

August 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	14	95	271	400	638	846	911 ?	941	861	722	554	381	173	32	0	0	0	0	0	6839
2	0	0	0	0	0	19	130	237	489	639	752	870	878	851	727	541	355	173	32	0	0	0	0	0	6692
3	0	0	0	0	0	24	132	292	455	662	793	855	847	804	630	528	345	151	31	0	0	0	0	0	6549
4	0	0	0	0	0	18	18	90	196	316	452	911	528	809	719	520 ?	372	167	37	0	0	0	0	0	5154
5	0	0	0	0	0	20	130	307	516	693	684	710	781	772	679	228	178	107	106 ?	0	0	0	0	0	5911
6	0	0	0	0	0	4	43	163	219 ?	284	403	505	762 ?	910	723	543	428	156	13	0	0	0	0	0	5156
7	0	0	0	0	0	19	77	210	389	673	839	925	724	813	744	470	238	109	37	0	0	0	0	0	6266
8	0	0	0	0	0	24	97	254	475	673	777	785	741	803	710	571	387	163	33	0	0	0	0	0	6493
9	0	0	0	0	0	6	29	173	473	596	839	896	926	798	737	559	384	154	36	0	0	0	0	0	6606
10	0	0	0	0	0	5	18	32	20	14	3	11	36 ?	78 ?	118	213 ?	334	172	35	0	0	0	0	0	1090 ?
11	0	0	0	0	0	14	124	211	286	416	474	313	293	384	461	224	273	189	24	0	0	0	0	0	3686
12	0	0	0	0	0	16	121	269	502	661	528	765	718	731	448	472	351	105	16	0	0	0	0	0	5705
13	0	0	0	0	0	1	23	108	122	254	255	416	418	806	387	434	117	55	31	0	0	0	0	0	3428
14	0	0	0	0	0	17	140	397 ?	534	723	857	928	942	781	689	586	396	161	25	0	0	0	0	0	7176
15	0	0	0	0	0	22	130	321	530	711	781	858	932	858	722	552	373	162	22	0	0	0	0	0	6975
16	0	0	0	0	0	22	105	288	494	682	803	735	618	85	387	329	246	67	13	0	0	0	0	0	4871
17	0	0	0	0	0	15	109	315	513	686	774	824	755	417	435	417	257	64	5	0	0	0	0	0	5588
18	0	0	0	0	0	10	49	171	99	51	279	354	421	503	489	424	314	141	29	0	0	0	0	0	3333
19	0	0	0	0	0	16	116	238	456	514	532	689	772	684	466	501	291	138	1	0	0	0	0	0	5415
20	0	0	0	0	0	10	95 ?	284	461	615	658	475	49 ?	222	651	535	326	127	19	0	0	0	0	0	4528
21	0	0	0	0	0	15	111	300	498	668	797	871	868	781	611	399	276	115	25	0	0	0	0	0	6335
22	0	0	0	0	0	14	112	311	468	633	795	865	883	837	683	516	314	117	13	0	0	0	0	0	6561
23	0	0	0	0	0	10	77	275	471	635	776	792	820	801	669	489	306	124	11	0	0	0	0	0	6257
24	0	0	0	0	0	13	72	223	453	530	645	594	656	438	619	520	323	123	18	0	0	0	0	0	5226
25	0	0	0	0	0	12	100	275	471	633	775	657	794	815	663	504	303	113	14	0	0	0	0	0	6129
26	0	0	0	0	0	11	98	295	491	670	680	735	870	801	691	455	311	108	3	0	0	0	0	0	6218
27	0	0	0	0	0	11	79	249	364	465	551	642	866	790	461	398	173	104	12	0	0	0	0	0	5163
28	0	0	0	0	0	4	38	85	133	275	340	438	542	535	306	209	128	55	11	0	0	0	0	0	3098
29	0	0	0	0	0	5	54	158	214	186	238	286	432	526	439	287	169	51	2	0	0	0	0	0	3047
30	0	0	0	0	0	1	23	86	185	160	331	339	489	205	69	106	117	40	7	0	0	0	0	0	2156
31	0	0	0	0	0	1	2	56	79	112	62	127	173	153	175	107	81	40	5	0	0	0	0	0	1174
Avg	0	0	0	0	0	13	82	224	370	499	591	648	660	634	549	426	285	120	22	0	0	0	0	0	5123
S D	0	0	0	0	0	7	41	90	160	223	246	255	260	259	192	141	94	44	19	0	0	0	0	0	1697
S/A	0	0	0	0	0	0.54	0.5	0.4	0.43	0.45	0.42	0.39	0.39	0.41	0.35	0.33	0.33	0.37	0.86	0	0	0	0	0	0.33
Min	0	0	0	0	0	1	2	32	20	14	3	11	36	78	69	106	81	40	1	0	0	0	0	0	1090
Max	0	0	0	0	0	24	140	397	534	723	857	928	942	910	744	586	428	189	106	0	0	0	0	0	7176
n	0	0	0	0	0	227	366	364	364	371	369	366	349	363	369	363	370	371	254	0	0	0	0	0	4866

Daylight Data Recovery: 0.0% missing; 1.7% exceed the 15% QC threshold -- 4950 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.

August 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	*	87 ?	*	*	*	?	667 ?	?	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	?	564 ?	452 ?	*	*	?	0	0	0	0	0	*
5	0	0	0	0	0	637 ?	242 ?	266 ?	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
6	0	0	0	0	0	*	*	*	?	50 ?	183 ?	183	329 ?	?	?	*	*	*	?	0	0	0	0	0	746 *?
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
10	0	0	0	0	0	*	*	*	*	*	*	?	?	?	44 ?	?	*	*	*	0	0	0	0	0	*
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
12	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	?	0	0	0	0	0	*
14	0	0	0	0	0	*	?	472 ?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
15	0	0	0	0	0	455 *?	*	*	*	*	*	*	*	*	*	*	*	*	*	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	90 ?	102 ?	?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	?	*	?	*	*	*	*	*	*	*	*	369 ?	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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
Avg	0	0	0	0	0	394	144	369	N/A	50	183	425	329	N/A	304	452	N/A	N/A	369	0	0	0	0	0	N/A *
S/D	0	0	0	0	0	278	86	146	0	0	0	342	0	0	368	0	0	0	0	0	0	0	0	0	0
S/A	0	0	0	0	0	0.71	0.6	0.4	0	0	0	0.8	0	0	1.21	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	90	87	266	N/A	50	183	183	329	N/A	44	452	N/A	N/A	369	0	0	0	0	0	N/A
Max	0	0	0	0	0	637	242	472	N/A	50	183	667	329	N/A	564	452	N/A	N/A	369	0	0	0	0	0	N/A
n	0	0	0	0	0	9	8	9	0	4	8	14	7	0	6	3	0	0	1	0	0	0	0	0	0

Daylight Data Recovery: 88.8% missing; 9.7% exceed the 15% QC threshold -- 4950 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

August 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	12	84	201	303	290	233	268 ?	235	257	198	164	125	86	25	0	0	0	0	0	2481
2	0	0	0	0	0	17	114	205	266	298	346	300	295	293	253	242	171	113	28	0	0	0	0	0	2941
3	0	0	0	0	0	22	99	178	251	273	306	335	348	372	341	275	197	115	29	0	0	0	0	0	3140
4	0	0	0	0	0	16	15	77	175	288	292	408	417	374	266	209 ?	166	109	32	0	0	0	0	0	2846
5	0	0	0	0	0	19	93	175	231	272	390	446	413	372	379	171	153	98	81 ?	0	0	0	0	0	3293
6	0	0	0	0	0	3	38	142	189 ?	250	329 ?	455	526 ?	213	147	185	214	121	12	0	0	0	0	0	2825 ?
7	0	0	0	0	0	17	67	182	352	336	262	301	309	249	197	206	173	90	35	0	0	0	0	0	2775
8	0	0	0	0	0	21	86	188	256	309	304	331	314	276	232	194	178	110	28	0	0	0	0	0	2828
9	0	0	0	0	0	5	25	141	274	268	231	236	295	345	334	263	164	88	30	0	0	0	0	0	2698
10	0	0	0	0	0	5	16	28	18	12	3	10	28	73	102	168	173	88	29	0	0	0	0	0	751
11	0	0	0	0	0	12	112	183	251	366	411	275	261	336	372	199	219	140	22	0	0	0	0	0	3158
12	0	0	0	0	0	14	74	171	222	300	391	330	318	318	348	309	251	93	14	0	0	0	0	0	3154
13	0	0	0	0	0	1	20	95	108	224	231	346	356	358	196	266	100	48	29	0	0	0	0	0	2379
14	0	0	0	0	0	17	83	116	125	133	137	154	208	232	224	175	150	83	19	0	0	0	0	0	1858
15	0	0	0	0	0	19	71	115	136	150	207	274	222	197	173	150	154	114	15	0	0	0	0	0	1995
16	0	0	0	0	0	20	78	167	264	367	426	408	374	75	298	295	217	59	11	0	0	0	0	0	3059
17	0	0	0	0	0	14	73	121	182	174	242	269	278	232	361	373	228	57	5	0	0	0	0	0	2609
18	0	0	0	0	0	8	44	148	80	45	247	310	364	439	447	381	265	121	24	0	0	0	0	0	2924
19	0	0	0	0	0	14	90	178	223	332	392	346	343	503	417	394 ?	235	131	1	0	0	0	0	0	3598
20	0	0	0	0	0	9	77	185	282	321	391	286	40	199	381 ?	478 ?	317	120	17	0	0	0	0	0	3103 ?
21	0	0	0	0	0	14	67	113	148	180	188	219	472	544 ?	459 ?	376	265	109	21	0	0	0	0	0	3176
22	0	0	0	0	0	12	67	140	179	197	206	307	679 ?	?	?	474 ?	312	115	13	0	0	0	0	0	2702 ?
23	0	0	0	0	0	9	60	151	200	229	258	500	573 ?	?	579 ?	469	292	118	10	0	0	0	0	0	3448 ?
24	0	0	0	0	0	11	66	181	276	346	371	525	502 ?	392	520 ?	479 ?	311	117	16	0	0	0	0	0	4113
25	0	0	0	0	0	12	72	150	212	278	556	506 ?	552 ?	?	572 ?	477	293	108	13	0	0	0	0	0	3801 ?
26	0	0	0	0	0	9	66	120	171	384	595	598 ?	592 ?	661 ?	?	407 ?	309	108	2	0	0	0	0	0	4024 ?
27	0	0	0	0	0	10	68	175	290	393	444	499	694 ?	710 ?	331 ?	322	152	91	11	0	0	0	0	0	4187 ?
28	0	0	0	0	0	4	33	74	117	243	298	382	471	467	268	184	113	49	10	0	0	0	0	0	2713
29	0	0	0	0	0	4	48	137	183	164	209	249	386	457	360	253	148	45	2	0	0	0	0	0	2644
30	0	0	0	0	0	1	20	75	163	141	291	300	429	172	61	93	103	35	6	0	0	0	0	0	1889
31	0	0	0	0	0	1	2	51	69	98	55	114	154	130	152	94	71	35	4	0	0	0	0	0	1030
Avg	0	0	0	0	0	11	62	141	200	247	298	332	369	330	309	281	201	94	19	0	0	0	0	0	2843
S D	0	0	0	0	0	6	29	46	76	98	126	125	161	157	133	120	70	29	15	0	0	0	0	0	778
S/A	0	0	0	0	0	0.55	0.47	0.32	0.38	0.4	0.42	0.38	0.44	0.48	0.43	0.43	0.35	0.31	0.79	0	0	0	0	0	0.27
Min	0	0	0	0	0	1	2	28	18	12	3	10	28	73	61	93	71	35	1	0	0	0	0	0	751
Max	0	0	0	0	0	22	114	205	352	393	595	598	694	710	579	479	317	140	81	0	0	0	0	0	4187
n	0	0	0	0	0	226	369	367	369	371	363	353	316	305	306	345	363	371	251	0	0	0	0	0	4677

Daylight Data Recovery: 0.0% missing; 5.5% exceed the 15% QC threshold -- 4950 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18039F3 Calibration Factor: 7.470 $\mu\text{V}/\text{W}/\text{m}^2$ 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.