

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - February 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	4	104	225	152	78	168	119	171	127	168	33	0	0	0	0	0	0	1350
2	0	0	0	0	0	0	0	40	150	132	403	536	482	266	234	223	127	18	0	0	0	0	0	0	2610
3	0	0	0	0	0	0	0	29	83	183	186	429	170	125	245	372	116	4	0	0	0	0	0	0	1942
4	0	0	0	0	0	0	0	25	137	165	280	484	571	617	461	396	187	54	0	0	0	0	0	0	3375
5	0	0	0	0	0	0	0	45	237	445	612	728	778	734	625	462	260	63	0	0	0	0	0	0	4988
6	0	0	0	0	0	0	0	50	248	408	596	715	759	717	610	454	256	61	0	0	0	0	0	0	4875
7	0	0	0	0	0	0	0	52	228	431	600	721	756	733	584	433	242	51	0	0	0	0	0	0	4830
8	0	0	0	0	0	0	0	57	137	392	495	467	470	721	450	462	189	51	0	0	0	0	0	0	3891
9	0	0	0	0	0	0	0	44	123	265	486	603	677	619	624	386	210	68	0	0	0	0	0	0	4106
10	0	0	0	0	0	0	0	12	108	271	553	693	736	699	590	422	232	52	0	0	0	0	0	0	4369
11	0	0	0	0	0	0	0	24	126	278	472	734	716	271	432	437	222	59	0	0	0	0	0	0	3771
12	0	0	0	0	0	0	0	60	252	426	602	701	742	673	432	245	116	8	1	0	0	0	0	0	4259
13	0	0	0	0	0	0	0	50	220	489	668	790	830	796	683	508	294	85	0	0	0	0	0	0	5411
14	0	0	0	0	0	0	0	28	168	253	278	489	468	405	358	314	281	91	1	0	0	0	0	0	3134
15	0	0	0	0	0	0	0	56	256	469	637	682	801	673	618	475	280	30	0	0	0	0	0	0	4978
16	0	0	0	0	0	0	0	32	149	449	639	756	793	767	658	483	269	83	0	0	0	0	0	0	5079
17	0	0	0	0	0	0	0	57	214	482	612	656	679	623	401	283	116	24	0	0	0	0	0	0	4147
18	0	0	0	0	0	0	0	42	255	470	558	769	453	672	441	464	179	79	1	0	0	0	0	0	4383
19	0	0	0	0	0	0	0	51	251	380	435	638	717	728	568	381	183	59	2	0	0	0	0	0	4392
20	0	0	0	0	0	0	0	69	272	489	659	775	820	785	672	496	282	91	1	0	0	0	0	0	5411
21	0	0	0	0	0	0	0	40	52	80	134	232	379	166	227	271	173	90	1	0	0	0	0	0	1846
22	0	0	0	0	0	0	0	81	297	512	651	544	622	784	489	414	304	111	3	0	0	0	0	0	4812
23	0	0	0	0	0	0	0	69	258	323	596	595	322	146	330	438	160	50	1	0	0	0	0	0	3289
24	0	0	0	0	0	0	1	69	112	96	228	477	789	817	706	523	305	100	2	0	0	0	0	0	4226
25	0	0	0	0	0	0	1	94	316	504	681	797	841	809	700	517	301	97	2	0	0	0	0	0	5659
26	0	0	0	0	0	0	1	88	293	480	654	765	794	773	666	494	284	90	2	0	0	0	0	0	5385
27	0	0	0	0	0	0	1	85	274	441	688	792	831	769	607	471	276	92	2	0	0	0	0	0	5329
28	0	0	0	0	0	0	1	37	191	298	389	356	57 ?	283 ?	654	534	342	120	3	0	0	0	0	0	3264
Avg	0	0	0	0	0	0	0	50	197	351	498	607	615	582	508	410	227	65	1	0	0	0	0	0	4111
S/D	0	0	0	0	0	0	0	22	73	132	172	177	222	239	158	100	65	30	1	0	0	0	0	0	1133
S/A	0	0	0	0	0	0	1.89	0.44	0.37	0.38	0.35	0.29	0.36	0.41	0.31	0.24	0.29	0.47	1.19	0	0	0	0	0	0.28
Min	0	0	0	0	0	0	0	4	52	80	134	78	57	119	171	127	116	4	0	0	0	0	0	0	1350
Max	0	0	0	0	0	0	1	94	316	512	688	797	841	817	706	534	342	120	3	0	0	0	0	0	5659

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 3746 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 - February 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	3	11	25	6	4	6	6	9	8	37	15	0	0	0	0	0	0	131
2	0	0	0	0	0	0	0	44	27	11	23	53	31	19	24	24	16	15	0	0	0	0	0	0	288
3	0	0	0	0	0	0	0	11	9	16	8	44	9	6	26	57	24	5	0	0	0	0	0	0	216
4	0	0	0	0	0	0	0	8	14	8	20	41	50	34	38	37	43	38	0	0	0	0	0	0	329
5	0	0	0	0	0	0	0	16	15	36	27	31	37	30	28	33	38	43	33	0	0	0	0	0	367
6	0	0	0	0	0	0	0	41	257	37	31	33	38	34	27	34	33	36	13	0	0	0	0	0	613
7	0	0	0	0	0	0	0	40	75	114	23	19	30	33	35	37	41	16	5	0	0	0	0	0	467
8	0	0	0	0	0	0	0	69	33	48	47	36	19	37	33	40	35	33	10	0	0	0	0	0	440
9	0	0	0	0	0	0	0	36	24	31	37	39	36	40	35	39	36	34	4	0	0	0	0	0	391
10	0	0	0	0	0	0	0	4	4	39	68	31	35	40	40	45	43	30	3	0	0	0	0	0	383
11	0	0	0	0	0	0	0	4	4	59	15	43	53	21	27	41	51	24	27	0	0	0	0	0	369
12	0	0	0	0	0	0	0	2095	52	44	19	26	30	46	42	29	18	6	6	0	0	0	0	0	2412
13	0	0	0	0	0	0	0	33	14	43	19	19	15	28	22	25	19	24	11	0	0	0	0	0	272
14	0	0	0	0	0	0	0	22	45	54	28	47	24	32	44	38	40	46	5	0	0	0	0	0	424
15	0	0	0	0	0	0	0	12	9	46	27	28	22	37	35	31	27	15	5	0	0	0	0	0	294
16	0	0	0	0	0	0	0	37	34	48	22	20	17	29	30	30	24	32	6	0	0	0	0	0	330
17	0	0	0	0	0	0	0	40	32	50	48	52	32	54	54	30	6	9	17	0	0	0	0	0	424
18	0	0	0	0	0	0	0	21	7	54	26	36	38	50	52	51	33	35	11	0	0	0	0	0	415
19	0	0	0	0	0	0	0	44	53	53	45	40	32	33	42	42	35	30	6	0	0	0	0	0	456
20	0	0	0	0	0	0	0	10	8	56	23	27	28	33	33	38	24	28	9	0	0	0	0	0	317
21	0	0	0	0	0	0	0	39	3	5	4	5	27	3	6	37	36	31	7	0	0	0	0	0	203
22	0	0	0	0	0	0	0	11	8	57	42	59	59	47	50	63	43	41	5	0	0	0	0	0	485
23	0	0	0	0	0	0	0	18	13	53	53	45	33	8	23	46	32	22	68	0	0	0	0	0	414
24	0	0	0	0	0	0	39	44	33	6	25	58	38	30	25	24	19	26	23	0	0	0	0	0	388
25	0	0	0	0	0	0	12	19	24	48	31	26	30	30	27	27	24	26	14	0	0	0	0	0	337
26	0	0	0	0	0	0	8	36	48	46	35	31	36	37	37	37	34	33	11	0	0	0	0	0	430
27	0	0	0	0	0	0	9	12	43	28	31	21	24	32	42	43	40	40	11	0	0	0	0	0	374
28	0	0	0	0	0	0	2	20	48	50	59	48	1	27	44	30	19	23	5	0	0	0	0	0	379
Avg	0	0	0	0	0	0	2	100	34	42	30	34	30	31	33	36	31	27	11	0	0	0	0	0	441
S D	0	0	0	0	0	0	8	384	47	21	15	14	13	13	11	11	10	11	13	0	0	0	0	0	391
S/A	0	0	0	0	0	0	3.05	3.86	1.38	0.51	0.51	0.41	0.43	0.41	0.34	0.29	0.33	0.4	1.2	0	0	0	0	0	0.89
Min	0	0	0	0	0	0	0	3	3	5	4	4	1	3	6	8	6	5	0	0	0	0	0	0	131
Max	0	0	0	0	0	0	39	2095	257	114	68	59	59	54	54	63	51	46	68	0	0	0	0	0	2412

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 114261 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 - February 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	0	4	101	199	149	75	164	114	166	123	158	31	0	0	0	0	0	0	1285					
2	0	0	0	0	0	0	0	32	91	?	127	331	?	402	?	393	?	253	165	212	122	17	0	0	2144					
3	0	0	0	0	0	0	0	30	80	176	181	363	164	120	206	299	?	88	4	0	0	0	0	0	1712					
4	0	0	0	0	0	0	0	26	133	161	269	399	?	420	?	443	?	332	?	350	?	149	50	0	0	2732				
5	0	0	0	0	0	0	0	45	151	?	?	?	?	?	?	?	?	?	?	212	?	58	0	0	0	467				
6	0	0	0	0	0	0	0	50	188	309	?	?	?	?	?	?	?	?	?	218	?	57	0	0	0	822				
7	0	0	0	0	0	0	0	49	195	318	?	?	?	?	?	?	?	?	?	184	?	50	0	0	0	2155				
8	0	0	0	0	0	0	0	61	129	346	?	421	?	279	?	318	?	595	?	319	?	348	?	178	47	0	0	3042		
9	0	0	0	0	0	0	0	44	118	231	372	?	376	?	444	?	400	?	515	?	354	199	63	0	0	0	3115			
10	0	0	0	0	0	0	0	11	107	253	465	?	?	?	?	?	?	?	?	384	218	48	0	0	0	0	1486			
11	0	0	0	0	0	0	0	24	125	252	394	?	?	495	?	256	369	?	370	?	205	56	0	0	0	0	2545			
12	0	0	0	0	0	0	0	62	214	?	360	?	?	572	?	355	?	334	?	286	?	230	109	8	1	0	0	2530		
13	0	0	0	0	0	0	0	31	170	?	?	?	?	?	?	?	?	?	?	214	?	82	0	0	0	0	0	496		
14	0	0	0	0	0	0	0	28	138	228	261	367	?	358	314	295	236	?	229	?	74	1	0	0	0	0	2529			
15	0	0	0	0	0	0	0	62	173	?	?	?	471	?	?	455	?	498	?	350	?	223	?	28	0	0	0	2260		
16	0	0	0	0	0	0	0	31	138	318	?	?	?	?	?	?	?	?	?	379	?	255	78	0	0	0	0	1200		
17	0	0	0	0	0	0	0	65	?	143	?	461	?	447	?	389	?	527	?	349	267	114	23	0	0	0	0	2784		
18	0	0	0	0	0	0	0	40	172	?	?	419	?	597	?	370	436	?	309	?	329	?	157	74	1	0	0	0	2904	
19	0	0	0	0	0	0	0	48	119	?	289	?	362	368	?	365	?	581	?	472	?	280	?	170	55	2	0	0	0	3111
20	0	0	0	0	0	0	0	70	188	?	?	?	?	?	?	?	?	?	?	390	?	273	87	1	0	0	0	0	1008	
21	0	0	0	0	0	0	0	36	51	78	131	229	358	164	223	251	160	85	1	0	0	0	0	0	0	0	0	1767		
22	0	0	0	0	0	0	0	83	?	?	?	338	?	459	431	?	609	?	404	313	?	257	?	82	3	0	0	0	2977	
23	0	0	0	0	0	0	0	68	223	?	275	454	?	399	?	297	140	205	?	277	?	148	47	1	0	0	0	0	2536	
24	0	0	0	0	0	0	0	63	102	93	212	368	632	?	?	?	?	?	?	?	263	?	96	1	0	0	0	0	1831	
25	0	0	0	0	0	0	1	92	?	?	?	?	?	?	?	?	?	?	404	?	292	93	1	0	0	0	0	0	882	
26	0	0	0	0	0	0	1	83	267	?	398	?	?	?	?	?	?	?	?	423	?	271	85	2	0	0	0	0	0	1530
27	0	0	0	0	0	0	1	87	266	?	306	?	?	?	?	?	?	?	?	444	?	261	85	2	0	0	0	0	0	1994
28	0	0	0	0	0	0	1	35	175	272	350	287	46	?	257	?	540	?	445	?	247	?	115	3	0	0	0	0	0	2772
Avg	0	0	0	0	0	0	0	49	152	249	328	380	353	364	351	324	199	60	1	0	0	0	0	0	0	0	0	0	2022	
S D	0	0	0	0	0	0	0	22	53	86	106	119	131	166	124	77	55	28	1	0	0	0	0	0	0	0	0	0	810	
S/A	0	0	0	0	0	0	1.99	0.46	0.35	0.34	0.32	0.31	0.37	0.46	0.35	0.24	0.27	0.46	1.21	0	0	0	0	0	0	0	0	0	0.4	
Min	0	0	0	0	0	0	0	4	51	78	131	75	46	114	165	123	88	4	0	0	0	0	0	0	0	0	0	0	467	
Max	0	0	0	0	0	0	1	92	267	398	465	597	632	609	542	445	292	115	3	0	0	0	0	0	0	0	0	0	3115	

Daylight Data Recovery: 0% missing; 40% exceed the 15% QC threshold -- 3746 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.