

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

**May 2005**

**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	31	179	395	605	785	914	976	972	898	763	584	371	150	24	0	0	0	0	0	7646
2	0	0	0	0	0	28	157	391	577	692	852	933	910	423	311	140	183	100	9	0	0	0	0	0	5704
3	0	0	0	0	0	34	152	250	444	778	904	956	965	901	689	581	372	156	32	0	0	0	0	0	7214
4	0	0	0	0	0	22	107	251	403	527	709	914	962	823	527	290	130	24	8	0	0	0	0	0	5698
5	0	0	0	0	0	34	172	394	607	781	892	956	973	905	760	590	381	162	27	0	0	0	0	0	7634
6	0	0	0	0	0	35	175	396	601	770	887	940	967	890	724	565	339	149	29	0	0	0	0	0	7466
7	0	0	0	0	0	33	159	367	576	735	870	754	944	876	623	417	264	165	26	0	0	0	0	0	6811
8	0	0	0	0	0	30	162	369	571	724	702	879	886	614	440	341	292	124	22	0	0	0	0	0	6157
9	0	0	0	0	0	4	93	152	192	438	402	633	113 ?	75 ?	59 ?	107 ?	308	124	58	0	0	0	0	0	2758 ?
10	0	0	0	0	0	35	174	364	452	731	851	924	924	613	753	475	328	158	32	0	0	0	0	0	6812
11	0	0	0	0	0	54	179	398	589	756	871	864	937	838	732	549	365	143	26	0	0	0	0	0	7301
12	0	0	0	0	0	36	182	384	589	754	827	942	977	941	768	554	351	166	18	0	0	0	0	0	7488
13	0	0	0	0	0	33	185	380	575	647	712	833	683	709	615	564	133	99	35	0	0	0	0	0	6204
14	0	0	0	0	0	16	83	85	180	349	737	663	459	486	478	405	145 ?	?	4	0	0	0	0	0	4090
15	0	0	0	0	0	30	154	399	618	747	863	947	975	914	750	601	400	188	33	0	0	0	0	0	7622
16	0	0	0	0	0	61	174	417	640	771	673	582	694	811	473	322	379	170	35	0	0	0	0	0	6203
17	0	0	0	0	0	44	204	412	617	778	884	956	958	884	748	574	375	170	34	0	0	0	0	0	7640
18	0	0	0	0	0	39	187	382	586	746	853	945	817	888	585	442	377	165	29	0	0	0	0	0	7041
19	0	0	0	0	0	43	172	342	576	745	808	866	909	767	656	555	295	209	43	0	0	0	0	0	6987
20	0	0	0	0	0	31	193	392	586	743	884	939	965	891	762	401	174 ?	172	36	0	0	0	0	0	7168
21	0	0	0	0	0	45	203	399	605	777	896	928	959	897	729	575	379	180	34	0	0	0	0	0	7604
22	0	0	0	0	0	38	169	341	497	673	738	670	588	560	632	585	380	163	26	0	0	0	0	0	6059
23	0	0	0	0	1	36	68	165	366	575	549	861	469	476	574	562	363	170	35	0	0	0	0	0	5268
24	0	0	0	0	3	45	195	395	596	743	862	925	936	885	718	321	223	151	16	0	0	0	0	0	7013
25	0	0	0	0	4	40	172	426	578	765	878	978	978	910	780	603	412	199	35	0	0	0	0	0	7759
26	0	0	0	0	2	55	200	404	601	753	878	955	951	882	761	598	401	189	35	0	0	0	0	0	7664
27	0	0	0	0	3	48	193	380	571	728	836	917	923	875	716	544	257	105	12	0	0	0	0	0	7107
28	0	0	0	0	0	8	94	257	536	685	534	789	903	871	700	491	299	117	24	0	0	0	0	0	6308
29	0	0	0	0	0	5	34	47	77	66 ?	252	666	292	288	87	63	88	38	7	0	0	0	0	0	2010
30	0	0	0	0	1	17	71	112	148	299	387	499	524	395	353	456	267	85	12	0	0	0	0	0	3627
31	0	0	0	0	0	13	28	72	117	160	260	380	209	266	182	99	89	54	21	0	0	0	0	0	1952
Avg	0	0	0	0	0	33	151	320	493	652	747	838	797	724	595	450	294	142	26	0	0	0	0	0	6259
S/D	0	0	0	0	1	14	51	117	169	191	193	156	253	237	206	165	100	46	12	0	0	0	0	0	1679
S/A	0	0	0	0	2.35	0.42	0.34	0.37	0.34	0.29	0.26	0.19	0.32	0.33	0.35	0.37	0.34	0.33	0.45	0	0	0	0	0	0.27
Min	0	0	0	0	0	4	28	47	77	66	252	380	113	75	59	63	88	24	4	0	0	0	0	0	1952
Max	0	0	0	0	4	61	204	426	640	785	914	978	978	941	780	603	412	209	58	0	0	0	0	0	7759
n	0	0	0	0	16	354	368	370	372	363	369	372	367	363	366	368	363	359	317	0	0	0	0	0	5087

Daylight Data Recovery: 0.0% missing; 1.3% exceed the 15% QC threshold -- 5154 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.

May 2005

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	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
5	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
6	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*
20	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
21	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
22	0	0	0	0	?	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
23	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
24	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
25	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
26	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
27	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
28	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
29	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
30	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
31	0	0	0	0	*	*	*	*	*	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
Avg	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	N/A	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A	N/A	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	N/A
Max	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	N/A	N/A	N/A	N/A	N/A	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: 98.8% missing; 1.1% exceed the 15% QC threshold -- 5154 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**

**May 2005**

**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	21	58	70	75	85	92	99	99	98	94	85	74	53	16	0	0	0	0	0	1019
2	0	0	0	0	0	23	68	87	145	268	227	200	250	402	313	145	177	86	9	0	0	0	0	0	2398
3	0	0	0	0	0	28	119	225	239	97	99	129	105	111	114	85	75	55	23	0	0	0	0	0	1504
4	0	0	0	0	0	22	109	234	346	429	443	350	305	329	429	276	133	25	8	0	0	0	0	0	3438
5	0	0	0	0	0	22	60	79	91	99	104	108	108	106	101	89	74	55	18	0	0	0	0	0	1114
6	0	0	0	0	0	22	64	87	104	116	130	170	167	154	144	122	121	89	26	0	0	0	0	0	1516
7	0	0	0	0	0	27	90	137	167	190	213	260	325	288	275	241	128	84	20	0	0	0	0	0	2445
8	0	0	0	0	0	24	89	134	184	237	312	353	329	364	364	274	207	99	22	0	0	0	0	0	2992
9	0	0	0	0	0	5	75	158	185	345	342	428	102	69 ?	59	125	193	68	51 ?	0	0	0	0	0	2203
10	0	0	0	0	0	28	85	142	254	184	188	186	265	308	263	150	120	74	25	0	0	0	0	0	2272
11	0	0	0	0	0	44	107	159	228	235	236	259	237	231	190	162	113	79	20	0	0	0	0	0	2298
12	0	0	0	0	0	26	79	112	132	142	180	178	213	272	212	146	127	90	16	0	0	0	0	0	1923
13	0	0	0	0	0	31	139	191	233	363	384	356	338	328	266	259	129	103	35	0	0	0	0	0	3155
14	0	0	0	0	0	16	86	89	187	316	452	380	313	378	337	272	127 ?	?	4	0	0	0	0	0	2957
15	0	0	0	0	0	26	65	79	117	223	237	179	155	126	137	119	88	60	22	0	0	0	0	0	1633
16	0	0	0	0	0	48	126	107	134	297	493	478	520	372	377	297	194	82	23	0	0	0	0	0	3547
17	0	0	0	0	0	28	71	91	101	107	113	117	122	128	130	113	93	66	25	0	0	0	0	0	1305
18	0	0	0	0	0	29	89	129	144	156	189	225	270	232	227	192	128	75	23	0	0	0	0	0	2107
19	0	0	0	0	0	35	94	140	191	212	276	344	267	282	215	181	191	159	37	0	0	0	0	0	2623
20	0	0	0	0	0	30	90	129	174	249	259	217	264	250	188	182	102	84	30	0	0	0	0	0	2248
21	0	0	0	0	0	31	86	129	145	139	247	222	161	152	149	125	112	83	26	0	0	0	0	0	1807
22	0	0	0	0	0	36	145	274	342	372	466	507	512	454	266	148	112	82	19	0	0	0	0	0	3735
23	0	0	0	0	0	36	70	171	288	420	402	366	425	411	329	153	127	95	29	0	0	0	0	0	3321
24	0	0	0	0	?	32	85	112	135	153	159	189	236	247	261	189	211	131	19	0	0	0	0	0	2156
25	0	0	0	0	?	30	105	135	235	239	198	121	111	108	108	96	82	63	21	0	0	0	0	0	1651
26	0	0	0	0	2	37	97	134	135	156	141	144	147	138	122	114	103	75	25	0	0	0	0	0	1570
27	0	0	0	0	3	39	113	170	206	225	230	240	247	248	253	272	175	79	12	0	0	0	0	0	2514
28	0	0	0	0	0	8	96	245	279	382	507	490	301	230	236	242	208	114	26	0	0	0	0	0	3365
29	0	0	0	0	0	6	34	45	80	52	215	513	300	290	86	65	90	39	7	0	0	0	0	0	1821
30	0	0	0	0	0	17	73	116	152	305	394	453	452	387	368	332	216	88	12	0	0	0	0	0	3365
31	0	0	0	0	0	13	29	74	121	166	262	383	217	277	190	104	93	58	23	0	0	0	0	0	2010
Avg	0	0	0	0	0	26	87	135	179	224	264	279	254	251	219	173	133	80	22	0	0	0	0	0	2323
S/D	0	0	0	0	1	10	26	55	72	104	124	131	116	108	99	74	46	26	9	0	0	0	0	0	763
S/A	0	0	0	0	3.52	0.38	0.3	0.4	0.4	0.46	0.47	0.47	0.46	0.43	0.45	0.43	0.34	0.33	0.44	0	0	0	0	0	0.33
Min	0	0	0	0	0	5	29	45	75	52	92	99	99	69	59	65	74	25	4	0	0	0	0	0	1019
Max	0	0	0	0	3	48	145	274	346	429	507	513	520	454	429	332	216	159	51	0	0	0	0	0	3735
n	0	0	0	0	14	356	372	372	372	370	372	372	370	365	372	371	367	360	315	0	0	0	0	0	5120

Daylight Data Recovery: 0.0% missing; 0.7% exceed the 15% QC threshold -- 5154 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.