

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

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	8	47	213	458	314	385	641	366	356	211	107	56	4	0	0	0	0	0	3166	
2	0	0	0	0	0	0	1	14	88	319	238	247	337	262	167	55	64	36	2	0	0	0	0	0	1828	
3	0	0	0	0	0	0	5	52	103	117	223	321	236	111	48	17	15	6	1	0	0	0	0	0	1256	
4	0	0	0	0	0	0	3	20	66	178	266	258	238	372	373	533	288	106	7	0	0	0	0	0	2708	
5	0	0	0	0	0	0	6	97	282	484	675	820	882	857	753	571	341	103	13	0	0	0	0	0	5885	
6	0	0	0	0	0	0	11	82	183	315	347	576	496	417	538	270	157	76	16	0	0	0	0	0	3485	
7	0	0	0	0	0	0	6	114	273	348	497	483	424	382	297	196	126	33	7	0	0	0	0	0	3187	
8	0	0	0	0	0	0	14	108	314	523	705	830	877	846	732	561	341	125	14	0	0	0	0	0	5991	
9	0	0	0	0	0	0	39 ?	89	308	337	640	836	871	795	709	532	313	121	14	0	0	0	0	0	5604	
10	0	0	0	0	0	0	15	94	288	517	678	827	878	847	723	551	300	110	16	0	0	0	0	0	5844	
11	0	0	0	0	0	0	14	157	328	557	733	861	874	871	740	563	351	123	14	0	0	0	0	0	6186	
12	0	0	0	0	0	0	10	127	325	451	475	287	490	529	577	478	283	113	10	0	0	0	0	0	4155	
13	0	0	0	0	0	0	5	93	308	396	665	680	785	772	755	569	355	133	17	0	0	0	0	0	5535	
14	0	0	0	0	0	0	15	92	300	561	747	873	920	881	764	583	359	134	16	0	0	0	0	0	6245	
15	0	0	0	0	0	0	25	192 ?	318	558	542	715	796	868	755	570	326	130	17	0	0	0	0	0	5813	
16	0	0	0	0	0	0	20	177 ?	336	548	727	843	900	861	722	561	308	102	12	0	0	0	0	0	6118	
17	0	0	0	0	0	0	18	130	333	534	710	835	879	849	741	569	343	143	18	0	0	0	0	0	6102	
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
20	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
21	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
22	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
23	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
24	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
25	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
26	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
27	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
28	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
29	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
30	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
31	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
Avg	0	0	0	0	0	0	13	99	257	424	540	628	678	640	574	435	258	97	12	0	0	0	0	0	4653 *	
S D	0	0	0	0	0	0	9	50	91	137	193	244	251	266	235	199	114	41	5	0	0	0	0	0	1699	
S/A	0	0	0	0	0	0	0.73	0.5	0.36	0.32	0.36	0.39	0.37	0.41	0.41	0.46	0.44	0.42	0.47	0	0	0	0	0	0.37	
Min	0	0	0	0	0	0	1	14	66	117	223	247	236	111	48	17	15	6	1	0	0	0	0	0	1256	
Max	0	0	0	0	0	0	39	192	336	561	747	873	920	881	764	583	359	143	18	0	0	0	0	0	6245	
n	0	0	0	0	0	0	68	195	204	204	204	204	204	204	204	204	204	204	86	0	0	0	0	0	2389	

Daylight Data Recovery: 46.1% missing; 0.2% exceed the 15% QC threshold -- 4451 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.

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

March 2002

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	137	35	58	31	38	54	60	25	50	34	14	7	6	0	0	0	0	0	550
2	0	0	0	0	0	0	2	7	24	77	46	35	57	37	22	5	7	16	27	0	0	0	0	0	362
3	0	0	0	0	0	0	3 ?	46	20	6	35	45	13	3	2	3	2	2	2	0	0	0	0	0	180
4	0	0	0	0	0	0	11	2	7	31	50	31	14	24	43	50	61	36	19	0	0	0	0	0	379
5	0	0	0	0	0	0	36 ?	4	33	24	13	31	28	33	38	41	42	43	35	0	0	0	0	0	401
6	0	0	0	0	0	0	7 ?	34	53	53	55	72	75	58	78	37	26	21	21	0	0	0	0	0	591
7	0	0	0	0	0	0	46 ?	16 ?	29	51	69	76	72	67	61	42	38	2	7	0	0	0	0	0	577
8	0	0	0	0	0	0	43	41	41 ?	15 ?	4 ?	19	24	33	39	41	41	52	57	0	0	0	0	0	451
9	0	0	0	0	0	0	81 ?	36	16 ?	61	37	23	30	56	68	58	44	38	51	0	0	0	0	0	600
10	0	0	0	0	0	0	246	41	27	10	34	24	27	37	45	52	57	55	14	0	0	0	0	0	668
11	0	0	0	0	0	0	62	62 ?	60	10	4	15	25	35	50	47	44	47	20	0	0	0	0	0	483
12	0	0	0	0	0	0	33	16	34	50	35	51	71	72	79	69	55	59	10	0	0	0	0	0	635
13	0	0	0	0	0	0	12	31	32	44	29	40	42	37	39	41	35	31	59	0	0	0	0	0	471
14	0	0	0	0	0	0	43	64	74	53 ?	7	16	21	27	31	36	31	27	54	0	0	0	0	0	482
15	0	0	0	0	0	0	60 ?	401	22 ?	3	45	67	34	35	40	44	34	34	53	0	0	0	0	0	873
16	0	0	0	0	0	0	43	437 ?	30 ?	4	14	30	35	40	40	46	37	29	16	0	0	0	0	0	801
17	0	0	0	0	0	0	29	16	22	18	24	34	32	35	38	42	30	36	34	0	0	0	0	0	390
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
20	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
21	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
22	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
23	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
24	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
25	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
26	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
27	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
28	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
29	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
30	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
31	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
Avg	0	0	0	0	0	0	53	76	34	32	32	39	39	38	45	41	35	31	29	0	0	0	0	0	523 *
S D	0	0	0	0	0	0	60	131	18	23	19	19	20	17	19	16	16	18	20	0	0	0	0	0	169
S/A	0	0	0	0	0	0	1.14	1.72	0.51	0.71	0.59	0.49	0.53	0.44	0.43	0.4	0.46	0.56	0.69	0	0	0	0	0	0.32
Min	0	0	0	0	0	0	2	2	7	3	4	15	13	3	2	3	2	2	2	0	0	0	0	0	180
Max	0	0	0	0	0	0	246	437	74	77	69	76	75	72	79	69	61	59	59	0	0	0	0	0	873
n	0	0	0	0	0	0	58	191	182	194	201	204	204	204	204	204	204	204	86	0	0	0	0	0	2340

Daylight Data Recovery: 46.1% missing; 1.3% exceed the 15% QC threshold -- 4451 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

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	8	43	193	385 ?	289	343	491 ?	346	322	192	102	55	4	0	0	0	0	0	2772	
2	0	0	0	0	0	0	1	13	79	278	207	220	292	232	152	52	61	33	2	0	0	0	0	0	1621	
3	0	0	0	0	0	0	5	45	97	114	199	286	226	109	47	15	15	6	1	0	0	0	0	0	1164	
4	0	0	0	0	0	0	3	20	64	160	232	235	227	353	343	469 ?	249 ?	99	6	0	0	0	0	0	2459	
5	0	0	0	0	0	0	6	97	270	436 ?	540 ?	660 ?	?	?	?	?	325	95	11	0	0	0	0	0	2440 ?	
6	0	0	0	0	0	0	12 ?	76	163	254	309	498	435	371	432	248	147	72	15	0	0	0	0	0	3032	
7	0	0	0	0	0	0	8 ?	103	262	320	449	423	365	329	253	172	111	33	7	0	0	0	0	0	2834	
8	0	0	0	0	0	0	16 ?	102	244 ?	433 ?	?	?	?	?	?	454 ?	324	115	11	0	0	0	0	0	1700 ?	
9	0	0	0	0	0	0	?	86 ?	319 ?	303	338 ?	?	?	554 ?	566 ?	325 ?	295	114	11	0	0	0	0	0	2909 ?	
10	0	0	0	0	0	0	14	88	278	469 ?	601 ?	?	?	?	608 ?	478 ?	276	98	15	0	0	0	0	0	2926 ?	
11	0	0	0	0	0	0	13	131 ?	269 ?	?	?	?	?	?	541 ?	515 ?	333	113	14	0	0	0	0	0	1929 ?	
12	0	0	0	0	0	0	9	124	293 ?	412	340 ?	246	430	412	482	417	255	101	10	0	0	0	0	0	3531 ?	
13	0	0	0	0	0	0	5	87	294	353	460 ?	561 ?	607 ?	625 ?	?	473 ?	341	126	14	0	0	0	0	0	3946 ?	
14	0	0	0	0	0	0	13	80	270	427 ?	?	?	?	?	?	?	346	128	13	0	0	0	0	0	1277 ?	
15	0	0	0	0	0	0	25	136 ?	321	?	454 ?	564 ?	502 ?	?	?	481 ?	312	123	14	0	0	0	0	0	2931 ?	
16	0	0	0	0	0	0	23	121 ?	340	462 ?	?	?	?	?	?	493 ?	292	95	11	0	0	0	0	0	1838 ?	
17	0	0	0	0	0	0	17	126	324	491 ?	?	?	?	?	?	495 ?	330	135	16	0	0	0	0	0	1934 ?	
18	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
19	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	*	*	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	*
29	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
30	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
31	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
Avg	0	0	0	0	0	0	11	87	240	353	368	404	397	370	375	352	242	91	10	0	0	0	0	0	2426 *?	
S D	0	0	0	0	0	0	7	38	89	114	132	160	131	154	185	172	110	38	5	0	0	0	0	0	785	
S/A	0	0	0	0	0	0	0.63	0.44	0.37	0.32	0.36	0.4	0.33	0.42	0.49	0.49	0.45	0.42	0.46	0	0	0	0	0	0.32	
Min	0	0	0	0	0	0	1	13	64	114	199	220	226	109	47	15	15	6	1	0	0	0	0	0	1164	
Max	0	0	0	0	0	0	25	136	340	491	601	660	607	625	608	515	346	135	16	0	0	0	0	0	3946	
n	0	0	0	0	0	0	62	183	177	125	106	102	89	90	89	111	199	204	86	0	0	0	0	0	1629	

Daylight Data Recovery: 46.1% missing; 17.3% exceed the 15% QC threshold -- 4451 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.