

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	4	72	265	461	611	706	764	727	602	474	221	95	2	0	0	0	0	0	5004
2	0	0	0	0	0	0	0	4	19	51	84	75	81	97	153	48	44	39	9	0	0	0	0	0	704
3	0	0	0	0	0	0	0	26	115	107	181	163	90	49	25	91	71	27	4	0	0	0	0	0	949
4	0	0	0	0	0	0	1	62	133	274	392	553	562	718	574	361	315	117	11	0	0	0	0	0	4074
5	0	0	0	0	0	0	7	101	282	474	652	768	789	750	655	503	314	114	10	0	0	0	0	0	5420
6	0	0	0	0	0	0	8	101	262	488	635	720	748	758	659	512	323	120	9	0	0	0	0	0	5341
7	0	0	0	0	0	0	4	46	251	411	412	557	681	692	640	441	316	110	9	0	0	0	0	0	4570
8	0	0	0	0	0	0	6	76	253	475	604	739	763	697	579	437	222	86	9	0	0	0	0	0	4948
9	0	0	0	0	0	0	6	61	139	338	508	615	636	296	226	141	40	36	7	0	0	0	0	0	3047
10	0	0	0	0	0	0	6	118	332	531	693	799	837	804	702	541	347	135	12	0	0	0	0	0	5856
11	0	0	0	0	0	0	14	106	320	499	634	747	817	766	631	426	215	94	14	0	0	0	0	0	5282
12	0	0	0	0	0	0	0	5	23	40	68	136	129	109	64	73	83	12	1	0	0	0	0	0	743
13	0	0	0	0	0	0	1	41	63	41	73	215	116	468	135	82	41	13	2	0	0	0	0	0	1291
14	0	0	0	0	0	0	10	123	330	507	658	756	805	695	579	399	243	99	17	0	0	0	0	0	5222
15	0	0	0	0	0	0	13	138	304	542	671	770	744	601	487	482	325	70	23	0	0	0	0	0	5170
16	0	0	0	0	0	0	1	14	57	23	195	109	146	211	68	108	49	33	4	0	0	0	0	0	1016
17	0	0	0	0	0	0	1	5	18	32	117	174	446	447	233	205	62	61	12	0	0	0	0	0	1812
18	0	0	0	0	0	0	3	24	71	103	199	430	143	100	85	99	42	14	2	0	0	0	0	0	1317
19	0	0	0	0	0	0	2	9	16	20	43	28	25	31	71	26	14	13	3	0	0	0	0	0	301
20	0	0	0	0	0	0	9	58	138	414	76	114	100	69	52	59	44	18	1	0	0	0	0	0	1153
21	0	0	0	0	0	0	13	66	151	293	373	418	741	691	705	554	363	123	21	0	0	0	0	0	4512
22	0	0	0	0	0	0	8	58	289	597	730	846	889	845	744	584	384	166	24	0	0	0	0	0	6164
23	0	0	0	0	0	0	30	175	393	594	756	859	890	854	748	585	387	172	23	0	0	0	0	0	6466
24	0	0	0	0	0	0	17	157	367	482	730	802	845	807	672	480	361	147	19	0	0	0	0	0	5886
25	0	0	0	0	0	0	19	191	347	462	549	821	493	547	589	434	364	92	12	0	0	0	0	0	4920
26	0	0	0	0	0	0	18	86	175	304	392	272	188	490	313	170	25	38	9	0	0	0	0	0	2479
27	0	0	0	0	0	0	3	15	29	41	59	71	84	109	125	120	90	31	5	0	0	0	0	0	781
28	0	0	0	0	0	0	65	293 ?	455	604	757	852	887	856	733	529	319	135	19	0	0	0	0	0	6502
29	0	0	0	0	0	0	12	75	178	274	533	704	901	839	730	557	266	65	18	0	0	0	0	0	5153
30	0	0	0	0	0	0	2	13	105	334	634	394	270	422	281	230	137	37	2	0	0	0	0	0	2862
31	0	0	0	0	0	0	4	18	31	89	22	41	77	118	97	13	22	32	6	0	0	0	0	0	567
Avg	0	0	0	0	0	0	9	75	191	319	421	492	506	505	418	315	195	76	10	0	0	0	0	0	3533
S D	0	0	0	0	0	0	12	66	131	206	263	302	330	297	271	204	138	49	7	0	0	0	0	0	2143
S/A	0	0	0	0	0	0	1.33	0.87	0.69	0.64	0.62	0.61	0.65	0.59	0.65	0.65	0.71	0.65	0.69	0	0	0	0	0	0.61
Min	0	0	0	0	0	0	0	4	16	20	22	28	25	31	25	13	14	12	1	0	0	0	0	0	301
Max	0	0	0	0	0	0	65	293	455	604	757	859	901	856	748	585	387	172	24	0	0	0	0	0	6502
n	0	0	0	0	0	0	165	369	372	372	372	372	372	372	372	372	372	372	180	0	0	0	0	0	4434

Daylight Data Recovery: 0.0% missing; 0.1% exceed the 15% QC threshold -- 4437 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25821F3 Calibration Factor: 9.020 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

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	1	403	826	927	952	948	1027 ?	1012	844	862	456	455	18	0	0	0	0	0	8731
2	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
3	0	0	0	0	0	0	0	1	41	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	56
4	0	0	0	0	0	0	0	71	16	53	159	330	312	706	524	441	804	597	98	0	0	0	0	0	4112
5	0	0	0	0	0	0	0	310	686	800	925	989	1010	1004	986	931	828	590	92	0	0	0	0	0	9150
6	0	0	0	0	0	0	0	332	571	895	864	842	841	998	984	952	854	628	93	0	0	0	0	0	8855
7	0	0	0	0	0	0	1	27	347	359	157	187	558	771	851	677	719	470	40	0	0	0	0	0	5165
8	0	0	0	0	0	0	0	275	606	829	819	924	870	680	601	456	165	61	4	0	0	0	0	0	6289
9	0	0	0	0	0	0	0	7	2	127	333	330	295	13	2	1	0	0	0	0	0	0	0	0	1110
10	0	0	0	0	0	0	0	604	876 ?	992	1024 ?	?	?	?	1022 ?	983	881 ?	654	82	0	0	0	0	0	7118 ?
11	0	0	0	0	0	0	1	360	797	776	723	844	964	863	613	326	63	38	0	0	0	0	0	0	6367
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13	0	0	0	0	0	0	0	0	0	0	0	2	1	63	2	0	0	0	0	0	0	0	0	0	69
14	0	0	0	0	0	0	0	440	781	834	832	879	886	650	594	357	187	55	0	0	0	0	0	0	6496
15	0	0	0	0	0	0	61	472	607	874	901	924	650	298	222	558	434	65	2	0	0	0	0	0	6067
16	0	0	0	0	0	0	0	0	0	0	2	1	1	6	0	0	0	0	0	0	0	0	0	0	10
17	0	0	0	0	0	0	0	0	0	0	0	1	28	27	1	1	0	6	0	0	0	0	0	0	65
18	0	0	0	0	0	0	0	0	0	1	1	47	1	0	0	0	0	0	0	0	0	0	0	0	51
19	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
20	0	0	0	0	0	0	0	0	6	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134
21	0	0	0	0	0	0	0	19	38	58	78	62	502	474	821	858	745	239	26	0	0	0	0	0	3921
22	0	0	0	0	0	0	0	0	392	948	929	951 ?	?	989 ?	989	926	828	604	90	0	0	0	0	0	7647 ?
23	0	0	0	0	0	0	212	643	849	950	1006 ?	?	1044 ?	?	1001	948	859	671	116	0	0	0	0	0	8298 ?
24	0	0	0	0	0	0	55	478	711	477	858	689	832	865	701	402	516	378	6	0	0	0	0	0	6969
25	0	0	0	0	0	0	66	549	564	440	375	721	173	343	377	354	495	38	0	0	0	0	0	0	4494
26	0	0	0	0	0	0	2	9	8	37	34	5	2	141	53	20	0	0	0	0	0	0	0	0	312
27	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	2
28	0	0	0	0	0	0	218	646	813	900	949	968	1001	985	791	575	349	291	1	0	0	0	0	0	8486
29	0	0	0	0	0	0	0	1	2	5	341	526	864	780	721	703	236	0	0	0	0	0	0	0	4180
30	0	0	0	0	0	0	0	0	2	48	371	45	2	22	9	2	0	0	0	0	0	0	0	0	501
31	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	2
Avg	0	0	0	0	0	0	20	182	308	370	408	387	409	403	410	366	304	188	22	0	0	0	0	0	3699
S D	0	0	0	0	0	0	55	238	355	408	415	415	428	414	411	381	347	256	38	0	0	0	0	0	3513
S/A	0	0	0	0	0	0	2.77	1.3	1.15	1.1	1.02	1.07	1.05	1.03	1	1.04	1.14	1.36	1.76	0	0	0	0	0	0.95
Min	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
Max	0	0	0	0	0	0	218	646	876	992	1024	989	1044	1012	1022	983	881	671	116	0	0	0	0	0	9150
n	0	0	0	0	0	0	165	370	367	372	360	341	339	344	362	372	365	372	180	0	0	0	0	0	4310

Daylight Data Recovery: 0.0% missing; 2.9% exceed the 15% QC threshold -- 4437 total daylight measurements.

Instrument: Eppley NIP Serial Number: 17664E6 Calibration Factor: 8.480 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

Bluefield State College
37.27 N Latitude 81.24 W Longitude 803 Meters AMSL Time Zone -5

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	?	22	44	62	80	87	73	74	107	78	75	33	2	0	0	0	0	0	738
2	0	0	0	0	0	0	0	3	17	48	79	69	74	90	140	43	40	35	8	0	0	0	0	0	647
3	0	0	0	0	0	0	0	24	97	98	165	150	83	45	22	82	65	24	3	0	0	0	0	0	858
4	0	0	0	0	0	0	1	53	122	239	292	331	336	245	252	141	59	32	8	0	0	0	0	0	2111
5	0	0	0	0	0	0	10?	56	75	100	112	116	91	80	71	64	51	30	7	0	0	0	0	0	862
6	0	0	0	0	0	0	7	55	79	78	124	143	146	88	72	60	48	28	6	0	0	0	0	0	934
7	0	0	0	0	0	0	5?	41	130	229	310	412	276	148	124	112	82	39	7	0	0	0	0	0	1915
8	0	0	0	0	0	0	6	37	57	85	108	109	134	208	199	202	160	74	8	0	0	0	0	0	1387
9	0	0	0	0	0	0	5	58	125	262	280	371	411	268	211	129	36	33	6	0	0	0	0	0	2196
10	0	0	0	0	0	0	5	29	50	62	71	75	76	74	69	60	50	31	7	0	0	0	0	0	661
11	0	0	0	0	0	0	19?	45	60	122	174	153	115	152	231	247	194	85	13	0	0	0	0	0	1610
12	0	0	0	0	0	0	0	4	21	37	63	124	120	103	60	66	77	11	1	0	0	0	0	0	686
13	0	0	0	0	0	0	1	38	58	37	68	201	107	408	125	75	37	12	2	0	0	0	0	0	1167
14	0	0	0	0	0	0	11	42	64	89	125	120	145	218	188	204	169	88	16	0	0	0	0	0	1478
15	0	0	0	0	0	0	9	62	87	103	100	111	262	368	327	184	166	56	21	0	0	0	0	0	1858
16	0	0	0	0	0	0	1	13	52	21	179	100	133	193	62	97	44	29	4	0	0	0	0	0	928
17	0	0	0	0	0	0	1	4	16	29	107	160	411	397	216	190	56	57	10	0	0	0	0	0	1655
18	0	0	0	0	0	0	3	22	65	94	181	359	130	92	77	90	38	12	2	0	0	0	0	0	1164
19	0	0	0	0	0	0	2	8	14	17	39	25	22	28	64	24	13	11	3	0	0	0	0	0	271
20	0	0	0	0	0	0	8	53	125	338	69	105	92	63	47	54	40	16	1	0	0	0	0	0	1011
21	0	0	0	0	0	0	12	59	128	247	312	356	352	329	165	94	82	66	19	0	0	0	0	0	2221
22	0	0	0	0	0	0	8	51	123	91	115	108	95	100	88	85	69	45	16	0	0	0	0	0	995
23	0	0	0	0	0	0	15	46	69	78	80	81	84	84	80	71	58	39	13	0	0	0	0	0	798
24	0	0	0	0	0	0	11	65	92	202	139	248	182	149	177	243	155	60	17	0	0	0	0	0	1741
25	0	0	0	0	0	0	13	81	114	195	245	270	339	268	321	216	157	81	11	0	0	0	0	0	2312
26	0	0	0	0	0	0	15	77	159	269	348	245	169	371	261	153	22	34	8	0	0	0	0	0	2132
27	0	0	0	0	0	0	2	13	25	36	54	65	76	99	113	109	81	27	4	0	0	0	0	0	704
28	0	0	0	0	0	0	34	86	94	90	98	102	90	100	188	198	185	61	16	0	0	0	0	0	1342
29	0	0	0	0	0	0	10	69	161	242	269	277	209	221	217	161	153	58	16	0	0	0	0	0	2065
30	0	0	0	0	0	0	2	12	93	293	341	332	243	376	262	205	123	33	2	0	0	0	0	0	2316
31	0	0	0	0	0	0	4	16	27	80	19	36	68	104	86	11	19	28	5	0	0	0	0	0	505
Avg	0	0	0	0	0	0	7	40	79	128	153	176	166	179	149	121	84	41	8	0	0	0	0	0	1331
S/D	0	0	0	0	0	0	7	24	42	93	97	111	109	117	84	67	55	22	6	0	0	0	0	0	618
S/A	0	0	0	0	0	0	0.99	0.61	0.54	0.73	0.64	0.63	0.66	0.65	0.56	0.56	0.65	0.54	0.69	0	0	0	0	0	0.46
Min	0	0	0	0	0	0	0	3	14	17	19	25	22	28	22	11	13	11	1	0	0	0	0	0	271
Max	0	0	0	0	0	0	34	86	161	338	348	412	411	408	327	247	194	88	21	0	0	0	0	0	2316
n	0	0	0	0	0	0	158	370	372	372	372	372	372	372	372	372	372	372	180	0	0	0	0	0	4428

Daylight Data Recovery: 0.0% missing; 0.2% exceed the 15% QC threshold -- 4437 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17860F3 Calibration Factor: 7.010 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.