

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

February 2002

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	0	26	110	243	287	301	355	332	302	175	56	15	0	0	0	0	0	0	2202
2	0	0	0	0	0	0	0	57	227	419	559	644	645	604	488	312	138	28	0	0	0	0	0	0	4121
3	0	0	0	0	0	0	0	7	52	103	64	85	92	116	161	108	48	11	0	0	0	0	0	0	846
4	0	0	0	0	0	0	0	29	159	408	507	542	610	587	349	262	110	17	0	0	0	0	0	0	3581
5	0	0	0	0	0	0	0	19	76	91	162	180	160	109	56	36	11	0	0	0	0	0	0	0	900
6	0	0	0	0	0	0	0	3	16	34	64	89	70	73	64	33	13	2	0	0	0	0	0	0	462
7	0	0	0	0	0	0	0	19	46	91	107	233	254	185	190	133	74	15	0	0	0	0	0	0	1348
8	0	0	0	0	0	0	6	74	227	426	573	664	685	637	516	341	151	27	0	0	0	0	0	0	4327
9	0	0	0	0	0	0	3	100	240	435	578	669	690	635	513	339	151	29	0	0	0	0	0	0	4383
10	0	0	0	0	0	0	1	66	235	431	572	518	231	277	192	113	42	6	0	0	0	0	0	0	2685
11	0	0	0	0	0	0	0	14	99	329	380	550	458	599	473	350	157	28	0	0	0	0	0	0	3437
12	0	0	0	0	0	0	4	98	266	456	602	690	709	651	531	299	129	22	0	0	0	0	0	0	4456
13	0	0	0	0	0	0	1	68	261	452	596	686	698	642	523	350	163	33	0	0	0	0	0	0	4473
14	0	0	0	0	0	0	5	85	275	465	624	707	723	659	471	267	118	21	0	0	0	0	0	0	4420
15	0	0	0	0	0	0	5	83	265	344	566	534	388	276	456	332	122	25	0	0	0	0	0	0	3395
16	0	0	0	0	0	0	4	39	131	420	615	705	726	667	547	377	178	35	0	0	0	0	0	0	4445
17	0	0	0	0	0	0	5	93	287	484	633	718	723	605	540	363	153	32	0	0	0	0	0	0	4637
18	0	0	0	0	0	0	7	99	289	473	619	703	698	638	537	345	176	23	0	0	0	0	0	0	4607
19	0	0	0	0	0	0	4	55	145	194	354	487	394	268	112	72	25	6	0	0	0	0	0	0	2115
20	0	0	0	0	0	0	7	95	292	462	613	680	702	640	554	352	184	36	0	0	0	0	0	0	4618
21	0	0	0	0	0	0	21	73	146	198	289	359	161	174	218	102	60	21	0	0	0	0	0	0	1821
22	0	0	0	0	0	0	2	44	240	457	303	387	429	333	287	234	168	39	0	0	0	0	0	0	2923
23	0	0	0	0	0	0	16	142	328	508	655	738	760	705	570	407	202	38	0	0	0	0	0	0	5070
24	0	0	0	0	0	0	20	116	311	501	661	752	772	682	587	414	205	44	0	0	0	0	0	0	5066
25	0	0	0	0	0	0	11	75	157	252	417	510	652	582	544	159	39	11	0	0	0	0	0	0	3410
26	0	0	0	0	0	0	1	33	152	400	593	638	459	669	516	389	182	50	0	0	0	0	0	0	4080
27	0	0	0	0	0	0	15	133	353	551	705	790	805	745	619	438	224	50	0	0	0	0	0	0	5422
28	0	0	0	0	0	0	17	132	348	547	696	786	803	739	612	437	224	43	0	0	0	0	0	0	5385

Avg	0	0	0	0	0	0	6	67	205	363	478	548	530	494	412	269	125	25	0	0	0	0	0	0	3523
S D	0	0	0	0	0	0	7	40	96	151	198	210	237	222	179	128	66	14	0	0	0	0	0	0	1451
S/A	0	0	0	0	0	0	1.18	0.6	0.47	0.41	0.41	0.38	0.45	0.45	0.44	0.48	0.53	0.54	0	0	0	0	0	0	0.41
Min	0	0	0	0	0	0	0	3	16	34	64	85	70	73	56	33	11	0	0	0	0	0	0	0	462
Max	0	0	0	0	0	0	21	142	353	551	705	790	805	745	619	438	224	50	0	0	0	0	0	0	5422
n	0	0	0	0	0	0	89	336	335	336	336	335	336	336	336	336	334	232	0	0	0	0	0	0	3677

Daylight Data Recovery: 0.0% missing; 0.1% exceed the 15% QC threshold -- 3681 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.

February 2002

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	*
5	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
6	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
7	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	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	756 ?	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	*	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	*

Avg	0	0	0	0	0	0	756	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	324	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	756	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	324	N/A	0	0	0	0	0	0	N/A	
Max	0	0	0	0	0	0	756	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	324	N/A	0	0	0	0	0	0	N/A	
n	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 98.7% missing; 1.1% exceed the 15% QC threshold -- 3681 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.

February 2002

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	0	25	107	231	262	296	338	305	260	165	55	15	0	0	0	0	0	0	2060
2	0	0	0	0	0	0	0	55	185 ?	?	?	?	?	?	?	?	133	27	0	0	0	0	0	0	400 ?
3	0	0	0	0	0	0	0	6	51	101	63	83	90	113	158	105	47	10	0	0	0	0	0	0	828
4	0	0	0	0	0	0	0	27	150	276 ?	443 ?	484 ?	483 ?	401 ?	330	232 ?	102	17	0	0	0	0	0	0	2945 ?
5	0	0	0	0	0	0	0	18	74	90	158	179	157	108	55	35	9	0	0	0	0	0	0	0	885
6	0	0	0	0	0	0	0	3	16	33	63	88	69	72	64	33	13	2	0	0	0	0	0	0	454
7	0	0	0	0	0	0	0	18	46	89	106	227	253	184	188	129	71	15	0	0	0	0	0	0	1326
8	0	0	0	0	0	0	2	70	185 ?	?	?	?	?	?	?	?	137	28	0	0	0	0	0	0	421 ?
9	0	0	0	0	0	0	3	44 ?	242 ?	?	?	?	?	?	?	?	145	30	0	0	0	0	0	0	463 ?
10	0	0	0	0	0	0	1	64	202 ?	?	488 ?	368 ?	225	267	189	111	42	6	0	0	0	0	0	0	1963 ?
11	0	0	0	0	0	0	0	13	97	248 ?	334	386 ?	360 ?	458 ?	434 ?	319 ?	151	28	0	0	0	0	0	0	2828 ?
12	0	0	0	0	0	0	3	91	207 ?	?	?	?	?	?	?	163 ?	108	20	0	0	0	0	0	0	592 ?
13	0	0	0	0	0	0	1	66	205 ?	?	?	?	?	?	?	?	157	33	0	0	0	0	0	0	461 ?
14	0	0	0	0	0	0	5	83	200 ?	?	?	?	?	?	393 ?	248	105	20	0	0	0	0	0	0	1054 ?
15	0	0	0	0	0	0	4	77	214 ?	295	437 ?	443 ?	358	253	395 ?	311	111	23	0	0	0	0	0	0	2922 ?
16	0	0	0	0	0	0	3	39	129	286 ?	?	?	?	?	?	?	155	36	0	0	0	0	0	0	647 ?
17	0	0	0	0	0	0	6	91	212 ?	?	?	?	?	460 ?	471 ?	257 ?	145	30	0	0	0	0	0	0	1670 ?
18	0	0	0	0	0	0	7	96	226 ?	?	?	?	?	?	451 ?	191 ?	159	23	0	0	0	0	0	0	1152 ?
19	0	0	0	0	0	0	3	51	129	170	321	450	351	237	100	64	23	6	0	0	0	0	0	0	1906
20	0	0	0	0	0	0	6	91	242 ?	?	493 ?	551 ?	518 ?	?	?	305 ?	169	37	0	0	0	0	0	0	2412 ?
21	0	0	0	0	0	0	23 ?	66	129	174	257	322	143	155	190	90	53	19	0	0	0	0	0	0	1620
22	0	0	0	0	0	0	2	40	213	389 ?	267	346	391	295	251	208	147	38	0	0	0	0	0	0	2587
23	0	0	0	0	0	0	16	116	?	?	?	?	?	?	?	?	171 ?	40	0	0	0	0	0	0	342 ?
24	0	0	0	0	0	0	19	89	213 ?	386 ?	?	?	?	?	?	?	174 ?	46	0	0	0	0	0	0	928 ?
25	0	0	0	0	0	0	10	67	139	224	367	440	500 ?	434 ?	364 ?	142	35	10	0	0	0	0	0	0	2733 ?
26	0	0	0	0	0	0	0	29	134	284 ?	449 ?	436 ?	391	430 ?	381 ?	237 ?	130 ?	50	0	0	0	0	0	0	2952 ?
27	0	0	0	0	0	0	15	128	?	?	?	?	?	?	?	?	178 ?	49	0	0	0	0	0	0	370 ?
28	0	0	0	0	0	0	16	128	?	?	?	?	?	?	?	?	183 ?	45	0	0	0	0	0	0	371 ?

Avg	0	0	0	0	0	0	5	60	158	219	300	340	309	278	275	176	111	25	0	0	0	0	0	0	0	1403 ?
S D	0	0	0	0	0	0	7	36	65	107	150	142	146	135	138	91	56	14	0	0	0	0	0	0	0	954
S/A	0	0	0	0	0	0	1.27	0.59	0.41	0.49	0.5	0.42	0.47	0.48	0.5	0.52	0.5	0.57	0	0	0	0	0	0	0	0.68
Min	0	0	0	0	0	0	0	3	16	33	63	83	69	72	55	33	9	0	0	0	0	0	0	0	0	342
Max	0	0	0	0	0	0	23	128	242	389	493	551	518	460	471	319	183	50	0	0	0	0	0	0	0	2952
n	0	0	0	0	0	0	88	328	227	144	138	145	149	139	150	172	310	232	0	0	0	0	0	0	0	2230

Daylight Data Recovery: 0.0% missing; 39.4% exceed the 15% QC threshold -- 3681 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.