0	0	0	7	72	229	389	529	786	756	805	749	704	524	249	89	16	0	0	0	0	0	5904
11	0	0	0	0	0	7	97	206	523	704	821	888	772	733	438	318	153	57	1	0	0	0	0	0	5721
12	0	0	0	0	0	1	6	56	98	128	112	96	78 ?	61 ?	50	186	135	54	12	0	0	0	0	0	1073
13	0	0	0	0	0	1	16	100	190 ?	205	319	538	468	505	565	476	265	67	5	0	0	0	0	0	3723
14	0	0	0	0	0	1	11	40	403	364	144	112 ?	139 ?	101 ?	53	43	14	24	3	0	0	0	0	0	1451
15	0	0	0	0	0	0	23	58	106	129	111	75 ?	83 ?	536	508	457	354	104	17	0	0	0	0	0	2563
16	0	0	0	0	0	15	116	324	540	720	850	926	917	850	718	538	325	119	17	0	0	0	0	0	6975
17	0	0	0	0	0	16	134	363	584	770	906	974	973	903	770	580	357	129	19	0	0	0	0	0	7478
18	0	0	0	0	0	17	132	359	573	762	891	964	963	891	752	570	355	129	10	0	0	0	0	0	7369
19	0	0	0	0	0	19	130	363	573	746	827	813	755	823	650	365	268	72	20	0	0	0	0	0	6423
20	0	0	0	0	0	3	19	66	195	297	677	628	327	542	458	436	212	112	23	0	0	0	0	0	3994
21	0	0	0	0	0	7	82	242	287	336	533	665	615	499	505	426	325	97	20	0	0	0	0	0	4639
22	0	0	0	0	0	13	98	311	470	697	635	935 ?	629 ?	544	611	418	151	86	24	0	0	0	0	0	5621
23	0	0	0	0	0	19	64	303	483	670	791 ?	727	483	703	403	338	36 ?	3	0	0	0	0	0	0	5024
24	0	0	0	0	0	23	115	225	355	547	697	810	843	860	789	607	382	154	23	0	0	0	0	0	6431
25	0	0	0	0	0	28	162	390	604	782	910	979	975	899	763	578	361	141	19	0	0	0	0	0	7592
26	0	0	0	0	0	20	154	367	578	760	889	956	954	879	741	551	341	132	23	0	0	0	0	0	7346
27	0	0	0	0	0	27	158	373	583	760	885	949	947	744	657	554	349	138	21	0	0	0	0	0	7146
28	0	0	0	0	0	29	158	365	580	753	886	835	877	681	492	417	171	61	12	0	0	0	0	0	6315
29	0	0	0	0	0	23	140	346	536	596	676	923	908	840	731	534	200	57	31	0	0	0	0	0	6542
30	0	0	0	0	0	12	148	345	554	737	864	930	871	536	687	453	293	160	17	0	0	0	0	0	6606
Avg	0	0	0	0	0	11	85	234	387	513	617	671	648	614	546	408	234	86	14	0	0	0	0	0	5068
S D	0	0	0	0	0	9	51	122	180	231	277	300	299	244	211	150	104	40	7	0	0	0	0	0	1996
S/A	0	0	0	0	0	0.83	0.6	0.52	0.47	0.45	0.45	0.45	0.46	0.4	0.39	0.37	0.44	0.46	0.52	0	0	0	0	0	0.39
Min	0	0	0	0	0	0	2	10	60	128	111	75	78	61	50	43	14	3	0	0	0	0	0	0	1073
Max	0	0	0	0	0	29	162	390	604	782	910	979	975	903	789	607	382	160	31	0	0	0	0	0	7592
n	0	0	0	0	0	184	357	359	356	359	353	346	339	346	359	360	355	359	175	0	0	0	0	0	4607

Daylight Data Recovery: 0.0% missing; 1.5% exceed the 15% QC threshold -- 4679 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18036F3 Calibration Factor: 7.430 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

April 2001

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	*
2	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
3	0	0	0	0	0	*	*	*	*	*	?	*	*	*	*	*	*	*	*	0	0	0	0	0	*
4	0	0	0	0	0	*	*	*	*	*	*	*	?	*	*	*	*	*	*	0	0	0	0	0	*
5	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
6	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
7	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
8	0	0	0	0	0	?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
9	0	0	0	0	0	54 *?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
10	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
12	0	0	0	0	0	789 ?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
13	0	0	0	0	0	*	*	*	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
14	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
16	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
22	0	0	0	0	0	*	*	*	?	*	*	?	263 ?	?	*	?	?	*	*	0	0	0	0	0	*
23	0	0	0	0	0	0 ?	?	*	*	319 *?	*	*	277 *	*	*	?	*	*	*	0	0	0	0	0	*
24	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
25	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
26	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
Avg	0	0	0	0	0	281	N/A	N/A	N/A	319	N/A	N/A	270	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A *
SD	0	0	0	0	0	441	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0
StA	0	0	0	0	0	1.57	0	0	0	0	0	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	N/A	N/A	N/A	319	N/A	N/A	263	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A
Max	0	0	0	0	0	789	N/A	N/A	N/A	319	N/A	N/A	277	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A
n	0	0	0	0	0	3	0	0	0	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 95.5% missing; 4.0% exceed the 15% QC threshold -- 4679 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

April 2001

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	5	77	188 ?	?	?	?	?	?	?	?	?	215 ?	91	2	0	0	0	0	0	578 ?
2	0	0	0	0	0	4	78	204	208	201	415	527 ?	622 ?	471	422 ?	274	113	54	8	0	0	0	0	0	3602 ?
3	0	0	0	0	0	0	1	9	79	165	125	129	169	220	361	147	100	55	9	0	0	0	0	0	1569
4	0	0	0	0	0	0	36	35	53	167	143	191	116	82	57	85	135	21	7	0	0	0	0	0	1128
5	0	0	0	0	0	10	47	204	193	222	457	375	375	400	333	284	80	35	8	0	0	0	0	0	3020
6	0	0	0	0	0	22 ?	89	264	431	526 ?	?	740 ?	688	604	?	404	243	65	10	0	0	0	0	0	4087 ?
7	0	0	0	0	0	3	60	168	204	343	364	506	402	385	308	219	153	77	10	0	0	0	0	0	3201
8	0	0	0	0	0	2	33	103	189	317	425	362	554	583	514	287	214	68	13	0	0	0	0	0	3663
9	0	0	0	0	0	4	42	152	309	378	374	407	614 ?	451	481 ?	306 ?	236	89	12	0	0	0	0	0	3854 ?
10	0	0	0	0	0	6	64	203	339	476	687 ?	590 ?	711 ?	595	610 ?	?	244	81	15	0	0	0	0	0	4620 ?
11	0	0	0	0	0	7	71	175	311	511 ?	?	?	627 ?	595	369	232	140	54	1	0	0	0	0	0	3091 ?
12	0	0	0	0	0	1	5	50	86	113	100	85	69 ?	54 ?	44	164	118	47	10	0	0	0	0	0	946
13	0	0	0	0	0	1	14	88	166 ?	180	280	418	404	442	395 ?	329 ?	237	63	5	0	0	0	0	0	3024 ?
14	0	0	0	0	0	1	10	37	287 ?	321	129	97 ?	123 ?	87 ?	47	38	12	21	3	0	0	0	0	0	1213
15	0	0	0	0	0	0	20	51	93	113	97	64 ?	69 ?	349 ?	371 ?	398	264 ?	96	16	0	0	0	0	0	2001 ?
16	0	0	0	0	0	14	75	136	176	366	692 ?	?	?	?	?	?	316	111	15	0	0	0	0	0	1901 ?
17	0	0	0	0	0	14	66	100	131	177	481 ?	?	?	?	?	?	?	?	118	16	0	0	0	0	1102 ?
18	0	0	0	0	0	15	69	106	138	164	263	613 ?	?	?	?	?	?	?	112	9	0	0	0	0	1489 ?
19	0	0	0	0	0	16	66	106	129	176	311	579	669	721 ?	528 ?	280	226	63	18	0	0	0	0	0	3888 ?
20	0	0	0	0	0	2	17	58	170	264	568	451	287	468	399	372	184	101	21	0	0	0	0	0	3362
21	0	0	0	0	0	6	71	200	248	289	449	526	519	445	368 ?	361	268	87	17	0	0	0	0	0	3853
22	0	0	0	0	0	12	70	182	243	250	443	480 ?	510	477	509	370	132	77	22	0	0	0	0	0	3777
23	0	0	0	0	0	16	57	244	289	317	409 ?	500	403	540	341	274	34	3	0	0	0	0	0	0	3428
24	0	0	0	0	0	21	106	208	297	390	440	429	392	324	344	?	?	112 ?	20	0	0	0	0	0	3082 ?
25	0	0	0	0	0	20	60	79	89	101	108	113	117	120	146	303	322	122	17	0	0	0	0	0	1717
26	0	0	0	0	0	16	71	102	120	132	137	139	140	135	132	149	176	104	19	0	0	0	0	0	1572
27	0	0	0	0	0	21	66	95	112	123	133	139	141	186	181	126	110	75	17	0	0	0	0	0	1526
28	0	0	0	0	0	22	70	107	139	144	161	264	239	288	300	238	148	54	10	0	0	0	0	0	2183
29	0	0	0	0	0	20	83	152	261	351	399	264	314	220	200	182	115	48	31	0	0	0	0	0	2638
30	0	0	0	0	0	11	101	146	177	194	205	211	266	259	221	224	178	100	14	0	0	0	0	0	2306
Avg	0	0	0	0	0	10	56	132	195	258	326	354	367	365	319	252	175	73	12	0	0	0	0	0	2581 ?
S D	0	0	0	0	0	8	28	67	92	123	178	195	213	188	157	79	31	7	0	0	0	0	0	0	1124
S/A	0	0	0	0	0	0.8	0.5	0.51	0.47	0.48	0.55	0.55	0.58	0.51	0.49	0.39	0.45	0.42	0.55	0	0	0	0	0	0.44
Min	0	0	0	0	0	0	1	9	53	101	97	64	69	54	44	38	12	3	0	0	0	0	0	0	578
Max	0	0	0	0	0	22	106	264	431	526	692	740	711	721	610	404	322	122	31	0	0	0	0	0	4620
n	0	0	0	0	0	182	356	350	337	339	295	276	273	279	260	264	294	355	174	0	0	0	0	0	4037

Daylight Data Recovery: 0.0% missing; 13.7% exceed the 15% QC threshold -- 4679 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.