

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - December 1998

Field: GHI

Hour 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	59	217	401	540	624	637	571	436	270	100	4	0	0	0	0	0	0	3859
2	0	0	0	0	0	0	0	69	241	360	542	643	654	583	460	285	92	3	0	0	0	0	0	0	3933
3	0	0	0	0	0	0	0	30	76	367	542	631	636	563	399	289	104	3	0	0	0	0	0	0	3640
4	0	0	0	0	0	0	0	66	252	384	551	639	641	475	241	288	112	4	0	0	0	0	0	0	3651
5	0	0	0	0	0	0	0	55	204	414	565	638	636	578	458	286	101	3	0	0	0	0	0	0	3936
6	0	0	0	0	0	0	0	62	235	344	557	637	641	582	461	288	106	4	0	0	0	0	0	0	3917
7	0	0	0	0	0	0	0	30	218	389	529	613	636	577	461	289	109	3	0	0	0	0	0	0	3853
8	0	0	0	0	0	0	0	51	193	373	531	612	628	509	449	281	80	3	0	0	0	0	0	0	3711
9	0	0	0	0	0	0	0	43	192	351	512	568	417	563	440	270	97	3	0	0	0	0	0	0	3456
10	0	0	0	0	0	0	0	48	210	386	520	605	627	444	299	216	96	4	0	0	0	0	0	0	3455
11	0	0	0	0	0	0	0	20	162	316	323	383	579	348	389	206	61	3	0	0	0	0	0	0	2790
12	0	0	0	0	0	0	0	25	107	164	339	364	482	321	284	240	79	4	0	0	0	0	0	0	2408
13	0	0	0	0	0	0	0	22	106	333	470	406	312	258	254	12	32	5	0	0	0	0	0	0	2208
14	0	0	0	0	0	0	0	13	83	372	544	408	414	303	228	117	40	3	0	0	0	0	0	0	2526
15	0	0	0	0	0	0	0	7	25	96	132	129	169	152	166	129	86	7	0	0	0	0	0	0	1097
16	0	0	0	0	0	0	0	42	213	396	536	621	640	582	473	307	119	5	0	0	0	0	0	0	3935
17	0	0	0	0	0	0	0	41	212	396	543	623	645	592	484	315	120	5	0	0	0	0	0	0	3977
18	0	0	0	0	0	0	0	33	202	388	537	624	639	587	472	292	111	10	0	0	0	0	0	0	3897
19	0	0	0	0	0	0	0	17	86	72	227	297	465	263	53	216	80	7	0	0	0	0	0	0	1783
20	0	0	0	0	0	0	0	10	81	194	360	407	372	250	415	185	88	7	0	0	0	0	0	0	2368
21	0	0	0	0	0	0	0	23	112	210	386	523	608	541	462	291	118	7	0	0	0	0	0	0	3280
22	0	0	0	0	0	0	0	31	152	247	352	461	546	555	461	279	75	6	0	0	0	0	0	0	3165
23	0	0	0	0	0	0	0	35	200	311	456	592	613	522	422	295	113	6	0	0	0	0	0	0	3566
24	0	0	0	0	0	0	0	11	96	202	455	450	373	480	456	335	125	7	0	0	0	0	0	0	2989
25	0	0	0	0	0	0	0	9	57	148	204	212	317	218	218	64	26	3	0	0	0	0	0	0	1475
26	0	0	0	0	0	0	0	3	30	109	150	144	147	151	106	97	16	3	0	0	0	0	0	0	955
27	0	0	0	0	0	0	0	10	74	161	355	576	412	319	297	189	43	3	0	0	0	0	0	0	2438
28	0	0	0	0	0	0	0	7	46	194	204	134	143	93	173	86	70	10	0	0	0	0	0	0	1161
29	0	0	0	0	0	0	0	11	70	116	146	191	338	155	235	155	67	9	0	0	0	0	0	0	1492
30	0	0	0	0	0	0	0	16	188	383	545	639	670	622	509	341	145	11	0	0	0	0	0	0	4069
31	0	0	0	0	0	0	0	31	191	378	524	618	648	600	490	327	137	7	0	0	0	0	0	0	3951
Avg	0	0	0	0	0	0	0	30	146	289	425	484	506	431	360	234	89	5	0	0	0	0	0	0	2998
S/D	0	0	0	0	0	0	0	19	70	110	142	172	163	166	127	87	32	2	0	0	0	0	0	0	986
S/A	0	0	0	0	0	0	0	0.64	0.48	0.38	0.33	0.36	0.32	0.39	0.35	0.37	0.36	0.48	0	0	0	0	0	0	0.33
Min	0	0	0	0	0	0	0	3	25	72	132	129	143	93	53	12	16	3	0	0	0	0	0	0	955
Max	0	0	0	0	0	0	0	69	252	414	565	643	670	622	509	341	145	11	0	0	0	0	0	0	4069

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 3839 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: BC
Latitude: 29.18° N
Longitude: 81.02° W
Elevation: 20 Meters AMSL
Time Zone: -5

Instrument: PSP
Calibration Constant: 8.33 uV/Wm-2
Serial Number: 17800F3
Calibration Date: 9/13/96

Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - December 1998

Field: DNI

Hour 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	32	129	144	37	35	42	43	47	34	30	18	0	0	0	0	0	0	591
2	0	0	0	0	0	0	0	216	22	55	41	39	44	41	44	44	35	24	0	0	0	0	0	0	604
3	0	0	0	0	0	0	0	12	8	98	26	32	37	42	42	40	33	23	0	0	0	0	0	0	394
4	0	0	0	0	0	0	0	21	26	35	30	31	37	39	21	44	35	18	0	0	0	0	0	0	337
5	0	0	0	0	0	0	0	11	49	44	34	35	39	38	40	29	30	19	0	0	0	0	0	0	369
6	0	0	0	0	0	0	0	22	87	17	30	33	36	36	38	23	35	17	0	0	0	0	0	0	375
7	0	0	0	0	0	0	0	12	34	21	26	31	38	37	38	20	37	18	0	0	0	0	0	0	312
8	0	0	0	0	0	0	0	10	1	27	30	30	35	38	40	31	26	17	0	0	0	0	0	0	283
9	0	0	0	0	0	0	0	2	17	44	32	36	38	42	43	28	27	23	0	0	0	0	0	0	332
10	0	0	0	0	0	0	0	21	26	37	34	34	47	39	32	35	30	13	0	0	0	0	0	0	349
11	0	0	0	0	0	0	0	6	32	40	26	22	40	28	50	27	13	5	0	0	0	0	0	0	290
12	0	0	0	0	0	0	0	12	15	13	28	26	53	25	33	34	28	12	0	0	0	0	0	0	280
13	0	0	0	0	0	0	0	18	19	40	45	25	17	15	19	3	10	7	0	0	0	0	0	0	218
14	0	0	0	0	0	0	0	10	9	36	63	11	17	24	24	17	13	5	0	0	0	0	0	0	230
15	0	0	0	0	0	0	0	19	7	15	15	12	15	14	17	20	20	9	0	0	0	0	0	0	164
16	0	0	0	0	0	0	0	10	28	30	30	30	34	32	43	34	28	19	0	0	0	0	0	0	318
17	0	0	0	0	0	0	0	9	25	31	29	31	32	29	39	28	32	13	0	0	0	0	0	0	298
18	0	0	0	0	0	0	0	14	22	29	30	32	35	33	44	37	29	101	0	0	0	0	0	0	406
19	0	0	0	0	0	0	0	7	13	9	16	20	44	23	11	31	23	34	0	0	0	0	0	0	231
20	0	0	0	0	0	0	0	7	18	17	39	16	27	22	51	17	16	40	0	0	0	0	0	0	271
21	0	0	0	0	0	0	0	15	22	17	34	39	50	42	54	47	38	31	0	0	0	0	0	0	389
22	0	0	0	0	0	0	0	21	9	23	42	19	34	37	52	51	18	32	0	0	0	0	0	0	338
23	0	0	0	0	0	0	0	33	25	22	32	40	47	43	45	50	43	35	0	0	0	0	0	0	414
24	0	0	0	0	0	0	0	14	19	19	47	25	30	35	38	61	36	21	0	0	0	0	0	0	343
25	0	0	0	0	0	0	0	17	13	20	19	19	22	20	21	11	9	6	0	0	0	0	0	0	177
26	0	0	0	0	0	0	0	30	9	15	19	16	14	14	15	10	6	0	0	0	0	0	0	0	162
27	0	0	0	0	0	0	0	7	12	20	33	42	38	19	27	29	15	8	0	0	0	0	0	0	249
28	0	0	0	0	0	0	0	6	10	19	20	14	13	11	19	16	18	17	0	0	0	0	0	0	162
29	0	0	0	0	0	0	0	9	16	16	15	17	17	10	29	19	17	6	0	0	0	0	0	0	169
30	0	0	0	0	0	0	0	13	34	40	35	38	46	44	48	47	47	37	0	0	0	0	0	0	430
31	0	0	0	0	0	0	0	26	38	40	38	40	47	45	48	49	41	38	0	0	0	0	0	0	449
Avg	0	0	0	0	0	0	0	21	26	33	31	28	34	31	36	31	26	22	0	0	0	0	0	0	320
S/D	0	0	0	0	0	0	0	36	25	26	10	9	11	11	12	13	10	18	0	0	0	0	0	0	110
S/A	0	0	0	0	0	0	0	1.7	0.96	0.79	0.32	0.32	0.33	0.35	0.34	0.43	0.39	0.82	0	0	0	0	0	0	0.34
Min	0	0	0	0	0	0	0	2	1	9	15	11	13	10	11	3	9	5	0	0	0	0	0	0	162
Max	0	0	0	0	0	0	0	216	129	144	63	42	53	45	54	61	47	101	0	0	0	0	0	0	604

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 106610 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: BC
Latitude: 29.18° N
Longitude: 81.02° W
Elevation: 20 Meters AMSL
Time Zone: -5

Instrument: Estimated DNI
Calibration Constant: 0.00
Serial Number: XXXXXXXX
Calibration Date: 1/1/1997

Diffuse Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - December 1998

Field: DHI

Hour 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	53	218 ?	354 ?	468 ?	?	?	495 ?	413	258	94	3	0	0	0	0	0	0	2357 ?
2	0	0	0	0	0	0	0	46 ?	?	323 ?	387 ?	?	?	?	409 ?	265	86	3	0	0	0	0	0	0	1519 ?
3	0	0	0	0	0	0	0	31	74	204 ?	?	?	?	420 ?	371	266	98	3	0	0	0	0	0	0	1466 ?
4	0	0	0	0	0	0	0	62	?	362 ?	384 ?	?	?	386 ?	230	244 ?	105	3	0	0	0	0	0	0	1776 ?
5	0	0	0	0	0	0	0	60	181	350 ?	?	?	?	?	398 ?	256 ?	95	2	0	0	0	0	0	0	1342 ?
6	0	0	0	0	0	0	0	65	191 ?	341 ?	?	?	?	?	400 ?	261 ?	100	4	0	0	0	0	0	0	1362 ?
7	0	0	0	0	0	0	0	29	145 ?	368 ?	?	559 ?	559 ?	511 ?	401 ?	259 ?	101	3	0	0	0	0	0	0	2935 ?
8	0	0	0	0	0	0	0	51	171 ?	386 ?	?	?	541 ?	460 ?	397 ?	264	76	2	0	0	0	0	0	0	2347 ?
9	0	0	0	0	0	0	0	49	160 ?	368 ?	439 ?	403 ?	281 ?	493 ?	419	260	92	3	0	0	0	0	0	0	2968 ?
10	0	0	0	0	0	0	0	51	180 ?	396 ?	?	?	534 ?	291 ?	284	188	90	3	0	0	0	0	0	0	2018 ?
11	0	0	0	0	0	0	0	20	136	275	290	346	491 ?	332	305 ?	169	59	3	0	0	0	0	0	0	2427
12	0	0	0	0	0	0	0	24	103	158	323	349	376 ?	277	268	219	61	3	0	0	0	0	0	0	2161
13	0	0	0	0	0	0	0	22	83	263 ?	368 ?	371	301	249	130 ?	11	31	4	0	0	0	0	0	0	1834
14	0	0	0	0	0	0	0	12	81	236 ?	455 ?	402	403	289	217	111	38	3	0	0	0	0	0	0	2247
15	0	0	0	0	0	0	0	6	23	90	124	121	160	144	158	122	82	7	0	0	0	0	0	0	1037
16	0	0	0	0	0	0	0	41	151 ?	?	?	?	?	?	?	239 ?	113	4	0	0	0	0	0	0	549 ?
17	0	0	0	0	0	0	0	40	151 ?	?	?	?	?	?	?	232 ?	114	4	0	0	0	0	0	0	541 ?
18	0	0	0	0	0	0	0	32	147 ?	?	?	?	?	?	?	372 ?	272	105	10	0	0	0	0	0	938 ?
19	0	0	0	0	0	0	0	18	83	69	218	285	419	250	48	185	76	6	0	0	0	0	0	0	1656
20	0	0	0	0	0	0	0	9	77	187	325	367	335	237	356 ?	179	85	6	0	0	0	0	0	0	2164
21	0	0	0	0	0	0	0	23	106	203	315 ?	444 ?	498 ?	456 ?	395 ?	270	110	6	0	0	0	0	0	0	2827 ?
22	0	0	0	0	0	0	0	32	166 ?	233	331	391 ?	318 ?	465 ?	409 ?	245	72	5	0	0	0	0	0	0	2667 ?
23	0	0	0	0	0	0	0	36	137 ?	313 ?	374 ?	?	?	422 ?	394	273	104	5	0	0	0	0	0	0	2058 ?
24	0	0	0	0	0	0	0	10	91	195	364 ?	349 ?	332	337 ?	401 ?	228 ?	118	7	0	0	0	0	0	0	2432 ?
25	0	0	0	0	0	0	0	9	54	140	194	200	304	207	208	60	24	2	0	0	0	0	0	0	1402
26	0	0	0	0	0	0	0	3	28	103	141	134	139	142	100	91	14	2	0	0	0	0	0	0	897
27	0	0	0	0	0	0	0	9	71	154	298	494 ?	373	308	284	157	40	2	0	0	0	0	0	0	2191
28	0	0	0	0	0	0	0	6	43	162	194	126	135	87	164	81	67	10	0	0	0	0	0	0	1075
29	0	0	0	0	0	0	0	10	67	110	138	181	304	149	221	149	63	9	0	0	0	0	0	0	1401
30	0	0	0	0	0	0	0	15	123 ?	333 ?	?	?	?	?	?	242 ?	135	11	0	0	0	0	0	0	857 ?
31	0	0	0	0	0	0	0	31	143 ?	?	?	?	?	?	?	309 ?	128	7	0	0	0	0	0	0	618 ?
Avg	0	0	0	0	0	0	0	29	117	247	307	325	358	322	302	205	83	5	0	0	0	0	0	0	1744
S D	0	0	0	0	0	0	0	18	51	101	103	127	126	125	111	74	30	2	0	0	0	0	0	0	708
S/A	0	0	0	0	0	0	0	0.62	0.44	0.41	0.34	0.39	0.35	0.39	0.37	0.36	0.36	0.51	0	0	0	0	0	0	0.41
Min	0	0	0	0	0	0	0	3	23	69	124	121	135	87	48	11	14	2	0	0	0	0	0	0	541
Max	0	0	0	0	0	0	0	65	218	396	468	559	559	511	419	309	135	11	0	0	0	0	0	0	2968

Daylight Data Recovery: 0% missing; 33% exceed the 15% QC threshold -- 3839 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: BC
Latitude: 29.18° N
Longitude: 81.02° W
Elevation: 20 Meters AMSL
Time Zone: -5

Instrument: PSP
Calibration Constant: 8.08 uV/Wm-2
Serial Number: 17879F3
Calibration Date: 9/13/96