

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

November 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	7	89	294	475	530	617	715	601	450	266	133	24	0	0	0	0	0	0	4201
2	0	0	0	0	0	0	14	97	307	432	427	403	490	477	396	221	35	3	0	0	0	0	0	0	3302
3	0	0	0	0	0	0	10	72	238	423	357	656	622	449	344	188	83	14	0	0	0	0	0	0	3457
4	0	0	0	0	0	0	9	64	222	413	355	380	389	340	243	165	65	10	0	0	0	0	0	0	2656
5	0	0	0	0	0	0	2	32	55	93	88	168	320	293	306	220	76	16	0	0	0	0	0	0	1669
6	0	0	0	0	0	0	8	99	305	397	524	555	664	531	340	136	21	0	0	0	0	0	0	0	4237
7	0	0	0	0	0	0	15	130	326	485	623	714	728	660	531	336	131	17	0	0	0	0	0	0	4697
8	0	0	0	0	0	0	12	113	258	464	606	640	760	591	462	308	103	15	0	0	0	0	0	0	4331
9	0	0	0	0	0	0	8	101	284	461	594	681	684	605	482	284	103	13	0	0	0	0	0	0	4301
10	0	0	0	0	0	0	10	84	261	434	576	672	697	622	490	299	109	12	0	0	0	0	0	0	4266
11	0	0	0	0	0	0	9	79	237	439	574	658	692	522	481	303	111	11	0	0	0	0	0	0	4115
12	0	0	0	0	0	0	9	107	277	403	417	341	485	414	446	227	112	35	0	0	0	0	0	0	3273
13	0	0	0	0	0	0	1	6	27	140	301	789	578	526	276	245	99	19	0	0	0	0	0	0	3007
14	0	0	0	0	0	0	1	5	15	66	89	24	27	64	69	177	129	18	0	0	0	0	0	0	683
15	0	0	0	0	0	0	4	27	90	196	208	197	142	143	105	40	15	2	0	0	0	0	0	0	1169
16	0	0	0	0	0	0	3	12	83	187	416	505	635	514	489	289	76	18	0	0	0	0	0	0	3228
17	0	0	0	0	0	0	6	64	258	343	483	639	579	301	446	275	115	10	0	0	0	0	0	0	3519
18	0	0	0	0	0	0	4	66	233	409	544	459	383	560	407	202	86	12	0	0	0	0	0	0	3365
19	0	0	0	0	0	0	4	34	109	229	271	268	262	201	210	83	29	2	0	0	0	0	0	0	1701
20	0	0	0	0	0	0	3	59	257	424	545	597	524	481	454	297	88	9	0	0	0	0	0	0	3740
21	0	0	0	0	0	0	4	69	231	398	526	616	643	580	452	273	94	11	0	0	0	0	0	0	3896
22	0	0	0	0	0	0	5	68	231	397	523	628	576	395	441	185	63	5	0	0	0	0	0	0	3517
23	0	0	0	0	0	0	3	49	237	398	526	594	612	538	342	172	45	3	0	0	0	0	0	0	3520
24	0	0	0	0	0	0	3	66	230	400	520	617	585	460	442	241	131	11	0	0	0	0	0	0	3707
25	0	0	0	0	0	0	3	67	234	397	520	621	640	574	457	281	101	14	0	0	0	0	0	0	3909
26	0	0	0	0	0	0	4	61	192	237	349	423	583	542	469	284	100	13	0	0	0	0	0	0	3255
27	0	0	0	0	0	0	3	71	217	350	540	624	653	593	476	294	105	15	0	0	0	0	0	0	3941
28	0	0	0	0	0	0	3	59	291	435	530	628	655	586	463	266	92	16	0	0	0	0	0	0	4025
29	0	0	0	0	0	0	0	48	236	383	518	543	604	578	447	278	100	12	0	0	0	0	0	0	3747
30	0	0	0	0	0	0	0	54	225	384	509	447	585	366	368	277	101	12	0	0	0	0	0	0	3328
Avg	0	0	0	0	0	0	6	65	215	356	453	523	550	475	399	244	92	13	0	0	0	0	0	0	3392
S D	0	0	0	0	0	0	4	31	84	116	143	179	174	152	116	69	31	7	0	0	0	0	0	0	957
S/A	0	0	0	0	0	0	0.73	0.47	0.39	0.33	0.31	0.34	0.32	0.32	0.29	0.28	0.34	0.52	0	0	0	0	0	0	0.28
Min	0	0	0	0	0	0	0	5	15	66	88	24	27	64	69	40	15	2	0	0	0	0	0	0	683
Max	0	0	0	0	0	0	15	130	326	485	623	789	760	660	531	340	136	35	0	0	0	0	0	0	4697
n	0	0	0	0	0	0	78	360	360	360	360	360	360	360	360	360	360	158	0	0	0	0	0	0	3836

Daylight Data Recovery: 0.0% missing; 0.0% exceed the 15% QC threshold -- 3836 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.

November 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	20	18	35	19	35	54	51	54	50	31	35	30	0	0	0	0	0	0	433
2	0	0	0	0	0	0	37	33	50	33	53	29	59	47	44	34	7	2	0	0	0	0	0	0	429
3	0	0	0	0	0	0	20	32	46	26	32	44	56	38	40	34	30	7	0	0	0	0	0	0	406
4	0	0	0	0	0	0	22	34	59	62	50	25	26	5	9	10	9	11	0	0	0	0	0	0	323
5	0	0	0	0	0	0	1	5	4	4	4	5	7	7	20	20	8	8	0	0	0	0	0	0	93
6	0	0	0	0	0	0	15	24	29	36	33	36	44	39	49	31	30	28	0	0	0	0	0	0	395
7	0	0	0	0	0	0	11 ?	42	34	8	8	20	25	32	43	22	21	23	0	0	0	0	0	0	290
8	0	0	0	0	0	0	33 ?	41	47 ?	31	21	25	36	34	43	31	25	22	0	0	0	0	0	0	387
9	0	0	0	0	0	0	20	17	24	23	19	23	29	32	44	33	33	29	0	0	0	0	0	0	325
10	0	0	0	0	0	0	31	38	25 ?	13 ?	15	31	40	41	55	40	37	31	0	0	0	0	0	0	397
11	0	0	0	0	0	0	32	23	31	18	11	29	42	38	46	38	36	33	0	0	0	0	0	0	376
12	0	0	0	0	0	0	32	45	52	25	39	37	47	40	58	43	47	42	0	0	0	0	0	0	508
13	0	0	0	0	0	0	57	3	5	11	31	65	62	61	16	41	27	17	0	0	0	0	0	0	395
14	0	0	0	0	0	0	0 ?	2	3	6	7	2	2	4	6	36	13 ?	22	0	0	0	0	0	0	103
15	0	0	0	0	0	0	13 ?	7	5	20	13	12	9	10	8	4	3	0	0	0	0	0	0	0	106
16	0	0	0	0	0	0	7	5	10	13	35	29	51	46	60	43	20	28	0	0	0	0	0	0	348
17	0	0	0	0	0	0	40	28	51	31	18	25	48	30	54	51	45	14	0	0	0	0	0	0	437
18	0	0	0	0	0	0	8	29	38	31	30	32	39	44	54	37	21	17	0	0	0	0	0	0	381
19	0	0	0	0	0	0	26	12	11	17	16	14	17	18	20	13	11	12	0	0	0	0	0	0	187
20	0	0	0	0	0	0	28 ?	15 ?	28	16	9	31	44	55	65	54	31	31	0	0	0	0	0	0	408
21	0	0	0	0	0	0	39 ?	24	29	28	18	25	43	43	58	53	32	26	0	0	0	0	0	0	417
22	0	0	0	0	0	0	39 ?	29	57	16	12	25	43	35	62	29	9	16	0	0	0	0	0	0	371
23	0	0	0	0	0	0	26	23	35	20	6	20	39	46	42	17	12	8	0	0	0	0	0	0	293
24	0	0	0	0	0	0	13	11	25	16	5	18	44	44	58	45	47	30	0	0	0	0	0	0	355
25	0	0	0	0	0	0	72	21	21	15	6	16	37	37	52	36	28	18	0	0	0	0	0	0	358
26	0	0	0	0	0	0	32	23	23 ?	27	30	28	66	57	55	44	25	17	0	0	0	0	0	0	427
27	0	0	0	0	0	0	14	81	77 ?	33	7	12	37	39	50	39	32	22	0	0	0	0	0	0	443
28	0	0	0	0	0	0	0	25	196	131 ?	4	17	41	40	51	37	32	16	0	0	0	0	0	0	589
29	0	0	0	0	0	0	0	22 ?	67	21	16	25	53	51	58	47	33	18	0	0	0	0	0	0	412
30	0	0	0	0	0	0	0	8	35	11	4	32	46	41	51	41	30	20	0	0	0	0	0	0	319
Avg	0	0	0	0	0	0	23	24	38	25	20	26	39	37	44	35	26	20	0	0	0	0	0	0	357
S D	0	0	0	0	0	0	17	16	35	23	14	13	16	15	17	12	12	10	0	0	0	0	0	0	112
S/A	0	0	0	0	0	0	0.75	0.67	0.92	0.9	0.71	0.5	0.39	0.4	0.39	0.36	0.47	0.49	0	0	0	0	0	0	0.31
Min	0	0	0	0	0	0	0	2	3	4	4	2	2	4	6	4	3	0	0	0	0	0	0	0	93
Max	0	0	0	0	0	0	72	81	196	131	53	65	66	61	65	54	47	42	0	0	0	0	0	0	589
n	0	0	0	0	0	0	69	352	332	349	360	360	360	360	360	360	354	158	0	0	0	0	0	0	3774

Daylight Data Recovery: 0.0% missing; 1.6% exceed the 15% QC threshold -- 3836 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

November 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	7	85	281	465	498	494 ?	634 ?	566	422	252	125	22	0	0	0	0	0	0	3851
2	0	0	0	0	0	0	12	92	292	415	393	382	426	385	353	206	33	3	0	0	0	0	0	0	2991
3	0	0	0	0	0	0	9	66	217	387	288	548 ?	516 ?	367	287	145	77	14	0	0	0	0	0	0	2921 ?
4	0	0	0	0	0	0	8	59	200	381	323	363	371	337	238	161	63	9	0	0	0	0	0	0	2512
5	0	0	0	0	0	0	2	31	54	91	86	164	315	288	296	211	74	16	0	0	0	0	0	0	1628
6	0	0	0	0	0	0	7	95	291	362	440 ?	391 ?	512 ?	?	471 ?	327	130	19	0	0	0	0	0	0	3047 ?
7	0	0	0	0	0	0	14	113	358 ?	425 ?	?	?	?	?	460 ?	326	128	16	0	0	0	0	0	0	1840 ?
8	0	0	0	0	0	0	12	105	265	433	?	225 ?	610 ?	536 ?	426	287 ?	97	13	0	0	0	0	0	0	3011 ?
9	0	0	0	0	0	0	8	98	275	449	537 ?	?	?	571 ?	458	271	96	12	0	0	0	0	0	0	2777 ?
10	0	0	0	0	0	0	10	78	261	432	548 ?	?	?	559 ?	461	283	102	10	0	0	0	0	0	0	2743 ?
11	0	0	0	0	0	0	8	75	226	434	545 ?	?	?	485	456	288	104	10	0	0	0	0	0	0	2631 ?
12	0	0	0	0	0	0	9	101	260	390	377	317	454	388	406	211	102	32	0	0	0	0	0	0	3047
13	0	0	0	0	0	0	1	5	25	135	246	?	478 ?	409 ?	268	225	93	18	0	0	0	0	0	0	1903 ?
14	0	0	0	0	0	0	1	5	14	62	85	22	25	62	66	84 ?	91 ?	17	0	0	0	0	0	0	534
15	0	0	0	0	0	0	4 ?	26	88	186	201	189	135	137	100	38	15	3	0	0	0	0	0	0	1122
16	0	0	0	0	0	0	3	12	80	181	396	405 ?	565 ?	480	440 ?	273	72	16	0	0	0	0	0	0	2922 ?
17	0	0	0	0	0	0	6	60	228 ?	314	466	571 ?	413 ?	248	418	256	98	9	0	0	0	0	0	0	3088 ?
18	0	0	0	0	0	0	4	62	221	394	520	368 ?	358	523	379	188	82	11	0	0	0	0	0	0	3110
19	0	0	0	0	0	0	4	33	105	221	262	259	251	190	200	79	27	2	0	0	0	0	0	0	1631
20	0	0	0	0	0	0	3	32 ?	237	416	531 ?	560	443 ?	439	415	240 ?	82	9	0	0	0	0	0	0	3405 ?
21	0	0	0	0	0	0	3	66	221	385	516	583 ?	?	546	422	254	88	10	0	0	0	0	0	0	3095 ?
22	0	0	0	0	0	0	7 ?	64	213	389	516	?	494 ?	354	366 ?	175	62	4	0	0	0	0	0	0	2646 ?
23	0	0	0	0	0	0	3	46	226	389	523	562 ?	565 ?	499	320	166	43	3	0	0	0	0	0	0	3345 ?
24	0	0	0	0	0	0	3	65	222	393	511	?	501 ?	422	413	215	115	10	0	0	0	0	0	0	2870 ?
25	0	0	0	0	0	0	3	64	227	397	480 ?	?	?	537 ?	431	268	95	14	0	0	0	0	0	0	2515 ?
26	0	0	0	0	0	0	?	58	194	231	303	375	453 ?	394 ?	427	268	95	13	0	0	0	0	0	0	2810 ?
27	0	0	0	0	0	0	?	59	164 ?	338	?	?	?	?	440	269	99	13	0	0	0	0	0	0	1383 ?
28	0	0	0	0	0	0	?	56	170 ?	414 ?	496 ?	?	?	?	438	246	86	15	0	0	0	0	0	0	1922 ?
29	0	0	0	0	0	0	0	47	197	374	505	309 ?	539 ?	513 ?	419	261	93	12	0	0	0	0	0	0	3268 ?
30	0	0	0	0	0	0	0	53	215	385	489 ?	359 ?	420 ?	312	344	262	95	11	0	0	0	0	0	0	2945 ?

Avg	0	0	0	0	0	0	6	60	201	342	410	372	431	406	368	225	85	12	0	0	0	0	0	0	2584 ?
S D	0	0	0	0	0	0	4	29	82	111	139	153	147	137	105	70	28	6	0	0	0	0	0	0	755
S/A	0	0	0	0	0	0	0.72	0.48	0.41	0.33	0.34	0.41	0.34	0.34	0.29	0.31	0.33	0.51	0	0	0	0	0	0	0.29
Min	0	0	0	0	0	0	0	5	14	62	85	22	25	62	66	38	15	2	0	0	0	0	0	0	534
Max	0	0	0	0	0	0	14	113	358	465	548	583	634	571	471	327	130	32	0	0	0	0	0	0	3851
n	0	0	0	0	0	0	73	356	327	339	269	170	186	259	332	340	354	158	0	0	0	0	0	0	3168

Daylight Data Recovery: 0.0% missing; 17.4% exceed the 15% QC threshold -- 3836 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.