

February 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	1	31	118	222	342	479	617	571	427	290	140	30	0	0	0	0	0	0	3267
2	0	0	0	0	0	0	0	37	95	166	216	188	243	169	305	314	126	22	0	0	0	0	0	0	1880
3	0	0	0	0	0	0	0	13	46	94	73	92	82	95	95 ?	36 ?	14 ?	6	0	0	0	0	0	0	647 ?
4	0	0	0	0	0	0	0	44	252 ?	417	562	649	665	615	497	326	137	21	0	0	0	0	0	0	4185
5	0	0	0	0	0	0	0	58	230	371	318	334	283	123	102	79	24	4	0	0	0	0	0	0	1926
6	0	0	0	0	0	0	0	6	25 ?	50	48 ?	50 ?	58 ?	53 ?	40 ?	33 ?	13 ?	2	0	0	0	0	0	0	379 ?
7	0	0	0	0	0	0	0	8	76	171	126	123	156	256	308	205	77	19	0	0	0	0	0	0	1526
8	0	0	0	0	0	0	5	47	92	264	330	349	360	245	186	141	62	16	0	0	0	0	0	0	2097
9	0	0	0	0	0	0	0	23	124	225	213	147	112	99	63	57	18 ?	3	0	0	0	0	0	0	1085
10	0	0	0	0	0	0	0	13	34	80	173	278	438	709	464	370	146	30	0	0	0	0	0	0	2736
11	0	0	0	0	0	0	3	75	257	441	582	669	684	631	516	345	154	25	0	0	0	0	0	0	4382
12	0	0	0	0	0	0	1	69	251	425	570	661	693	642	524	352	158	28	0	0	0	0	0	0	4375
13	0	0	0	0	0	0	5	53	196	269	296	252	145	152	107	61 ?	18 ?	3	0	0	0	0	0	0	1557
14	0	0	0	0	0	0	0	9	49	45	78	178	290	358	64 ?	41	41	5	0	0	0	0	0	0	1157
15	0	0	0	0	0	0	0	10	34 ?	47	101	151	113	84 ?	69	?	5 ?	4	0	0	0	0	0	0	619 ?
16	0	0	0	0	0	0	0	8 ?	44	91	110	139	84	64	55	41 ?	6 ?	4	0	0	0	0	0	0	646 ?
17	0	0	0	0	0	0	0	18	49	65	111	180	236	217	160	101	68	18	0	0	0	0	0	0	1221
18	0	0	0	0	0	0	11	101	232	447	607	686	702	607	525	365	169	20	0	0	0	0	0	0	4473
19	0	0	0	0	0	0	7	86	164	303	300	110	76	144	137	115	52 ?	5	0	0	0	0	0	0	1500
20	0	0	0	0	0	0	1	15	58	244	181	173	148	123	84	71	30	6	0	0	0	0	0	0	1135
21	0	0	0	0	0	0	1	22	114	180	374	166	135	215	138 ?	?	?	3	0	0	0	0	0	0	1349 ?
22	0	0	0	0	0	0	4	33	39	76	96	73	74	92	73 ?	53	67	16	0	0	0	0	0	0	696
23	0	0	0	0	0	0	10	110	298	483	591	713	728	348	310	329	163	43	0	0	0	0	0	0	4125
24	0	0	0	0	0	0	3	55	207	352	543	583	503	505	464	358	166	44	0	0	0	0	0	0	3784
25	0	0	0	0	0	0	1	15	57	105	62	105	150	117	101	67	29	8	0	0	0	0	0	0	816
26	0	0	0	0	0	0	1	3 ?	?	56 ?	68	62 ?	60 ?	96	108	98	29	10	0	0	0	0	0	0	591 ?
27	0	0	0	0	0	0	1	31	138	117	91	149	119	156	101	60	39	15	0	0	0	0	0	0	1018
28	0	0	0	0	0	0	3	30	83	130	185	226	233	213	196	118	53	13	0	0	0	0	0	0	1483

Avg	0	0	0	0	0	0	2	37	125	212	262	284	292	275	222	170	74	15	0	0	0	0	0	0	0	1952
S D	0	0	0	0	0	0	3	30	85	143	191	221	235	213	173	131	59	12	0	0	0	0	0	0	0	1368
S/A	0	0	0	0	0	0	1.42	0.81	0.68	0.67	0.73	0.78	0.8	0.78	0.78	0.77	0.79	0.79	0	0	0	0	0	0	0	0.7
Min	0	0	0	0	0	0	0	3	25	45	48	50	58	53	40	33	5	2	0	0	0	0	0	0	0	379
Max	0	0	0	0	0	0	11	110	298	483	607	713	728	709	525	370	169	44	0	0	0	0	0	0	0	4473
n	0	0	0	0	0	0	89	321	309	319	321	318	328	326	316	291	282	230	0	0	0	0	0	0	0	3452

Daylight Data Recovery: 0.0% missing; 6.2% exceed the 15% QC threshold -- 3679 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.

February 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	*	*	*	*	*	*	*	*	*	?	?	291 ?	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	?	569	392 ?	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	961 *
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	3 ?	*	*	?	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
11	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	1254 *?
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	57 ?	514 *?	?	*	*	*	*	*	*	?	?	353 *?	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	*	*	*	*	*	*	40 ?	85 ?	?	?	151 ?	666	0	0	0	0	0	0	942 *?
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	806 ?	?	*	?	?	?	?	*	*	*	*	*	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	?	563 ?	*	*	*	*	*	*	*	*	*	*	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	289	549	392	N/A	N/A	N/A	40	445	450	N/A	300	437	0	0	0	0	0	0	0	N/A	*?
SD	0	0	0	0	0	0	449	30	0	0	0	0	0	509	0	0	204	201	0	0	0	0	0	0	0	0	0
StA	0	0	0	0	0	0	1.56	0.06	0	0	0	0	1.14	0	0	0	0.68	0.46	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	3	514	392	N/A	N/A	N/A	40	85	450	N/A	151	291	0	0	0	0	0	0	0	N/A	0
Max	0	0	0	0	0	0	806	569	392	N/A	N/A	N/A	40	804	450	N/A	533	666	0	0	0	0	0	0	0	N/A	0
n	0	0	0	0	0	0	4	17	9	0	0	0	4	11	9	0	10	13	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 86.9% missing; 10.7% exceed the 15% QC threshold -- 3679 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**

**February 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	?	30	115	216	338	433 ?	?	?	288 ?	?	122 ?	26	0	0	0	0	0	0	1568 ?
2	0	0	0	0	0	0	0	36	92	163	212	184	238	166	280	?	135	24	0	0	0	0	0	0	1530 ?
3	0	0	0	0	0	0	0	13	45	93	72	91	81	93	78	31	15	7	0	0	0	0	0	0	617
4	0	0	0	0	0	0	0	48	?	?	?	?	?	?	?	?	126 ?	23	0	0	0	0	0	0	197 ?
5	0	0	0	0	0	0	0	65	176 ?	315 ?	321	336	279	121	101	78	23	4	0	0	0	0	0	0	1821 ?
6	0	0	0	0	0	0	0	6	23	45	41	43	52	47	38	29	13	2	0	0	0	0	0	0	341
7	0	0	0	0	0	0	0	7	75	167	124	120	153	251	307	205	76	18	0	0	0	0	0	0	1504
8	0	0	0	0	0	0	6 ?	46	90	250	294	345	355	240	182	138	60	15	0	0	0	0	0	0	2021
9	0	0	0	0	0	0	0	22	121	221	210	136	110	97	57	56	17	3	0	0	0	0	0	0	1049
10	0	0	0	0	0	0	1	13	34	75	170	274	393	?	337 ?	?	134 ?	35	0	0	0	0	0	0	1466 ?
11	0	0	0	0	0	0	3	81	187 ?	?	?	?	?	?	?	?	145 ?	29	0	0	0	0	0	0	445 ?
12	0	0	0	0	0	0	1	73	184 ?	?	?	?	?	?	?	?	144 ?	35	0	0	0	0	0	0	437 ?
13	0	0	0	0	0	0	5	53	193	272	295	249	145	151	107	49	17	3	0	0	0	0	0	0	1538
14	0	0	0	0	0	0	0	9	46	45	88	178	291	339	74	43	40	5	0	0	0	0	0	0	1157
15	0	0	0	0	0	0	0	11	30	44	89	151	113	77	69	24	5 ?	4	0	0	0	0	0	0	618
16	0	0	0	0	0	0	0	8	41	91	110	138	84	64	51	30	11	4	0	0	0	0	0	0	631
17	0	0	0	0	0	0	0	18	49	64	111	180	234	215	158	99	67	17	0	0	0	0	0	0	1212
18	0	0	0	0	0	0	15 ?	60 ?	198 ?	370 ?	?	?	?	?	?	?	149 ?	23	0	0	0	0	0	0	815 ?
19	0	0	0	0	0	0	7	89	164	240 ?	305	110	74	144	138	115	48	5	0	0	0	0	0	0	1439
20	0	0	0	0	0	0	1	15	58	243	181	169	148	124	85	72	30	6	0	0	0	0	0	0	1132
21	0	0	0	0	0	0	1	22	115	181	280 ?	169	138	219	114	?	?	4	0	0	0	0	0	0	1242 ?
22	0	0	0	0	0	0	5	35	39	73	98	73	75	85	65	53	67	16	0	0	0	0	0	0	685
23	0	0	0	0	0	0	10	107	332 ?	?	436 ?	?	?	244 ?	317	308 ?	130 ?	48	0	0	0	0	0	0	1933 ?
24	0	0	0	0	0	0	3	54	209	282 ?	453 ?	496 ?	503	496 ?	447 ?	339 ?	158	44	0	0	0	0	0	0	3485 ?
25	0	0	0	0	0	0	0	14	56	105	61	105	150	116	100	66	28	8	0	0	0	0	0	0	810
26	0	0	0	0	0	0	1	6 ?	16 ?	41 ?	63	47	58	97	109	99	29	10	0	0	0	0	0	0	576 ?
27	0	0	0	0	0	0	1	32	138	119	92	150	120	157	102	61	40	16	0	0	0	0	0	0	1028
28	0	0	0	0	0	0	3	31	85	132	188	229	236	216	199	120	54	14	0	0	0	0	0	0	1505

Avg	0	0	0	0	0	0	2	36	108	160	193	192	183	171	159	101	70	16	0	0	0	0	0	0	0	1171 ?
S D	0	0	0	0	0	0	4	28	76	97	121	118	120	104	111	88	53	13	0	0	0	0	0	0	0	677
S/A	0	0	0	0	0	0	1.54	0.78	0.71	0.61	0.63	0.61	0.66	0.61	0.7	0.88	0.76	0.82	0	0	0	0	0	0	0	0.58
Min	0	0	0	0	0	0	0	6	16	41	41	43	52	47	38	24	5	2	0	0	0	0	0	0	0	197
Max	0	0	0	0	0	0	15	107	332	370	453	496	503	496	447	339	158	48	0	0	0	0	0	0	0	3485
n	0	0	0	0	0	0	85	324	274	254	263	264	261	257	262	222	278	229	0	0	0	0	0	0	0	2976

Daylight Data Recovery: 0.0% missing; 19.1% exceed the 15% QC threshold -- 3679 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18039F3 Calibration Factor: 7.470 μV/W/m<sup>2</sup> 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.