

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - January 1999

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	35	148	381	519	613	624	558	397	304	92	9	0	0	0	0	0	0	3680
2	0	0	0	0	0	0	0	4	119	243	320	550	489	442	323	263	119	5	0	0	0	0	0	0	2878
3	0	0	0	0	0	0	0	22	102	243	477	578	487	402	339	232	69	13	0	0	0	0	0	0	2964
4	0	0	0	0	0	0	0	29	183	381	510	390	597	510	305	290	146	13	0	0	0	0	0	0	3355
5	0	0	0	0	0	0	0	5	57	278	556	657	695	652	537	366	159	14	0	0	0	0	0	0	3976
6	0	0	0	0	0	0	0	32	190	385	536	633	663	620	512	351	158	16	0	0	0	0	0	0	4096
7	0	0	0	0	0	0	0	25	235	313	519	564	651	609	504	344	153	15	0	0	0	0	0	0	3931
8	0	0	0	0	0	0	0	21	135	367	488	413	449	341	191	54	44	8	0	0	0	0	0	0	2512
9	0	0	0	0	0	0	0	30	172	322	452	478	483	402	382	179	76	3	0	0	0	0	0	0	2980
10	0	0	0	0	0	0	0	6	76	99	117	186	211	269	248	171	70	6	0	0	0	0	0	0	1459
11	0	0	0	0	0	0	0	25	185	383	540	644	679	639	536	374	175	22	0	0	0	0	0	0	4202
12	0	0	0	0	0	0	0	16	116	377	533	648	675	629	503	361	162	22	0	0	0	0	0	0	4041
13	0	0	0	0	0	0	0	33	131	272	448	225	406	414	513	346	153	14	0	0	0	0	0	0	2957
14	0	0	0	0	0	0	0	17	107	294	516	621	663	627	523	361	136	12	0	0	0	0	0	0	3876
15	0	0	0	0	0	0	0	9	77	290	305	397	568	466	471	305	157	13	0	0	0	0	0	0	3059
16	0	0	0	0	0	0	0	25	177	368	519	620	659	620	515	357	167	22	0	0	0	0	0	0	4050
17	0	0	0	0	0	0	0	18	93	238	414	637	384	440	346	291	76	16	0	0	0	0	0	0	2954
18	0	0	0	0	0	0	0	13	151	288	450	599	567	440	442	112	41	6	0	0	0	0	0	0	3109
19	0	0	0	0	0	0	0	15	161	363	358	626	666	633	536	380	187	28	0	0	0	0	0	0	3953
20	0	0	0	0	0	0	0	19	114	291	512	617	664	615	491	289	94	25	0	0	0	0	0	0	3731
21	0	0	0	0	0	0	0	19	129	326	492	619	668	586	451	324	169	26	0	0	0	0	0	0	3810
22	0	0	0	0	0	0	0	42	148	348	548	656	701	662	524	373	197	31	0	0	0	0	0	0	4230
23	0	0	0	0	0	0	0	14	136	282	397	427	337	407	242	153	81	3	0	0	0	0	0	0	2478
24	0	0	0	0	0	0	0	2	39	311	559	687	650	710	576	417	215	37	0	0	0	0	0	0	4204
25	0	0	0	0	0	0	0	33	211	419	582	689	735	692	582	419	216	39	0	0	0	0	0	0	4617
26	0	0	0	0	0	0	0	37	295	387	603	693	734	690	581	420	218	41	0	0	0	0	0	0	4700
27	0	0	0	0	0	0	0	16	91	173	472	660	718	690	590	427	221	43	0	0	0	0	0	0	4097
28	0	0	0	0	0	0	0	34	209	413	571	707	534	631	465	255	164	42	0	0	0	0	0	0	4024
29	0	0	0	0	0	0	0	32	220	403	405	429	691	596	487	476	220	44	0	0	0	0	0	0	4002
30	0	0	0	0	0	0	0	46	207	364	523	533	627	714	547	367	150	19	0	0	0	0	0	0	4097
31	0	0	0	0	0	0	0	4	29	57	92	125	141	78	77	36	23	4	0	0	0	0	0	0	666
Avg	0	0	0	0	0	0	0	22	143	312	462	546	575	541	443	303	139	20	0	0	0	0	0	0	3506
S D	0	0	0	0	0	0	0	12	59	85	118	151	149	146	126	108	57	13	0	0	0	0	0	0	870
S/A	0	0	0	0	0	0	0	0.53	0.41	0.27	0.26	0.28	0.26	0.27	0.28	0.36	0.41	0.64	0	0	0	0	0	0	0.25
Min	0	0	0	0	0	0	0	2	29	57	92	125	141	78	77	36	23	3	0	0	0	0	0	0	666
Max	0	0	0	0	0	0	0	46	295	419	603	707	735	714	590	476	221	44	0	0	0	0	0	0	4700

Daylight Data Recovery: 0% missing; 1% exceed the 15% QC threshold -- 3905 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 - January 1999

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	51	72	32	32	41	43	50	54	19	12	0	0	0	0	0	0	439
2	0	0	0	0	0	0	0	5	27	27	23	37	45	38	36	45	43	12	0	0	0	0	0	0	337
3	0	0	0	0	0	0	0	10	19	26	40	31	40	39	36	34	22	7	0	0	0	0	0	0	304
4	0	0	0	0	0	0	0	19	35	39	36	32	49	53	32	47	41	23	0	0	0	0	0	0	407
5	0	0	0	0	0	0	0	3	11	28	31	34	43	41	46	42	44	227	0	0	0	0	0	0	550
6	0	0	0	0	0	0	0	18	23	31	30	31	39	39	44	41	44	37	0	0	0	0	0	0	377
7	0	0	0	0	0	0	0	20	555	5	44	31	37	36	41	41	46	35	0	0	0	0	0	0	891
8	0	0	0	0	0	0	0	22	35	43	47	53	45	17	18	10	11	9	0	0	0	0	0	0	309
9	0	0	0	0	0	0	0	26	270	80	46	57	48	41	32	24	16	25	0	0	0	0	0	0	663
10	0	0	0	0	0	0	0	3	14	8	9	12	15	15	11	15	12	7	0	0	0	0	0	0	121
11	0	0	0	0	0	0	0	13	23	33	29	29	38	36	41	37	42	18	0	0	0	0	0	0	340
12	0	0	0	0	0	0	0	11	27	35	28	32	39	38	45	39	44	90	0	0	0	0	0	0	427
13	0	0	0	0	0	0	0	28	46	7	25	19	38	42	49	46	42	39	0	0	0	0	0	0	381
14	0	0	0	0	0	0	0	5	25	29	22	25	34	34	40	36	33	20	0	0	0	0	0	0	304
15	0	0	0	0	0	0	0	6	20	42	38	31	38	43	53	50	49	17	0	0	0	0	0	0	387
16	0	0	0	0	0	0	0	12	14	27	28	29	41	39	44	41	49	32	0	0	0	0	0	0	357
17	0	0	0	0	0	0	0	5	19	35	41	40	34	35	38	39	20	7	0	0	0	0	0	0	313
18	0	0	0	0	0	0	0	9	29	77	19	33	49	42	53	11	8	2	0	0	0	0	0	0	333
19	0	0	0	0	0	0	0	12	36	38	33	31	40	39	41	39	46	42	0	0	0	0	0	0	397
20	0	0	0	0	0	0	0	26	16	24	37	31	40	41	57	40	21	27	0	0	0	0	0	0	361
21	0	0	0	0	0	0	0	22	39	30	15	29	47	44	47	45	52	21	0	0	0	0	0	0	390
22	0	0	0	0	0	0	0	35	34	29	24	24	33	33	36	34	45	27	0	0	0	0	0	0	353
23	0	0	0	0	0	0	0	6	37	51	52	48	22	34	24	10	11	5	0	0	0	0	0	0	301
24	0	0	0	0	0	0	0	1	4	27	30	31	51	48	43	41	49	94	0	0	0	0	0	0	419
25	0	0	0	0	0	0	0	20	42	54	46	39	54	47	49	45	55	57	0	0	0	0	0	0	507
26	0	0	0	0	0	0	0	201	631	38	98	53	59	46	42	45	52	42	0	0	0	0	0	0	1305
27	0	0	0	0	0	0	0	11	14	15	49	58	51	53	65	55	46	33	0	0	0	0	0	0	449
28	0	0	0	0	0	0	0	33	28	49	30	54	61	60	42	31	43	24	0	0	0	0	0	0	457
29	0	0	0	0	0	0	0	33	41	69	55	47	54	53	57	85	60	31	0	0	0	0	0	0	585
30	0	0	0	0	0	0	0	35	79	62	49	60	67	45	37	51	37	31	0	0	0	0	0	0	553
31	0	0	0	0	0	0	0	7	5	5	4	5	7	5	5	4	3	2	0	0	0	0	0	0	50
Avg	0	0	0	0	0	0	0	22	72	37	35	35	42	39	41	38	36	34	0	0	0	0	0	0	431
S/D	0	0	0	0	0	0	0	34	144	20	17	13	12	11	13	16	16	41	0	0	0	0	0	0	217
S/A	0	0	0	0	0	0	0	1.54	1.99	0.54	0.47	0.36	0.29	0.28	0.31	0.41	0.44	1.21	0	0	0	0	0	0	0.5
Min	0	0	0	0	0	0	0	1	4	5	4	5	7	5	5	4	3	2	0	0	0	0	0	0	50
Max	0	0	0	0	0	0	0	201	631	80	98	60	67	60	65	85	60	227	0	0	0	0	0	0	1305

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 110515 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 - January 1999

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	Dayly
1	0	0	0	0	0	0	0	35	144	251 ?	?	?	530 ?	464 ?	372	258 ?	87	9	0	0	0	0	0	0	2150 ?
2	0	0	0	0	0	0	0	3	113	233	308	440 ?	435	311 ?	269	247	110	4	0	0	0	0	0	0	2472
3	0	0	0	0	0	0	0	21	98	215	420 ?	474 ?	405 ?	349	285	210	65	12	0	0	0	0	0	0	2555
4	0	0	0	0	0	0	0	27	176	?	472 ?	301 ?	471 ?	416 ?	263	259	137	12	0	0	0	0	0	0	2534 ?
5	0	0	0	0	0	0	0	4	55	184 ?	?	?	?	?	?	265 ?	149	14	0	0	0	0	0	0	672 ?
6	0	0	0	0	0	0	0	33	161 ?	?	?	?	?	?	?	293 ?	149	16	0	0	0	0	0	0	653 ?
7	0	0	0	0	0	0	0	27	125 ?	?	?	434 ?	?	?	?	325	143	14	0	0	0	0	0	0	1068 ?
8	0	0	0	0	0	0	0	20	127	315 ?	429 ?	381	405	332	182	50	42	8	0	0	0	0	0	0	2291
9	0	0	0	0	0	0	0	34	109 ?	284	404 ?	421	429	302 ?	315 ?	169	73	3	0	0	0	0	0	0	2542
10	0	0	0	0	0	0	0	6	72	96	112	179	202	260	242	165	68	6	0	0	0	0	0	0	1408
11	0	0	0	0	0	0	0	27	164	?	?	?	?	?	?	279 ?	166	20	0	0	0	0	0	0	656 ?
12	0	0	0	0	0	0	0	17	110	249 ?	?	?	?	?	373 ?	327 ?	152	20	0	0	0	0	0	0	1248 ?
13	0	0	0	0	0	0	0	34	112	274 ?	329 ?	214	385	322 ?	434 ?	320	143	13	0	0	0	0	0	0	2580
14	0	0	0	0	0	0	0	17	101	274	?	?	?	?	?	339	128	11	0	0	0	0	0	0	869 ?
15	0	0	0	0	0	0	0	9	73	249	285	314	427 ?	425	363 ?	285	145	12	0	0	0	0	0	0	2587
16	0	0	0	0	0	0	0	27	173	284 ?	?	?	?	?	448 ?	341	155	20	0	0	0	0	0	0	1448 ?
17	0	0	0	0	0	0	0	19	89	224	292 ?	515 ?	256 ?	307 ?	282	241 ?	71	16	0	0	0	0	0	0	2312
18	0	0	0	0	0	0	0	13	166 ?	262	442	573 ?	422 ?	377	307 ?	107	39	5	0	0	0	0	0	0	2715 ?
19	0	0	0	0	0	0	0	14	153	345	290 ?	?	?	?	?	358	175	26	0	0	0	0	0	0	1361 ?
20	0	0	0	0	0	0	0	18	111	303	435 ?	?	?	488 ?	378 ?	257	88	23	0	0	0	0	0	0	2101 ?
21	0	0	0	0	0	0	0	17	121	336	453 ?	?	?	590 ?	428 ?	378 ?	305	156	24	0	0	0	0	0	2807 ?
22	0	0	0	0	0	0	0	48 ?	140	293 ?	?	?	?	?	406 ?	358	186	28	0	0	0	0	0	0	1459 ?
23	0	0	0	0	0	0	0	13	127	261	369	377	323	305 ?	198	148	78	3	0	0	0	0	0	0	2202
24	0	0	0	0	0	0	0	2	38	176 ?	?	?	?	?	?	?	202	35	0	0	0	0	0	0	959 ?
25	0	0	0	0	0	0	0	32	167 ?	?	?	?	?	?	?	346 ?	201	36	0	0	0	0	0	0	783 ?
26	0	0	0	0	0	0	0	33	181 ?	259 ?	?	?	?	?	?	354 ?	204	39	0	0	0	0	0	0	1069 ?
27	0	0	0	0	0	0	0	15	87	166	377 ?	427 ?	?	?	?	366 ?	207	40	0	0	0	0	0	0	1685 ?
28	0	0	0	0	0	0	0	34	165 ?	?	?	509 ?	378 ?	384 ?	313 ?	242	152	39	0	0	0	0	0	0	2217 ?
29	0	0	0	0	0	0	0	29	138 ?	350 ?	375	350	467 ?	412 ?	355 ?	344 ?	133 ?	40	0	0	0	0	0	0	2995 ?
30	0	0	0	0	0	0	0	46 ?	172 ?	292 ?	351 ?	494	458 ?	?	471 ?	276 ?	139	17	0	0	0	0	0	0	2717 ?
31	0	0	0	0	0	0	0	4	28	55	89	122	136	76	74	35	22	3	0	0	0	0	0	0	644
Avg	0	0	0	0	0	0	0	22	122	249	346	384	401	350	319	262	128	18	0	0	0	0	0	0	1799
S D	0	0	0	0	0	0	0	12	41	70	104	121	110	93	94	88	51	12	0	0	0	0	0	0	769
S/A	0	0	0	0	0	0	0	0.55	0.33	0.28	0.3	0.32	0.27	0.26	0.29	0.34	0.4	0.64	0	0	0	0	0	0	0.43
Min	0	0	0	0	0	0	0	2	28	55	89	122	136	76	74	35	22	3	0	0	0	0	0	0	644
Max	0	0	0	0	0	0	0	48	181	350	472	573	590	488	471	366	207	40	0	0	0	0	0	0	2995

Daylight Data Recovery: 0% missing; 37% exceed the 15% QC threshold -- 3905 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