

Bethune-Cookman College
29.18 N Latitude 81.02 W Longitude 20 Meters AMSL Time Zone -5

April 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	0	37	212	450	665	844	950	983	951	829	646	421	179	30	0	0	0	0	0	7196
2	0	0	0	0	0	0	45	225	458	666	843	951	986	950	829	649	426	186	31	0	0	0	0	0	7245
3	0	0	0	0	0	0	50	216	444	652	823	928	959	915	800	615	382	114	16	0	0	0	0	0	6913
4	0	0	0	0	0	0	16	99	122	254	360	583	573	703	758	397	346	71	27	0	0	0	0	0	4309
5	0	0	0	0	0	0	24	102	418	628	687	271	522	706	818	609	371	68	27	0	0	0	0	0	5251
6	0	0	0	0	0	0	36	218	444	650	819	934	952	921	818	642	420	161	35	0	0	0	0	0	7047
7	0	0	0	0	0	0	51	238	458	659	818	934	967	923	798	569	324	148	33	0	0	0	0	0	6919
8	0	0	0	0	0	0	38	181	393	630	777	947	972	870	747	599	318	128	33	0	0	0	0	0	6633
9	0	0	0	0	0	0	36	202	406	547	662	872	579	272	704	467	365	167	32	0	0	0	0	0	5309
10	0	0	0	0	0	0	48	235	454	661	814	937	964	921	811	635	411	177	33	0	0	0	0	0	7101
11	0	0	0	0	0	0	57	254	459	691	791	968	991	925	721	668	418	180	21	0	0	0	0	0	7146
12	0	0	0	0	0	0	38	208	383	532	566	609	771	725	595	554	353	161	48	0	0	0	0	0	5543
13	0	0	0	0	0	0	29	140	446	599	807	873	854	852	727	556	300	117	28	0	0	0	0	0	6329
14	0	0	0	0	0	0	27	164	415	535	467	406	454	458	711	446	249	72	27	0	0	0	0	0	4430
15	0	0	0	0	0	2	37	207	222	404	468	661	942	849	681	628	366	166	25	0	0	0	0	0	5659
16	0	0	0	0	0	2	63	249	475	674	763	960	986	929	810	643	413	182	34	0	0	0	0	0	7184
17	0	0	0	0	0	2	62	249	472	676	846	971	983	926	813	582	364	119	34	0	0	0	0	0	7101
18	0	0	0	0	0	3	62	260	491	699	884	1008	1032	980	867	679	437	196	37	0	0	0	0	0	7632
19	0	0	0	0	0	2	68	258	481	683	854	973	996	944	831	654	425	189	36	0	0	0	0	0	7395
20	0	0	0	0	0	4	67	261	475	696	865	985	914	946	830	586	407	192	39	0	0	0	0	0	7269
21	0	0	0	0	0	2	72	230	495	681	867	946	904	941	801	372	318	204	42	0	0	0	0	0	6875
22	0	0	0	0	0	4	61	260	454	642	615	696	873	593	815	649	434	209	44	0	0	0	0	0	6348
23	0	0	0	0	0	3	76	271	498	691	859	974	991	941	825	658	431	201	42	0	0	0	0	0	7460
24	0	0	0	0	0	6	83	254	480	778	860	962	969	937	704	667	420	196	33	0	0	0	0	0	7350
25	0	0	0	0	0	4	61	171	447	598	327	86	87	256	219	183	168	203	41	0	0	0	0	0	2850
26	0	0	0	0	0	4	45	185	354	738	798	874	941	895	803	679	458	221	44	0	0	0	0	0	7039
27	0	0	0	0	0	5	75	237	416	671	886	905	1054	990	830	680	455	218	44	0	0	0	0	0	7466
28	0	0	0	0	0	9	99	262	495	671	800	1010	908	912	844	612	333	159	34	0	0	0	0	0	7149
29	0	0	0	0	0	3	45	175	293	449	880	790	997	928	776	618	394	244	49	0	0	0	0	0	6641
30	0	0	0	0	0	3	46	132	204	366	489	613	452	414	499	148	166	120	52	0	0	0	0	0	3705
Avg	0	0	0	0	0	2	52	212	417	616	738	819	852	816	754	570	370	165	35	0	0	0	0	0	6416
S D	0	0	0	0	0	2	19	48	92	115	165	232	227	209	128	136	75	46	8	0	0	0	0	0	1233
S/A	0	0	0	0	0	1.15	0.37	0.23	0.22	0.19	0.22	0.28	0.27	0.26	0.17	0.24	0.2	0.28	0.24	0	0	0	0	0	0.19
Min	0	0	0	0	0	0	16	99	122	254	327	86	87	256	219	148	166	68	16	0	0	0	0	0	2850
Max	0	0	0	0	0	9	99	271	498	778	886	1010	1054	990	867	680	458	244	52	0	0	0	0	0	7632
n	0	0	0	0	0	36	346	360	360	360	360	360	360	360	360	360	360	360	283	0	0	0	0	0	4625

Daylight Data Recovery: 0.0% missing; 0.0% exceed the 15% QC threshold -- 4625 total daylight measurements.

Instrument: Eppley PSP Serial Number: 13434F3 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.

April 2001

Estimated Direct Normal Solar Radiation
 Hourly Integrated and Daily Totals
 Instrument: Calculated
 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	45	27	13	4	10	15	10	23	21	22	22	12 ?	97	0	0	0	0	0	321
2	0	0	0	0	0	0	107	22	12	3	8	15	11	23	21	21	19	12 ?	138	0	0	0	0	0	411
3	0	0	0	0	0	0	91	15 ?	17	5	10	20	19	27	27	31	37	48	18	0	0	0	0	0	367
4	0	0	0	0	0	0	33	46	35	53	63	77	72	73	56	64	58	36	35	0	0	0	0	0	700
5	0	0	0	0	0	0	53	47	41	26	65	37	68	61	46	51	45	34	44	0	0	0	0	0	617
6	0	0	0	0	0	0	48	26	25	13	12	26	13	19	28	31	34	19	74	0	0	0	0	0	368
7	0	0	0	0	0	0	102	47 ?	21	7	9	19	13	27	48	60	69	61	42	0	0	0	0	0	526
8	0	0	0	0	0	0	37	39	28	34	10	25	14	35	59	56	68	61	34	0	0	0	0	0	500
9	0	0	0	0	0	0	45	38	40	47	64	52	50	41	67	75	70	36	59	0	0	0	0	0	683
10	0	0	0	0	0	0	48	27	38	9	2	28	23	25	36	37	39	4	73	0	0	0	0	0	390
11	0	0	0	0	0	0	124 ?	5	16	10	15	35	15	24	50	46	38	11	24	0	0	0	0	0	414
12	0	0	0	0	0	0	33	42	71	55	65	72	58	75	71	65	60	55	42	0	0	0	0	0	764
13	0	0	0	0	0	0	62	48	48	44	15	53	48	56	76	82	70	62	40	0	0	0	0	0	704
14	0	0	0	0	0	0	46	53	62	79	77	51	65	74	80	64	53	32	35	0	0	0	0	0	771
15	0	0	0	0	0	2	34	52	56	58	60	64	56	53	56	55	43	22	40	0	0	0	0	0	651
16	0	0	0	0	0	0	115	0 ?	13	13	33	48	38	43	50	56	52	37	65	0	0	0	0	0	564
17	0	0	0	0	0	0	45	4	16	10	25	47	37	40	53	65	63	49	58	0	0	0	0	0	512
18	0	0	0	0	0	207	35	?	12	6	22	47	33	38	53	65	59	42	79	0	0	0	0	0	698
19	0	0	0	0	0	42	49	1	17	16	32	53	41	46	60	67	59	44	54	0	0	0	0	0	581
20	0	0	0	0	0	21	39	12	14	4	25	49	58	44	60	74	68	52	49	0	0	0	0	0	570
21	0	0	0	0	0	21	45	13 ?	13	9	27	63	61	57	80	66	74	63	72	0	0	0	0	0	665
22	0	0	0	0	0	37 ?	31	3	45	36	59	69	77	82	89	84	121	78	77	0	0	0	0	0	889
23	0	0	0	0	0	13	100	0 ?	12	9	26	44	33	56	79	267	456	219	74	0	0	0	0	0	1386
24	0	0	0	0	0	58	67	23 ?	38	50	36	51	45	53	97	546	460	286	51	0	0	0	0	0	1860
25	0	0	0	0	0	26	56	28	48	69	56	10	13	41	38	37	49	108	58	0	0	0	0	0	637
26	0	0	0	0	0	29 ?	44	45	50	36	63	61	54	82	503	765	681	454	117	0	0	0	0	0	2982
27	0	0	0	0	0	26 ?	43	30	52	39	33	79	35	182	779	801	694	456	121	0	0	0	0	0	3369
28	0	0	0	0	0	42 ?	58	31	32	39	45	52	63	319	713	514	188	44	48	0	0	0	0	0	2188
29	0	0	0	0	0	15 ?	34	67	69	62	61	85	100	303	341	314	193	226	55	0	0	0	0	0	1926
30	0	0	0	0	0	12	39	52	50	72	79	89	64	37	87	30	46	27	56	0	0	0	0	0	739
Avg	0	0	0	0	0	18	57	29	33	31	37	48	43	69	127	150	133	90	61	0	0	0	0	0	925
S/D	0	0	0	0	0	39	27	19	19	24	24	22	23	73	194	216	185	119	28	0	0	0	0	0	770
S/A	0	0	0	0	0	2.13	0.48	0.66	0.56	0.78	0.65	0.45	0.55	1.06	1.52	1.44	1.39	1.33	0.46	0	0	0	0	0	0.83
Min	0	0	0	0	0	0	31	0	12	3	2	10	10	19	21	21	19	4	18	0	0	0	0	0	321
Max	0	0	0	0	0	207	124	67	71	79	79	89	100	319	779	801	694	456	138	0	0	0	0	0	3369
n	0	0	0	0	0	31	337	312	359	360	360	360	360	360	360	360	360	347	283	0	0	0	0	0	4549

Daylight Data Recovery: 0.0% missing; 1.6% exceed the 15% QC threshold -- 4625 total daylight measurements.

Instrument: Calculated Serial Number: Estimated Calibration Factor: Global = Diffuse + Direct * COS (Zenith Angle) Calibration Date: N/A

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.

Bethune-Cookman College
29.18 N Latitude 81.02 W Longitude 20 Meters AMSL Time Zone -5

April 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	0	34	194	?	?	?	?	?	?	?	?	350 ?	178	21	0	0	0	0	0	778 ?	
2	0	0	0	0	0	0	43	200	?	?	?	?	?	?	?	?	350 ?	187	19	0	0	0	0	0	799 ?	
3	0	0	0	0	0	0	48	220	370 ?	?	?	?	?	?	?	?	365	101	14	0	0	0	0	0	1117 ?	
4	0	0	0	0	0	0	14	86	105	218	309	515	507	622	582 ?	329	318	62	24	0	0	0	0	0	3692	
5	0	0	0	0	0	0	20	88	397	534 ?	518 ?	239	460	396 ?	?	486 ?	350	60	23	0	0	0	0	0	3571 ?	
6	0	0	0	0	0	0	35	211	404 ?	?	?	?	?	?	?	?	354 ?	156	27	0	0	0	0	0	1188 ?	
7	0	0	0	0	0	0	45	215 ?	384 ?	?	?	?	?	?	?	529	291	131	29	0	0	0	0	0	1624 ?	
8	0	0	0	0	0	0	34	171	369	518 ?	484 ?	?	?	651 ?	645 ?	510 ?	285	112	31	0	0	0	0	0	3809 ?	
9	0	0	0	0	0	0	32	190	385	480 ?	435 ?	716 ?	327 ?	236	371 ?	375	330	157	26	0	0	0	0	0	4061 ?	
10	0	0	0	0	0	0	48	228	382 ?	?	?	?	?	?	?	?	391	176	25	0	0	0	0	0	1250 ?	
11	0	0	0	0	0	0	57	244	442 ?	?	663 ?	?	?	?	492 ?	?	390	176	18	0	0	0	0	0	2483 ?	
12	0	0	0	0	0	0	35	195	345	476	513	544	458 ?	623	406 ?	457 ?	324	146	44	0	0	0	0	0	4563	
13	0	0	0	0	0	0	26	125	407	512 ?	?	770 ?	645 ?	784 ?	617 ?	483	266	100	24	0	0	0	0	0	4757 ?	
14	0	0	0	0	0	0	23	147	365	480	403	359	393	392	582 ?	403	222	64	23	0	0	0	0	0	3855	
15	0	0	0	0	0	?	33	189	192	332	418	509 ?	720 ?	675 ?	549 ?	447 ?	311	160	21	0	0	0	0	0	4558 ?	
16	0	0	0	0	0	2	55	255	414 ?	?	694 ?	?	?	?	?	526 ?	388	172	26	0	0	0	0	0	2532 ?	
17	0	0	0	0	0	2	58	249	427 ?	?	?	?	?	?	?	444 ?	333	105	29	0	0	0	0	0	1647 ?	
18	0	0	0	0	0	3	59	267	406 ?	?	?	?	?	?	?	?	397	184	28	0	0	0	0	0	1344 ?	
19	0	0	0	0	0	4 ?	63	258	436 ?	?	?	?	?	?	?	523 ?	395	177	29	0	0	0	0	0	1885 ?	
20	0	0	0	0	0	6 ?	62	250	422 ?	?	?	?	655 ?	?	?	471 ?	373	178	33	0	0	0	0	0	2449 ?	
21	0	0	0	0	0	2	68	214	434 ?	458 ?	?	609 ?	781 ?	?	523 ?	297	281	186	32	0	0	0	0	0	3885 ?	
22	0	0	0	0	0	3	58	259	378 ?	489 ?	468 ?	490 ?	723 ?	518	626 ?	562 ?	373	187	33	0	0	0	0	0	5167 ?	
23	0	0	0	0	0	3	68	278	423 ?	?	?	?	?	?	?	411 ?	200	130	32	0	0	0	0	0	1545 ?	
24	0	0	0	0	0	7 ?	74	250	402 ?	?	?	?	?	?	530 ?	295	185	103	27	0	0	0	0	0	1874 ?	
25	0	0	0	0	0	3	53	162	407	419 ?	280	77	75	218	188	157	144	173	35	0	0	0	0	0	2390	
26	0	0	0	0	0	4	39	169	326	570 ?	656 ?	692 ?	704 ?	743 ?	391	151	108	78	28	0	0	0	0	0	4659 ?	
27	0	0	0	0	0	4	69	214	326 ?	404 ?	?	699 ?	?	570 ?	183	126	98	73	27	0	0	0	0	0	2795 ?	
28	0	0	0	0	0	8	93	196 ?	440 ?	523 ?	669 ?	?	790 ?	593	251	250	234	145	29	0	0	0	0	0	4221 ?	
29	0	0	0	0	0	3	39	149	254	362	696 ?	626 ?	750 ?	650	488	398	297	169	43	0	0	0	0	0	4923 ?	
30	0	0	0	0	0	3	40	113	175	313	420	529	390	380	426	127	142	111	46	0	0	0	0	0	3215	
Avg	0	0	0	0	0	2	47	200	365	443	508	527	559	537	462	381	295	138	28	0	0	0	0	0	2888 ?	
S D	0	0	0	0	0	2	18	52	85	95	138	193	206	174	147	139	90	43	7	0	0	0	0	0	1394	
S/A	0	0	0	0	0	1.18	0.38	0.26	0.23	0.21	0.27	0.37	0.37	0.32	0.32	0.36	0.3	0.31	0.25	0	0	0	0	0	0	0.48
Min	0	0	0	0	0	0	14	86	105	218	280	77	75	218	183	126	98	60	14	0	0	0	0	0	778	
Max	0	0	0	0	0	8	93	278	442	570	696	770	790	784	645	562	397	187	46	0	0	0	0	0	5167	
n	0	0	0	0	0	32	341	346	243	118	127	122	117	139	137	205	338	360	283	0	0	0	0	0	0	2923

Daylight Data Recovery: 0.0% missing; 36.8% exceed the 15% QC threshold -- 4625 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25951F3 Calibration Factor: 7.600 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.