

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - July 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	11	111	296	498	697	840	914	872	647	350	146	85	49	22	0	0	0	0	0	5537
2	0	0	0	0	0	4	64	195	333	472	488	426	324	317	346	259	159	93	28	0	0	0	0	0	3509
3	0	0	0	0	0	4	97	261	464	523	305	488	268	151	282	244	200	35	2	0	0	0	0	0	3322
4	0	0	0	0	0	5	73	230	433	564	854	924	855	671	569	492	381	206	56	2	0	0	0	0	6313
5	0	0	0	0	0	3	50	235	421	658	705	269	563	553	678	493	325	209	54	1	0	0	0	0	5216
6	0	0	0	0	0	5	72	279	468	607	814	709	99	50	57	98	104	24	0	0	0	0	0	0	3436
7	0	0	0	0	0	7	60	232	464	624	490	759	443	148	129	143	132	104	112	2	0	0	0	0	3848
8	0	0	0	0	0	7	90	232	412	521	723	645	662	784	722	366	120	205	65	2	0	0	0	0	5558
9	0	0	0	0	0	9	112	266	489	615	788	719	725	821	794	573	491	261	30	1	0	0	0	0	6692
10	0	0	0	0	0	5	73	204	196	210	390	841	917	494	505	534	199	163	59	3	0	0	0	0	4794
11	0	0	0	0	0	6	85	174	160	316	660	769	689	508	505	426	363	162	23	7	0	0	0	0	4852
12	0	0	0	0	0	6	84	250	376	580	791	891	963	547	86	281	279	54	11	0	0	0	0	0	5200
13	0	0	0	0	0	3	60	117	238	145	154	299	359	206	87	160	137	90	57	3	0	0	0	0	2115
14	0	0	0	0	0	1	32	119	148	190	249	298	279	466	393	301	174	65	36	1	0	0	0	0	2753
15	0	0	0	0	0	10	119	128	61	207	320	415	407	498	397	264	69	6	8	0	0	0	0	0	2909
16	0	0	0	0	0	5	105	243	279	456	262	107	111	417	527	143	192	141	56	4	0	0	0	0	3048
17	0	0	0	0	0	4	107	187	254	487	892	891	1090	920	513	374	340	259	48	1	0	0	0	0	6370
18	0	0	0	0	0	3	96	280	526	735	824	750	483	790	754	563	426	91	26	1	0	0	0	0	6347
19	0	0	0	0	0	5	104	296	484	665	847	1004	296	63	104	255	189	76	28	2	0	0	0	0	4417
20	0	0	0	0	0	3	122	272	552	385	692	787	947	655	884	715	511	242	25	1	0	0	0	0	6792
21	0	0	0	0	0	4	92	334	479	702	649	781	470	797	886	715	501	282	66	1	0	0	0	0	6758
22	0	0	0	0	0	5	102	303	448	698	845	901	1020	741	481	236	320	205	56	1	0	0	0	0	6361
23	0	0	0	0	0	4	90	262	478	687	706	819	593	858	800	657	457	248	69	1	0	0	0	0	6731
24	0	0	0	0	0	4	90	278	492	686	811	837	713	797	638	659	448	239	68	1	0	0	0	0	6762
25	0	0	0	0	0	3	81	264	478	578	834	933	939	925	829	659	345	46 ?	5	1	0	0	0	0	6919
26	0	0	0	0	0	5	90	280	490	701	877	826	893	957	845	676	472	243	34	1	0	0	0	0	7391
27	0	0	0	0	0	2	75	291	504	701	854	841	943	796	644	417	471	117	14	0	0	0	0	0	6670
28	0	0	0	0	0	3	90	285	470	625	714	724	883	731	33	20	58	65	58	1	0	0	0	0	4761
29	0	0	0	0	0	3	56	125	309	594	355	516	692	767	517	64	50	53	41	2	0	0	0	0	4143
30	0	0	0	0	0	3	95	250	475	637	783	919	968	812	556	548	318	57	35	1	0	0	0	0	6458
31	0	0	0	0	0	2	86	245	440	641	554	709	928	777	720	407	315	229	62	0	0	0	0	0	6115
Avg	0	0	0	0	0	5	86	239	397	545	647	700	658	602	504	382	278	142	41	1	0	0	0	0	5229
S.D	0	0	0	0	0	2	20	57	126	168	220	228	285	261	261	208	147	83	24	1	0	0	0	0	1489
S/A	0	0	0	0	0	0.48	0.24	0.24	0.32	0.31	0.34	0.33	0.43	0.43	0.52	0.55	0.53	0.58	0.57	1	0	0	0	0	0.28
Min	0	0	0	0	0	1	32	117	61	145	154	107	99	50	33	20	50	6	2	0	0	0	0	0	2115
Max	0	0	0	0	0	11	122	334	552	735	892	1004	1090	957	886	715	511	282	112	7	0	0	0	0	7391

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 5136 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 - July 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	26	106	355	470	591	638	625	509	268	105	25	18	18	8	1	0	0	0	0	3762
2	0	0	0	0	0	11	27	79	141	207	170	119	81	71	97	73	35	16	6	3	0	0	0	0	1135
3	0	0	0	0	0	7	66	193	375	302	64	119	28	22	39	28	41	6	7	4	0	0	0	0	1299
4	0	0	0	0	0	10	30	123	272	289	593	612	373	197	163	198	218	129	24	3	0	0	0	0	3234
5	0	0	0	0	0	6	19	166	257	490	343	53	156	153	287	163	114	95	29	7	0	0	0	0	2336
6	0	0	0	0	0	14	45	217	367	417	548	356	14	6	10	23	36	13	5	0	0	0	0	0	2076
7	0	0	0	0	0	17	34	108	265	339	114	221	70	18	21	26	31	40	48	8	0	0	0	0	1361
8	0	0	0	0	0	47	46	120	246	236	393	285	291	405	422	180	36	116	35	9	0	0	0	0	2866
9	0	0	0	0	0	21	141	302	455	416	509	421	363	514	552	389	496	341	8	4	0	0	0	0	4932
10	0	0	0	0	0	14	14	67	46	38	75	383	371	52	69	199	35	64	42	11	0	0	0	0	1480
11	0	0	0	0	0	20	61	40	32	49	222	428	343	230	141	153	153	39	7	22	0	0	0	0	1941
12	0	0	0	0	0	16	47	113	119	298	452	490	534	146	12	47	90	19	5	1	0	0	0	0	2388
13	0	0	0	0	0	9	40	29	46	23	24	43	48	31	14	32	32	33	41	6	0	0	0	0	450
14	0	0	0	0	0	1	22	40	35	31	42	24	36	62	54	26	27	21	23	6	0	0	0	0	451
15	0	0	0	0	0	40	63	42	13	36	49	62	51	75	56	48	17	3	5	0	0	0	0	0	560
16	0	0	0	0	0	22	109	235	52	57	42	13	15	71	135	27	46	68	48	15	0	0	0	0	956
17	0	0	0	0	0	22	83	76	65	240	754	610	777	519	105	156	149	301	26	12	0	0	0	0	3896
18	0	0	0	0	0	10	75	258	582	746	592	369	95	466	446	361	345	34	17	0	0	0	0	0	4397
19	0	0	0	0	0	13	167	451	487	505	573	668	111	7	14	59	39	20	16	35	0	0	0	0	3165
20	0	0	0	0	0	6	259	422	706	136	316	405	507	434	873	836	738	443	19	2	0	0	0	0	6103
21	0	0	0	0	0	14	117	353	542	613	358	388	101	527	799	705	627	420	84	3	0	0	0	0	5652
22	0	0	0	0	0	18	130	257	453	735	722	767	868	400	137	104	258	224	47	7	0	0	0	0	5126
23	0	0	0	0	0	22	61	65	399	532	453	481	248	552	598	545	437	265	55	5	0	0	0	0	4717
24	0	0	0	0	0	17	71	77	400	604	607	524	379	475	338	483	397	234	49	4	0	0	0	0	4656
25	0	0	0	0	0	17	51	84	263	422	601	652	576	622	658	567	234	10	5	0	0	0	0	0	4762
26	0	0	0	0	0	40	74	76	215	668	772	600	646	784	745	658	536	323	31	5	0	0	0	0	6172
27	0	0	0	0	0	7	64	35	111	686	742	595	696	571	486	281	526	125	13	1	0	0	0	0	4939
28	0	0	0	0	0	14	90	42	53	364	462	422	545	399	4	3	14	27	23	2	0	0	0	0	2465
29	0	0	0	0	0	11	40	45	60	95	51	54	112	255	156	5	12	18	39	16	0	0	0	0	972
30	0	0	0	0	0	13	101	27	44	146	540	705	738	520	351	467	300	19	25	2	0	0	0	0	3997
31	0	0	0	0	0	10	62	59	63	100	222	234	505	331	312	210	170	173	51	4	0	0	0	0	2505
Avg	0	0	0	0	0	17	75	147	246	336	389	378	329	296	264	228	200	119	27	6	0	0	0	0	3057
S D	0	0	0	0	0	10	50	122	195	230	245	227	257	221	258	235	208	130	19	7	0	0	0	0	1739
S/A	0	0	0	0	0	0.61	0.67	0.83	0.79	0.69	0.63	0.6	0.78	0.75	0.98	1.03	1.04	1.1	0.69	1.12	0	0	0	0	0.57
Min	0	0	0	0	0	1	14	27	13	23	24	13	14	6	4	3	12	3	5	0	0	0	0	0	450
Max	0	0	0	0	0	47	259	451	706	746	772	767	868	784	873	836	738	443	84	35	0	0	0	0	6172

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 85271 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 - July 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	10	86	149	214	246	272	309	367	387	255	127	74	42	20	0	0	0	0	0	2558
2	0	0	0	0	0	3	59	161	247	315	336	312	244	249	260	204	138	87	27	0	0	0	0	0	2642
3	0	0	0	0	0	4	81	182	238	299	247	372	240	130	248	223	175	32	2 ?	0	0	0	0	0	2473
4	0	0	0	0	0	4	67	178	270	343	325	334	485	481	426	344	254	151	51	2	0	0	0	0	3714
5	0	0	0	0	0	2	46	162	271	285	403	218	408	405	426	370	259	171	48	1	0	0	0	0	3475
6	0	0	0	0	0	5	62	187	246	290	328	368	85	44	44	50	85	90	21	0	0	0	0	0	1904
7	0	0	0	0	0	6	54	186	305	368	389	545	374	130	110	124	114	90	101	1	0	0	0	0	2896
8	0	0	0	0	0	6	81	183	262	342	377	371	374	394	353	223	101	155	58	2	0	0	0	0	3282
9	0	0	0	0	0	9	80	144	220	296	338	312	365	329	305	273	199	123	28	1	0	0	0	0	3019
10	0	0	0	0	0	4	70	178	168	182	322	471	549	443	445	386	178	135	50	3	0	0	0	0	3586
11	0	0	0	0	0	5	73	158	141	279	458	359	349	285	385	308	274	147	22	6	0	0	0	0	3248
12	0	0	0	0	0	5	75	203	307	350	392	419	434	405	76	246	224	46	10	0	0	0	0	0	3193
13	0	0	0	0	0	3	52	106	211	127	133	257	312	176	74	137	118	77	49	3	0	0	0	0	1837
14	0	0	0	0	0	1	28	103	128	166	212	275	243	407	345	281	159	56	32	1	0	0	0	0	2437
15	0	0	0	0	0	10	107	113	53	179	277	355	356	426	347	228	64	5	7	0	0	0	0	0	2528
16	0	0	0	0	0	4	82	154	248	413	225	95	95	349	406	122	165	114	47	4	0	0	0	0	2524
17	0	0	0	0	0	3	89	159	217	298	227	305	322	421	418	262	255	134	43	1	0	0	0	0	3154
18	0	0	0	0	0	3	79	186	184	174	305	398	389	344	363	295	217	76	23	2	0	0	0	0	3038
19	0	0	0	0	0	4	68	118	207	280	344	364	186	56	92	214	165	68	26	2	0	0	0	0	2193
20	0	0	0	0	0	3	71	103	143	289	408	402	447	236	117	86	79	62	22	1	0	0	0	0	2469
21	0	0	0	0	0	4	71	191	172	238	338	410	371	293	183	186	134	116	46	1	0	0	0	0	2755
22	0	0	0	0	0	4	78	195	189	152	215	164	164	356	361	162	170	117	44	1	0	0	0	0	2373
23	0	0	0	0	0	4	80	235	244	289	310	359	349	328	276	249	202	143	58	1	0	0	0	0	3126
24	0	0	0	0	0	4	77	249	255	236	281	338	341	344	338	297	217	146	58	1	0	0	0	0	3182
25	0	0	0	0	0	3	72	232	320	268	307	311	372	329	252	233	205	40 ?	5 ?	1	0	0	0	0	2948
26	0	0	0	0	0	4	77	251	361	203	203	254	257	207	193	185	160	115	27	1	0	0	0	0	2499
27	0	0	0	0	0	2	64	278	429	188	207	270	259	251	215	210	166	61	12	0	0	0	0	0	2613
28	0	0	0	0	0	3	75	269	439	350	315	325	348	346	29	17	50	56	54	1	0	0	0	0	2680
29	0	0	0	0	0	3	50	108	241	490	310	464	582	526	376	60	44	46	35	2	0	0	0	0	3336
30	0	0	0	0	0	3	78	250 ?	446	501	310	248	244	315	250	207	137	50	31	1	0	0	0	0	3071
31	0	0	0	0	0	2	76	223	371	544	359	488	433	462	449	252	225	160	51	0	0	0	0	0	4095
Avg	0	0	0	0	0	4	71	180	250	290	306	338	334	318	272	212	162	94	36	1	0	0	0	0	2866
S D	0	0	0	0	0	2	14	50	90	100	71	92	113	118	127	89	63	44	20	1	0	0	0	0	505
S/A	0	0	0	0	0	0.5	0.2	0.27	0.36	0.34	0.23	0.27	0.34	0.37	0.47	0.42	0.39	0.47	0.57	0.95	0	0	0	0	0.18
Min	0	0	0	0	0	1	28	103	53	127	133	95	85	44	29	17	44	5	2	0	0	0	0	0	1837
Max	0	0	0	0	0	10	107	278	446	544	458	545	582	526	449	386	274	171	101	6	0	0	0	0	4095

Daylight Data Recovery: 0% missing; 1% exceed the 15% QC threshold -- 5136 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