

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - March 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	2	109	339	557	732	852	892	858	742	561	344	120	3	0	0	0	0	0	6110	
2	0	0	0	0	0	0	2	133	329	538	708	823	867	836	726	548	331	115	3	0	0	0	0	0	5960	
3	0	0	0	0	0	0	3	39	126	172	338	354	575	451	439	419	279	120	4	0	0	0	0	0	3319	
4	0	0	0	0	0	0	3	121	356	577	753	875	920	876	759	577	356	127	3	0	0	0	0	0	6303	
5	0	0	0	0	0	0	3	117	340	549	724	871	915	857	693	475	316	122	7	0	0	0	0	0	5991	
6	0	0	0	0	0	0	4	95	229	504	591	779	874	838	729	473	349	78	7	0	0	0	0	0	5550	
7	0	0	0	0	0	0	3	50	315	443	475	831	845	746	491	258	325	123	5	0	0	0	0	0	4910	
8	0	0	0	0	0	0	4	109	331	524	733	866	882	760	521	443	263	125	5	0	0	0	0	0	5566	
9	0	0	0	0	0	0	4	91	324	549	692	663	831	373	330	325	196	85	7	0	0	0	0	0	4470	
10	0	0	0	0	0	0	4	101	350	563	740	866	901	853	747	575	350	128	5	0	0	0	0	0	6183	
11	0	0	0	0	0	0	5	100	295	433	739	868	889	847	736	552	332	121	6	0	0	0	0	0	5922	
12	0	0	0	0	0	0	6	109	329	542	736	854	892	852	742	567	346	129	6	0	0	0	0	0	6111	
13	0	0	0	0	0	0	8	122	323	351	316	402	654	659	663	408	172	58	4	0	0	0	0	0	4138	
14	0	0	0	0	0	0	1	23	37	35	75	77	?	?	168	?	104	55	37	61	12	0	0	0	686	?
15	0	0	0	0	0	0	7	122	368	595	726	628	897	739	615	503	349	143	8	0	0	0	0	0	5701	
16	0	0	0	0	0	0	11	155	384	600	776	888	922	876	755	564	346	134	9	0	0	0	0	0	6420	
17	0	0	0	0	0	0	15	149	400	603	790	909	950	908	793	608	346	91	9	0	0	0	0	0	6572	
18	0	0	0	0	0	0	15	183	396	595	772	924	881	858	763	584	366	121	9	0	0	0	0	0	6469	
19	0	0	0	0	0	0	14	152	355	566	745	863	903	861	745	562	348	134	9	0	0	0	0	0	6257	
20	0	0	0	0	0	0	11	135	379	571	756	881	906	867	493	344	326	137	9	0	0	0	0	0	5813	
21	0	0	0	0	0	0	7	148	383	597	769	503	705	687	537	415	354	158	12	0	0	0	0	0	5278	
22	0	0	0	0	0	0	19	177	411	631	814	924	963	924	801	612	389	158	11	0	0	0	0	0	6833	
23	0	0	0	0	0	0	24	203	418	637	823	936	967	916	792	609	387	151	12	0	0	0	0	0	6878	
24	0	0	0	0	0	0	26	172	346	584	774	898	937	889	770	584	321	126	15	0	0	0	0	0	6443	
25	0	0	0	0	0	0	22	179	408	623	803	915	947	897	779	592	373	141	12	0	0	0	0	0	6690	
26	0	0	0	0	0	0	16	111	313	381	507	236	560	459	529	531	292	78	9	0	0	0	0	0	4022	
27	0	0	0	0	0	0	23	182	424	645	697	855	964	938	788	616	391	163	12	0	0	0	0	0	6698	
28	0	0	0	0	0	0	29	206	450	668	851	958	992	943	814	623	401	169	14	0	0	0	0	0	7119	
29	0	0	0	0	0	0	31	231	439	651	823	930	964	917	795	610	391	153	11	0	0	0	0	0	6945	
30	0	0	0	0	0	0	42	167	402	650	786	888	583	730	378	326	179	112	11	0	0	0	0	0	5252	
31	0	0	0	0	0	0	16	188	239	269	491	730	870	531	427	386	196	77	3	0	0	0	0	0	4423	
Avg	0	0	0	0	0	0	12	135	340	523	679	769	862	772	645	494	315	121	8	0	0	0	0	0	5646	
S/D	0	0	0	0	0	0	10	48	85	143	173	220	118	185	172	129	80	29	3	0	0	0	0	0	1298	
S/A	0	0	0	0	0	0	0.84	0.36	0.25	0.27	0.25	0.29	0.14	0.24	0.27	0.26	0.25	0.24	0.42	0	0	0	0	0	0.23	
Min	0	0	0	0	0	0	1	23	37	35	75	77	560	168	104	55	37	58	3	0	0	0	0	0	686	
Max	0	0	0	0	0	0	42	231	450	668	851	958	992	943	814	623	401	169	15	0	0	0	0	0	7119	

Daylight Data Recovery: 0% missing; 1% exceed the 15% QC threshold -- 4459 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
Note: Instrument was changed during month.

**Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - March 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	0	7	31	18	13	14	17	23	22	18	22	7	0	0	0	0	0	192
2	0	0	0	0	0	0	0	1	14	31	19	16	19	20	26	27	24	31	102	0	0	0	0	0	331
3	0	0	0	0	0	0	5	29	50	46	60	58	70	68	66	59	34	25	19	0	0	0	0	0	589
4	0	0	0	0	0	0	0	0	6	28	10	12	19	20	28	25	25	24	11	0	0	0	0	0	209
5	0	0	0	0	0	0	0	0	6	28	14	17	34	28	47	62	53	48	21	0	0	0	0	0	358
6	0	0	0	0	0	0	8	44	61	43	45	21	23	26	31	42	34	28	12	0	0	0	0	0	418
7	0	0	0	0	0	0	18	32	48	49	47	32	44	59	77	63	44	38	9	0	0	0	0	0	559
8	0	0	0	0	0	0	7	18	25	38	29	42	31	48	64	57	53	52	11	0	0	0	0	0	476
9	0	0	0	0	0	0	16	35	17	40	45	55	42	61	60	70	65	47	14	0	0	0	0	0	567
10	0	0	0	0	0	0	78	67	37	38	21	21	17	11	32	30	29	27	56	0	0	0	0	0	462
11	0	0	0	0	0	0	15	23	52	41	23	25	21	20	36	40	39	41	28	0	0	0	0	0	405
12	0	0	0	0	0	0	18	36	39	34	27	25	22	22	33	35	32	33	16	0	0	0	0	0	372
13	0	0	0	0	0	0	15	13	31	62	57	58	72	67	68	61	55	37	5	0	0	0	0	0	602
14	0	0	0	0	0	0	5	13	13	7	14	5	3	10	20	14	13	40	27	0	0	0	0	0	185
15	0	0	0	0	0	0	27	40	28	24	40	77	50	59	41	48	57	57	19	0	0	0	0	0	567
16	0	0	0	0	0	0	24	7	19	26	24	26	28	33	37	41	38	43	22	0	0	0	0	0	368
17	0	0	0	0	0	0	16	19	30	10	15	20	20	23	25	42	52	44	10	0	0	0	0	0	326
18	0	0	0	0	0	0	13	26	15	21	19	35	49	42	36	40	31	37	94	0	0	0	0	0	458
19	0	0	0	0	0	0	25	11	26	30	27	33	30	35	38	43	37	35	24	0	0	0	0	0	395
20	0	0	0	0	0	0	29	14	55	44	34	33	41	39	57	61	59	70	19	0	0	0	0	0	556
21	0	0	0	0	0	0	15	22	22	31	30	46	57	52	60	57	37	14	45	0	0	0	0	0	488
22	0	0	0	0	0	0	27	3	12	26	23	21	23	24	23	24	24	17	41	0	0	0	0	0	288
23	0	0	0	0	0	0	101	1	8	23	21	18	20	23	21	26	23	16	28	0	0	0	0	0	328
24	0	0	0	0	0	0	69	75	40	54	38	29	31	35	32	36	40	40	19	0	0	0	0	0	538
25	0	0	0	0	0	0	24	5	17	30	24	22	28	30	27	30	28	25	25	0	0	0	0	0	315
26	0	0	0	0	0	0	32	50	65	74	75	33	42	63	56	54	48	46	8	0	0	0	0	0	647
27	0	0	0	0	0	0	91	26	42	39	56	57	44	35	37	34	35	29	31	0	0	0	0	0	555
28	0	0	0	0	0	0	52	1	21	10	23	27	22	24	25	23	25	17	50	0	0	0	0	0	321
29	0	0	0	0	0	0	58	75	23	15	26	23	20	28	28	26	26	24	19	0	0	0	0	0	389
30	0	0	0	0	0	0	63	39	37	34	44	55	77	91	67	71	55	66	19	0	0	0	0	0	718
31	0	0	0	0	0	0	25	29	67	57	82	89	85	81	70	71	61	40	5	0	0	0	0	0	764
Avg	0	0	0	0	0	0	28	24	30	34	33	34	35	39	42	43	39	36	26	0	0	0	0	0	443
S/D	0	0	0	0	0	0	27	21	18	15	18	19	20	21	17	16	14	14	23	0	0	0	0	0	145
S/A	0	0	0	0	0	0	0.95	0.87	0.59	0.43	0.54	0.58	0.56	0.53	0.41	0.38	0.36	0.38	0.86	0	0	0	0	0	0.33
Min	0	0	0	0	0	0	0	0	6	7	10	5	3	10	20	14	13	14	5	0	0	0	0	0	185
Max	0	0	0	0	0	0	101	75	67	74	82	89	85	91	77	71	65	70	102	0	0	0	0	0	764

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 118720 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 (Shadow Band PSP)
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - March 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	Daily
1	0	0	0	0	0	0	2	72 ?	?	?	?	?	?	?	?	?	283 ?	116	3	0	0	0	0	0	475 ?
2	0	0	0	0	0	0	0	41 ?	?	?	?	?	?	?	?	?	321	109	3	0	0	0	0	0	474 ?
3	0	0	0	0	0	0	2	35	109	148	297	310	519	398	393	361	227 ?	115	4	0	0	0	0	0	2918
4	0	0	0	0	0	0	3	73 ?	?	?	?	?	?	?	?	?	248 ?	122	3	0	0	0	0	0	449 ?
5	0	0	0	0	0	0	4	96 ?	?	?	?	?	621 ?	698 ?	523 ?	396 ?	251 ?	113	7	0	0	0	0	0	2709 ?
6	0	0	0	0	0	0	3	88	207	410 ?	478 ?	567 ?	?	?	?	?	269 ?	311 ?	7	0	0	0	0	0	2411 ?
7	0	0	0	0	0	0	3	45	230 ?	345 ?	238 ?	715 ?	676 ?	594 ?	436	221	307	116	5	0	0	0	0	0	3932 ?
8	0	0	0	0	0	0	3	98	249 ?	441 ?	411 ?	642 ?	652 ?	549 ?	452	394	241	115	5	0	0	0	0	0	4251 ?
9	0	0	0	0	0	0	3	87	325 ?	432 ?	549 ?	576 ?	600 ?	324	287	284	169	75	6	0	0	0	0	0	3716 ?
10	0	0	0	0	0	0	3	89	229 ?	504 ?	?	?	?	?	?	?	339	123	4	0	0	0	0	0	1291 ?
11	0	0	0	0	0	0	4	54 ?	236 ?	371 ?	491 ?	?	?	?	?	?	478 ?	316	112	6	0	0	0	0	2068 ?
12	0	0	0	0	0	0	6	104	301 ?	425 ?	?	?	?	?	?	?	466 ?	332	123	6	0	0	0	0	1762 ?
13	0	0	0	0	0	0	7	120	311	314	275	355	566	494 ?	604	371	149	50	4	0	0	0	0	0	3620
14	0	0	0	0	0	0	1	20	32	30	65	65 ?	?	145 ?	89	47	32	52	11	0	0	0	0	0	590 ?
15	0	0	0	0	0	0	7	97	261 ?	?	504 ?	498 ?	523 ?	521 ?	436 ?	371 ?	225 ?	117	7	0	0	0	0	0	3565 ?
16	0	0	0	0	0	0	11	135	?	?	?	?	?	?	?	?	486 ?	330	125	8	0	0	0	0	1094 ?
17	0	0	0	0	0	0	16	119 ?	445 ?	?	?	?	?	?	?	?	290 ?	82	8	0	0	0	0	0	960 ?
18	0	0	0	0	0	0	16	104 ?	?	?	?	?	652 ?	685 ?	?	478 ?	353	113	8	0	0	0	0	0	2407 ?
19	0	0	0	0	0	0	14	150	344	478 ?	?	?	?	?	?	?	501 ?	332	126	8	0	0	0	0	1953 ?
20	0	0	0	0	0	0	11	143	362 ?	480 ?	?	?	?	711 ?	420	290	265	120	8	0	0	0	0	0	2810 ?
21	0	0	0	0	0	0	7	144	365 ?	472 ?	691 ?	380	508 ?	486 ?	414 ?	358	328	155	9	0	0	0	0	0	4315 ?
22	0	0	0	0	0	0	17	140 ?	?	?	?	?	?	?	?	?	358 ?	154	8	0	0	0	0	0	677 ?
23	0	0	0	0	0	0	25	108 ?	?	?	?	?	?	?	?	?	?	361 ?	148	10	0	0	0	0	651 ?
24	0	0	0	0	0	0	25	152	318	491 ?	496 ?	?	?	?	?	?	500 ?	303	116	14	0	0	0	0	2414 ?
25	0	0	0	0	0	0	23	168	364 ?	?	?	?	?	?	?	?	501 ?	360	135	10	0	0	0	0	1560 ?
26	0	0	0	0	0	0	14	100	254	308	402	207	384 ?	404	434	429 ?	191 ?	68	8	0	0	0	0	0	3204
27	0	0	0	0	0	0	21	163	350 ?	501 ?	571 ?	608 ?	620 ?	?	676 ?	?	356	156	10	0	0	0	0	0	4032 ?
28	0	0	0	0	0	0	27	151 ?	?	?	?	?	?	?	?	?	384 ?	165	11	0	0	0	0	0	737 ?
29	0	0	0	0	0	0	29	124 ?	345 ?	?	?	?	?	?	?	?	379	147	10	0	0	0	0	0	1529 ?
30	0	0	0	0	0	0	41	153	343 ?	?	685 ?	712 ?	479	591 ?	325	281	154	95	9	0	0	0	0	0	3869 ?
31	0	0	0	0	0	0	14	142 ?	196	232	426	593	632 ?	432	372	339	167	66	3	0	0	0	0	0	3615
Avg	0	0	0	0	0	0	12	107	281	375	439	479	572	502	419	378	279	113	7	0	0	0	0	0	2260
S D	0	0	0	0	0	0	10	40	91	130	162	193	81	151	134	112	82	30	3	0	0	0	0	0	1287
S/A	0	0	0	0	0	0	0.87	0.37	0.32	0.35	0.37	0.4	0.14	0.3	0.32	0.3	0.29	0.27	0.4	0	0	0	0	0	0.57
Min	0	0	0	0	0	0	0	20	32	30	65	65	384	145	89	47	32	50	3	0	0	0	0	0	449
Max	0	0	0	0	0	0	41	168	445	504	691	715	676	711	676	501	384	165	14	0	0	0	0	0	4315

Daylight Data Recovery: 0% missing; 49% exceed the 15% QC threshold -- 4459 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
Note: Instrument was changed during month.