

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

March 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	11	33	139	177	372	275	171	134	110	86	51	11	0	0	0	0	0	0	1572
2	0	0	0	0	0	0	3	16	76	81	94	158	169	214	101	47	19	4	0	0	0	0	0	0	982
3	0	0	0	0	0	0	4	50	319	517	494	771	827	773	644	461	244	58	0	0	0	0	0	0	5163
4	0	0	0	0	0	0	23	150	375	579	726	817	832	770	637	460	243	58	0	0	0	0	0	0	5670
5	0	0	0	0	0	0	24	149	370	567	714	802	816	759	633	458	244	59	0	0	0	0	0	0	5595
6	0	0	0	0	0	0	22	142	193	244	453	544	739	484	346	227	152	45	0	0	0	0	0	0	3591
7	0	0	0	0	0	0	11	35	181	152	139	625	711	552	563	362	169	47	0	0	0	0	0	0	3550
8	0	0	0	0	0	0	21	95	184	331	533	671	596	343	293	97	129	47	0	0	0	0	0	0	3340
9	0	0	0	0	0	0	4	58	180	17	301	700	826	787	661	473	259	64	0	0	0	0	0	0	4330
10	0	0	0	0	0	0	30	179	399	531	727	802	845	807	654	460	253	66	0	0	0	0	0	0	5755
11	0	0	0	0	0	0	12	81	246	288	221	134	54	87	29	32	20 ?	6	0	0	0	0	0	0	1210
12	0	0	0	0	0	0	4	7	30	91	159	357	400	210	93	44	23	23	0	0	0	0	0	0	1441
13	0	0	0	0	0	0	32	161	295	426	612	768	830	741	639	477	263	65	0	0	0	0	0	0	5309
14	0	0	0	0	0	0	38	201	267	596	717	798	643	650	653	467	243	54	3	0	0	0	0	0	5329
15	0	0	0	0	0	0	22	168	234	360	657	508	427	373	452	354	205	53	1	0	0	0	0	0	3815
16	0	0	0	0	0	0	8	88	81	161	207	336	241	243	299	167	111	28	2	0	0	0	0	0	1973
17	0	0	0	0	0	0	14	68	169	239	575	615	403	223	435	204	116	26	3	0	0	0	0	0	3091
18	0	0	0	0	0	0	3	23	48	105	130	203 ?	208 ?	262	332	283	170	60	3	0	0	0	0	0	1831 ?
19	0	0	0	0	0	0	22	95	132	338	583	651	694	742	587	446	230	65	3	0	0	0	0	0	4587
20	0	0	0	0	0	0	14	33	84	60	69	?	?	48	21	41	28	8	2	0	0	0	0	0	407 ?
21	0	0	0	0	0	0	32	180	432	608	795	877	883	815	682	487	267	72	6	0	0	0	0	0	6134
22	0	0	0	0	0	0	47	238	469	670	821	901	891	774	614	489	270	89	3	0	0	0	0	0	6275
23	0	0	0	0	0	0	45	239	467	665	808	894	898	829	692	506	290	82	6	0	0	0	0	0	6420
24	0	0	0	0	0	0	40	196	442	636	766	801	848	778	626	407	242	72	6	0	0	0	0	0	5861
25	0	0	0	0	0	0	7	27	111	133	189	364	655	775	436	396	145	49	2	0	0	0	0	0	3288
26	0	0	0	0	0	0	3	28	110	175	172	209	224	229	206	133	58	15	1	0	0	0	0	0	1563
27	0	0	0	0	0	0	18	95	241	425	842	895	904	802	672	478	304	91	6	0	0	0	0	0	5773
28	0	0	0	0	0	1	63	256	473	670	807	876	878	815	680	494	289	86	7	0	0	0	0	0	6394
29	0	0	0	0	0	0	36	144	234	360	417	493	465	320	474	320	131	46	6	0	0	0	0	0	3447
30	0	0	0	0	0	0	3	7 ?	26	62	108 ?	173 ?	151 ?	243 ?	205	112	51	10	0	0	0	0	0	0	1151 ?
31	0	0	0	0	0	0	15	66	61	82	95 ?	203 ?	280 ?	212	155	114	76	28	4	0	0	0	0	0	1389
Avg	0	0	0	0	0	0	20	107	228	334	461	574	584	510	439	309	171	48	2	0	0	0	0	0	3749
S D	0	0	0	0	0	0	15	76	143	219	274	266	285	278	229	174	95	26	2	0	0	0	0	0	1950
S/A	0	0	0	0	0	3.52	0.76	0.71	0.63	0.66	0.59	0.46	0.49	0.55	0.52	0.56	0.55	0.54	1.15	0	0	0	0	0	0.52
Min	0	0	0	0	0	0	3	7	26	17	69	134	54	48	21	32	19	4	0	0	0	0	0	0	407
Max	0	0	0	0	0	1	63	256	473	670	842	901	904	829	692	506	304	91	7	0	0	0	0	0	6420
n	0	0	0	0	0	10	306	368	371	370	362	345	337	365	370	371	367	367	41	0	0	0	0	0	4351

Daylight Data Recovery: 0.0% missing; 2.1% exceed the 15% QC threshold -- 4444 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 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	*	*	*	*	*	*	*	*	*	*	?	?	272 ?	0	0	0	0	0	*	
12	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
13	0	0	0	0	0	0	*	*	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
14	0	0	0	0	0	0	?	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
15	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
16	0	0	0	0	0	0	?	?	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
17	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
20	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
21	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
22	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	*	
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	?	
31	0	0	0	0	0	?	472 ?	?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*	
Avg	0	0	0	0	0	0	472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	272	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	472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	272	0	0	0	0	0	0	0	N/A
Max	0	0	0	0	0	0	472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	272	0	0	0	0	0	0	0	N/A
n	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0

Daylight Data Recovery: 94.9% missing; 4.8% exceed the 15% QC threshold -- 4444 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 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	10	29	121	155	313	240	150	118	97	76	45	9	0	0	0	0	0	0	1364
2	0	0	0	0	0	0	3	14	66	71	82	139	148	187	89	41	17	4	0	0	0	0	0	0	860
3	0	0	0	0	0	0	4	43	255 ?	374 ?	455	534 ?	?	?	?	?	188 ?	60	0	0	0	0	0	0	1912 ?
4	0	0	0	0	0	0	21	147	?	?	?	?	?	?	?	?	188 ?	60	0	0	0	0	0	0	417 ?
5	0	0	0	0	0	0	22	146	?	?	?	?	?	?	?	?	191 ?	62	0	0	0	0	0	0	422 ?
6	0	0	0	0	0	0	20	135	139	213	350	479	571 ?	411	310	204	134	31	0	0	0	0	0	0	2998 ?
7	0	0	0	0	0	0	10	32	139	133	122	470 ?	396 ?	449 ?	407 ?	306 ?	154	42	0	0	0	0	0	0	2659 ?
8	0	0	0	0	0	0	18	85	161	292	489	620 ?	554	304	259	85	114	42	0	0	0	0	0	0	3022
9	0	0	0	0	0	0	3	53	150	16	264	435 ?	?	?	?	?	199 ?	68	0	0	0	0	0	0	1188 ?
10	0	0	0	0	0	0	27	164	368 ?	425 ?	?	?	?	?	?	355 ?	210 ?	69	0	0	0	0	0	0	1618 ?
11	0	0	0	0	0	0	11	70	189	226	192	118	47	76	26	28	16	6	0	0	0	0	0	0	1007
12	0	0	0	0	0	0	3	6	26	79	139	312	350	185	81	38	20	20	0	0	0	0	0	0	1259
13	0	0	0	0	0	0	29	150	255	347 ?	438 ?	521 ?	?	586 ?	?	274 ?	214 ?	69	0	0	0	0	0	0	2883 ?
14	0	0	0	0	0	0	36	169 ?	243	?	?	?	448 ?	390 ?	?	?	194 ?	50	2	0	0	0	0	0	1533 ?
15	0	0	0	0	0	0	19	139	206	307	542 ?	421	380	335	376	307 ?	179	50	1	0	0	0	0	0	3262 ?
16	0	0	0	0	0	0	7	77	71	141	181	294	211	213	261	146	97	24	2	0	0	0	0	0	1724
17	0	0	0	0	0	0	12	60	148	209	422 ?	539	363	197	386	182	102	23	3	0	0	0	0	0	2647
18	0	0	0	0	0	0	3	20	42	96	114	179 ?	183 ?	231	295	255	146	55	2	0	0	0	0	0	1622
19	0	0	0	0	0	0	19	83	116	300	515	588	616 ?	?	524 ?	355 ?	195	59	2	0	0	0	0	0	3373 ?
20	0	0	0	0	0	0	12	29	74	53	60	?	?	42	18	36	24	7	2	0	0	0	0	0	358 ?
21	0	0	0	0	0	0	27	163	348 ?	508 ?	?	?	?	?	?	?	246	68	6	0	0	0	0	0	1366 ?
22	0	0	0	0	0	0	42	183 ?	?	?	?	?	?	?	526 ?	467 ?	258	89	2	0	0	0	0	0	1566 ?
23	0	0	0	0	0	0	40	184 ?	?	?	?	?	?	?	?	?	220 ?	84	4	0	0	0	0	0	533 ?
24	0	0	0	0	0	0	36	175	375 ?	?	?	712 ?	?	?	584 ?	340 ?	223	65	5	0	0	0	0	0	2515 ?
25	0	0	0	0	0	0	6	24	97	117	167	321	503 ?	621 ?	404	309 ?	128	44	1	0	0	0	0	0	2742 ?
26	0	0	0	0	0	0	3	24	96	152	150	183	195	200	180	116	50	13	1	0	0	0	0	0	1363
27	0	0	0	0	0	0	15	83	211	304	?	?	?	?	?	416 ?	230 ?	91	4	0	0	0	0	0	1353 ?
28	0	0	0	0	0	1	59	217 ?	?	?	?	?	?	?	?	?	283	83	6	0	0	0	0	0	648 ?
29	0	0	0	0	0	0	32	126	206	318	371	413	418	282	420	287	115	41	5	0	0	0	0	0	3034
30	0	0	0	0	0	0	3	8	22	54	94 ?	152 ?	132 ?	215 ?	168	98	45	9	0	0	0	0	0	0	1001 ?
31	0	0	0	0	0	0	13	58	53	71	82 ?	177 ?	245 ?	186	136	100	66	24	4	0	0	0	0	0	1216
Avg	0	0	0	0	0	0	18	93	161	207	264	374	328	275	277	210	145	46	2	0	0	0	0	0	1725 ?
S D	0	0	0	0	0	0	14	64	101	133	163	179	171	157	173	135	80	27	2	0	0	0	0	0	929
S/A	0	0	0	0	0	3.7	0.77	0.69	0.63	0.64	0.62	0.48	0.52	0.57	0.63	0.64	0.55	0.58	1.15	0	0	0	0	0	0.54
Min	0	0	0	0	0	0	3	6	22	16	60	118	47	42	18	28	16	4	0	0	0	0	0	0	358
Max	0	0	0	0	0	1	59	217	375	508	542	712	616	621	584	467	283	91	6	0	0	0	0	0	3373
n	0	0	0	0	0	10	305	351	280	258	218	187	162	193	205	220	317	366	41	0	0	0	0	0	3123

Daylight Data Recovery: 0.0% missing; 29.7% exceed the 15% QC threshold -- 4444 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.