

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

January 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	18	157	301	291	497	518	356	273	175	61	0	0	0	0	0	0	0	2647
2	0	0	0	0	0	0	0	23	103	213	415	524	541	487	319	200	33	0	0	0	0	0	0	0	2860
3	0	0	0	0	0	0	0	34	174	340	457	535	542	483	359	204	53	0	0	0	0	0	0	0	3181
4	0	0	0	0	0	0	0	78	291	445	481	553	562	457	304	164	56	0	0	0	0	0	0	0	3390
5	0	0	0	0	0	0	0	9	64	115	201	189	119	83	67	37	8	0	0	0	0	0	0	0	891
6	0	0	0	0	0	0	0	3	26	111	128	159	191	251	259	176	56	2	159	0	0	0	0	0	1362
7	0	0	0	0	0	0	0	19	66	128	170	160	232	299	174	99	45	2	0	0	0	0	0	0	1394
8	0	0	0	0	0	0	0	34	175	340	460	538	552	494	368	214	48	1	0	0	0	0	0	0	3223
9	0	0	0	0	0	0	0	40	162	320	302	339	473	443	307	227	67	10	0	0	0	0	0	0	2692
10	0	0	0	0	0	0	0	23	119	257	298	275	239	182	72	44	11	0	0	0	0	0	0	0	1521
11	0	0	0	0	0	0	0	28	142	334	464	531	561	493	379	207	41	2	0	0	0	0	0	0	3182
12	0	0	0	0	0	0	0	19	105	243	327	556	558	419	380	217	66	3	0	0	0	0	0	0	2894
13	0	0	0	0	0	0	0	45	208	350	474	559	571	513	392	227	73	6	0	0	0	0	0	0	3417
14	0	0	0	0	0	0	0	17	155	325	395	507	480	397	284	206	81	5	0	0	0	0	0	0	2851
15	0	0	0	0	0	0	0	39	184	359	481	569	581	523	400	233	73	3	0	0	0	0	0	0	3446
16	0	0	0	0	0	0	0	26	114	236	268	294	330	321	356	235	75	3	0	0	0	0	0	0	2259
17	0	0	0	0	0	0	0	16	36	85	137	218	178	172	115	20	11	0	0	0	0	0	0	0	987
18	0	0	0	0	0	0	0	8	48	91	125	146	126	82	70	58	25	4	0	0	0	0	0	0	780
19	0	0	0	0	0	0	0	5	45	37	42	80	73	114	158	102	100	18	0	0	0	0	0	0	773
20	0	0	0	0	0	0	0	13	63	83	117	172	299	255	198	217	59	16	0	0	0	0	0	0	1492
21	0	0	0	0	0	0	0	51	202	371	497	585	603	547	426	253	90	5	0	0	0	0	0	0	3630
22	0	0	0	0	0	0	0	25	88	226	227	206	167	149	121	66	14	0	0	0	0	0	0	0	1288
23	0	0	0	0	0	0	0	31	116	166	240	274	256	278	364	213	67 ?	8	0	0	0	0	0	0	2013
24	0	0	0	0	0	0	0	2	2	7	41	11	11	14	19	22	6	2	0	0	0	0	0	0	136
25	0	0	0	0	0	0	0	51	221	389	521	612	632	575	452	278	106	14	0	0	0	0	0	0	3851
26	0	0	0	0	0	0	0	52	208	397	535	619	582	577	466	285	107	5	0	0	0	0	0	0	3832
27	0	0	0	0	0	0	0	52	200	378	510	595	612	560	434	264	96	7	0	0	0	0	0	0	3708
28	0	0	0	0	0	0	0	7	81	128	222	200	217	102	184	97	62	10	0	0	0	0	0	0	1310
29	0	0	0	0	0	0	0	14	55	93	164	156	293	190	130	181	60	10	0	0	0	0	0	0	1347
30	0	0	0	0	0	0	0	29	144	158	265	224	434	448	375	149	32	4	0	0	0	0	0	0	2262
31	0	0	0	0	0	0	0	24	147	137	453	275	592	536	436	272	48	1	0	0	0	0	0	0	2921
Avg	0	0	0	0	0	0	0	27	126	231	313	360	391	348	279	172	56	4	0	0	0	0	0	0	2308
S D	0	0	0	0	0	0	0	18	68	124	155	192	194	175	134	81	29	5	0	0	0	0	0	0	1084
S/A	0	0	0	0	0	0	5.57	0.66	0.54	0.54	0.49	0.53	0.5	0.5	0.48	0.47	0.52	1.11	0	0	0	0	0	0	0.47
Min	0	0	0	0	0	0	0	2	2	7	41	11	11	14	19	20	6	0	0	0	0	0	0	0	136
Max	0	0	0	0	0	0	0	78	291	445	535	619	632	577	466	285	107	18	0	0	0	0	0	0	3851
n	0	0	0	0	0	0	1	351	369	370	371	370	372	371	371	372	369	84	0	0	0	0	0	0	3771

Daylight Data Recovery: 0.0% missing; 0.3% exceed the 15% QC threshold -- 3784 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.

January 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	0	0	*	
2	0	0	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	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	0	*	
6	0	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	0	*	
8	0	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	0	*	
10	0	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	0	*	
12	0	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	0	*	
14	0	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	0	*	
16	0	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	0	*	
18	0	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	0	*	
20	0	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	0	*	
22	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*	
23	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	?	?	?	0	0	0	0	*	
24	0	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	0	*	
26	0	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	0	*	
28	0	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	0	*	
30	0	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	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	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	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0	0	N/A	
Max	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0	0	N/A	
n	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

Daylight Data Recovery: 92.4% missing; 7.5% exceed the 15% QC threshold -- 3784 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25796E6 Calibration Factor: 8.670 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

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

January 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	17	149	243 ?	263	454 ?	460 ?	323	258	169	61	0	0	0	0	0	0	0	2399 ?
2	0	0	0	0	0	0	0	23	100	203	386 ?	452 ?	?	?	226 ?	166	31	0	0	0	0	0	0	0	1587 ?
3	0	0	0	0	0	0	0	33	167	325	?	?	?	?	300 ?	203	51	0	0	0	0	0	0	0	1081 ?
4	0	0	0	0	0	0	0	10 ?	?	?	?	?	?	410 ?	297	154	53	0	0	0	0	0	0	0	925 ?
5	0	0	0	0	0	0	0	8	61	111	194	183	116	80	64	35	6	0	0	0	0	0	0	0	858
6	0	0	0	0	0	0	0	3	25	107	122	150	184	244	233	155	53	2	0	0	0	0	0	0	1278
7	0	0	0	0	0	0	0	18	64	123	165	155	190	284	168	95	43	3	0	0	0	0	0	0	1307
8	0	0	0	0	0	0	0	33	169	326	?	?	?	?	316 ?	216	46	1	0	0	0	0	0	0	1108 ?
9	0	0	0	0	0	0	0	39	157	312	293	328	444 ?	407 ?	304	201 ?	64	10	0	0	0	0	0	0	2557
10	0	0	0	0	0	0	0	22	114	200 ?	286	269	228	179	70	43	11	0	0	0	0	0	0	0	1421
11	0	0	0	0	0	0	0	27	135	324	376 ?	438 ?	?	425 ?	324 ?	210	39	2	0	0	0	0	0	0	2298 ?
12	0	0	0	0	0	0	0	18	99	185 ?	273	?	?	315 ?	336 ?	220	64	4	0	0	0	0	0	0	1514 ?
13	0	0	0	0	0	0	0	43	182 ?	323 ?	?	?	?	?	?	231	71	8	0	0	0	0	0	0	858 ?
14	0	0	0	0	0	0	0	16	136	319	396	484 ?	464	379	271	199	79	7	0	0	0	0	0	0	2749
15	0	0	0	0	0	0	0	38	181	311 ?	?	?	?	?	?	233	73	6	0	0	0	0	0	0	842 ?
16	0	0	0	0	0	0	0	26	111	218	252	281	317	302	315 ?	233	73	3	0	0	0	0	0	0	2131
17	0	0	0	0	0	0	0	16	35	83	133	212	174	168	112	19	10	0	0	0	0	0	0	0	961
18	0	0	0	0	0	0	0	7	46	88	121	142	123	80	68	56	24	3	0	0	0	0	0	0	759
19	0	0	0	0	0	0	0	4	43	36	41	77	71	112	159	98	84	22 ?	0	0	0	0	0	0	748
20	0	0	0	0	0	0	0	12	61	81	114	167	293	245	193	167 ?	58	16	0	0	0	0	0	0	1406
21	0	0	0	0	0	0	0	47	192	337 ?	?	?	?	?	?	242 ?	89	8	0	0	0	0	0	0	915 ?
22	0	0	0	0	0	0	0	24	86	211	222	201	162	146	118	65	13	0	0	0	0	0	0	0	1247
23	0	0	0	0	0	0	0	30	110	140	227	259	240	241	360	211	70	8	0	0	0	0	0	0	1896
24	0	0	0	0	0	0	0	2	2	7	40	10	11	14	19	22	5	1	0	0	0	0	0	0	132
25	0	0	0	0	0	0	0	48	180	318 ?	?	?	?	?	?	240 ?	104	16	0	0	0	0	0	0	905 ?
26	0	0	0	0	0	0	0	49	180 ?	?	?	?	502 ?	?	?	232 ?	106	7	0	0	0	0	0	0	1075 ?
27	0	0	0	0	0	0	0	50	200	342 ?	?	?	?	?	387 ?	271	94	8	0	0	0	0	0	0	1351 ?
28	0	0	0	0	0	0	0	7	79	126	218	196	212	100	181	94	58	10	0	0	0	0	0	0	1281
29	0	0	0	0	0	0	0	14	55	91	162	154	255	182	123	173	57	10	0	0	0	0	0	0	1275
30	0	0	0	0	0	0	0	27	136	153	248	222	359 ?	337 ?	337	141	31	3	0	0	0	0	0	0	1995
31	0	0	0	0	0	0	0	23	136	126	438 ?	196	470 ?	466 ?	397 ?	278	47	1	0	0	0	0	0	0	2579 ?
Avg	0	0	0	0	0	0	0	24	113	199	226	239	264	247	228	164	54	5	0	0	0	0	0	0	1401 ?
S D	0	0	0	0	0	0	0	14	56	106	110	128	145	129	111	77	28	5	0	0	0	0	0	0	636
S/A	0	0	0	0	0	0	5.57	0.61	0.5	0.53	0.49	0.53	0.55	0.52	0.49	0.47	0.52	1.08	0	0	0	0	0	0	0.45
Min	0	0	0	0	0	0	0	2	2	7	40	10	11	14	19	19	5	0	0	0	0	0	0	0	132
Max	0	0	0	0	0	0	0	50	200	342	438	484	502	466	397	278	106	22	0	0	0	0	0	0	2749
n	0	0	0	0	0	0	1	343	350	300	242	223	207	219	241	343	368	83	0	0	0	0	0	0	2922

Daylight Data Recovery: 0.0% missing; 22.8% exceed the 15% QC threshold -- 3784 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.