

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - September 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	47	228	470	678	846	935	956	899	779	591	382	165	18	0	0	0	0	0	6994
2	0	0	0	0	0	0	71	282	489	700	862	963	986	932	806	620	393	168	17	0	0	0	0	0	7287
3	0	0	0	0	0	0	57	250	475	683	836	926	951	902	763	573	372	155	15	0	0	0	0	0	6958
4	0	0	0	0	0	0	55	243	469	673	822	922	942	893	765	581	365	149	15	0	0	0	0	0	6894
5	0	0	0	0	0	0	53	241	460	663	815	919	880	803	712	511	345	125	5	0	0	0	0	0	6531
6	0	0	0	0	0	0	76	256	433	618	478	143	83	163	295	224	242	43	10	0	0	0	0	0	3063
7	0	0	0	0	0	0	53	178	456	653	560	645	798	878	731	520	101	48	2	0	0	0	0	0	5623
8	0	0	0	0	0	0	26	142	376	611	632	600	588	802	578	146	73	51	5	0	0	0	0	0	4631
9	0	0	0	0	0	0	45	230	442	592	507	571	702	505	516	327	250	105	4	0	0	0	0	0	4795
10	0	0	0	0	0	0	36	194	411	623	788	858	907	851	721	536	316	69	4	0	0	0	0	0	6313
11	0	0	0	0	0	0	42	222	441	646	800	795	942	684	191	373	327	76	9	0	0	0	0	0	5548
12	0	0	0	0	0	0	2	52	376	290	545	325	268	97	187	61	123	86	4	0	0	0	0	0	2414
13	0	0	0	0	0	0	45	223	392	641	818	869	743	713	534	526	338	99	6	0	0	0	0	0	5946
14	0	0	0	0	0	0	29	170	105	362	544	445	372	678	546	290	215	39	4	0	0	0	0	0	3798
15	0	0	0	0	0	0	5	40	32	46	49	63	61	145	174	78	60	71	6	0	0	0	0	0	830
16	0	0	0	0	0	0	42	223	419	657	818	907	922	853	734	545	341	107	4	0	0	0	0	0	6571
17	0	0	0	0	0	0	45	234	452	654	803	895	908	835	695	510	297	99	4	0	0	0	0	0	6432
18	0	0	0	0	0	0	5	36	48	131	271	326	483	244	162	134	71	13	0	0	0	0	0	0	1924
19	0	0	0	0	0	0	7	30	129	184	331	364	389	128	121	99	85	13	1	0	0	0	0	0	1881
20	0	0	0	0	0	0	13	68	192	183	114	163	240	177	140	93	101	31	1	0	0	0	0	0	1516
21	0	0	0	0	0	0	7	52	350	374	439	462	258	282	395	306	228	102	3	0	0	0	0	0	3257
22	0	0	0	0	0	0	32	188	398	369	562	867	757	730	470	98	193	87	2	0	0	0	0	0	4754
23	0	0	0	0	0	0	29	182	320	482	711	400	392	518	169	242	249	19	1	0	0	0	0	0	3714
24	0	0	0	0	0	0	20	151	515	576	648	638	530	638	247	221	134	50	2	0	0	0	0	0	4369
25	0	0	0	0	0	0	24	180	406	586	366	622	801	441	167	88	52	18	1	0	0	0	0	0	3751
26	0	0	0	0	0	0	9	83	109	218	218	473	498	191	30	41	41	12	0	0	0	0	0	0	1923
27	0	0	0	0	0	0	35	262	336	329	636	567	549	444	89	309	120	20	0	0	0	0	0	0	3697
28	0	0	0	0	0	0	31	195	425	631	784	861	871	797	667	368	215	80	1	0	0	0	0	0	5926
29	0	0	0	0	0	0	34	218	468	253	418	857	671	811	683	399	248	71	1	0	0	0	0	0	5133
30	0	0	0	0	0	0	22	172	395	556	759	672	729	694	426	311	205	59	0	0	0	0	0	0	5001
Avg	0	0	0	0	0	0	33	174	360	489	593	635	639	591	450	324	216	74	5	0	0	0	0	0	4582
S D	0	0	0	0	0	0	19	75	138	197	229	264	275	281	256	188	112	46	5	0	0	0	0	0	1836
S/A	0	0	0	0	0	0	0.58	0.43	0.38	0.4	0.39	0.42	0.43	0.48	0.57	0.58	0.52	0.62	1.06	0	0	0	0	0	0.4
Min	0	0	0	0	0	0	2	30	32	46	49	63	61	97	30	41	41	12	0	0	0	0	0	0	830
Max	0	0	0	0	0	0	76	282	515	700	862	963	986	932	806	620	393	168	18	0	0	0	0	0	7287

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 4453 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: 8.67 uV/Wm-2
Serial Number: 13434F3
Calibration Date: 5/18/98

Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Watt-Hours per Square Meter
Bethune-Cookman College - September 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	170	46	37	45	40	38	37	39	33	29	17	15	39	0	0	0	0	0	585
2	0	0	0	0	0	0	155	32	14	23	21	20	19	17	14	5	0	16	57	0	0	0	0	0	394
3	0	0	0	0	0	0	84	17	20	24	24	26	24	23	26	25	11	15	41	0	0	0	0	0	361
4	0	0	0	0	0	0	70	18	22	26	27	32	27	25	24	19	12	15	68	0	0	0	0	0	385
5	0	0	0	0	0	0	68	21	24	28	28	28	34	44	53	47	27	21	7	0	0	0	0	0	429
6	0	0	0	0	0	0	78	42	40	42	41	21	13	28	55	51	54	19	20	0	0	0	0	0	506
7	0	0	0	0	0	0	60	53	42	35	39	46	34	34	38	51	26	22	5	0	0	0	0	0	484
8	0	0	0	0	0	0	38	42	53	61	89	83	70	42	38	32	14	32	13	0	0	0	0	0	608
9	0	0	0	0	0	0	44	56	47	69	63	58	63	62	69	64	48	30	8	0	0	0	0	0	683
10	0	0	0	0	0	0	44	59	54	58	47	46	44	44	46	43	45	14	5	0	0	0	0	0	548
11	0	0	0	0	0	0	121	37	41	47	44	41	43	46	36	59	44	22	14	0	0	0	0	0	595
12	0	0	0	0	0	0	4	16	50	50	56	50	40	13	35	13	37	43	7	0	0	0	0	0	416
13	0	0	0	0	0	0	47	46	52	43	31	47	55	57	65	36	41	49	4	0	0	0	0	0	574
14	0	0	0	0	0	0	36	62	30	62	63	57	57	66	70	56	68	18	7	0	0	0	0	0	652
15	0	0	0	0	0	0	7	22	9	10	9	11	10	23	33	19	21	48	15	0	0	0	0	0	237
16	0	0	0	0	0	0	41	35	47	33	26	25	26	29	27	32	27	19	40	0	0	0	0	0	408
17	0	0	0	0	0	0	19	25	28	29	26	27	27	35	40	38	33	24	5	0	0	0	0	0	357
18	0	0	0	0	0	0	3	12	15	27	50	54	72	41	31	26	25	6	4	0	0	0	0	0	366
19	0	0	0	0	0	0	7	15	37	40	61	60	63	20	22	24	32	7	0	0	0	0	0	0	388
20	0	0	0	0	0	0	14	35	56	40	18	26	41	32	28	23	35	13	0	0	0	0	0	0	361
21	0	0	0	0	0	0	37	21	42	44	53	71	34	49	57	60	51	38	12	0	0	0	0	0	570
22	0	0	0	0	0	0	37	64	68	81	79	67	75	73	61	18	51	30	9	0	0	0	0	0	714
23	0	0	0	0	0	0	53	65	70	68	67	51	51	75	28	44	49	14	3	0	0	0	0	0	637
24	0	0	0	0	0	0	26	56	100	42	79	69	62	61	44	56	51	27	21	0	0	0	0	0	692
25	0	0	0	0	0	0	27	33	40	47	44	62	52	41	24	18	17	14	2	0	0	0	0	0	420
26	0	0	0	0	0	0	17	45	22	34	37	76	68	29	5	9	11	6	2	0	0	0	0	0	362
27	0	0	0	0	0	0	25	72	79	67	69	52	52	50	14	51	43	4	1	0	0	0	0	0	578
28	0	0	0	0	0	0	44	31	29	31	27	30	31	38	34	38	36	37	6	0	0	0	0	0	412
29	0	0	0	0	0	0	21	10	59	40	42	41	40	32	26	29	30	32	6	0	0	0	0	0	408
30	0	0	0	0	0	0	28	56	47	45	45	53	62	54	54	64	57	36	6	0	0	0	0	0	607
Avg	0	0	0	0	0	0	47	38	42	43	45	46	44	41	38	36	34	23	14	0	0	0	0	0	491
S D	0	0	0	0	0	0	40	18	20	16	20	18	18	16	16	17	16	12	17	0	0	0	0	0	124
S/A	0	0	0	0	0	0	0.85	0.47	0.47	0.37	0.44	0.4	0.4	0.39	0.44	0.47	0.48	0.53	1.2	0	0	0	0	0	0.25
Min	0	0	0	0	0	0	3	10	9	10	9	11	10	13	5	5	0	4	0	0	0	0	0	0	237
Max	0	0	0	0	0	0	170	72	100	81	89	83	75	75	70	64	68	49	68	0	0	0	0	0	714

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 147938 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: XXXXXXX
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 - September 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	41	214	415 ?	?	?	?	?	?	?	541 ?	374	163	14	0	0	0	0	0	1762 ?
2	0	0	0	0	0	0	67	?	?	?	?	?	?	?	?	?	?	384	171	11	0	0	0	0	633 ?
3	0	0	0	0	0	0	51	228 ?	384 ?	?	?	?	?	?	?	?	532 ?	366	154	11	0	0	0	0	1726 ?
4	0	0	0	0	0	0	54	226	389 ?	?	?	?	?	?	?	?	520 ?	359	148	11	0	0	0	0	1707 ?
5	0	0	0	0	0	0	48	228	396 ?	?	?	?	?	?	?	?	480	332	119	4	0	0	0	0	3196 ?
6	0	0	0	0	0	0	82 ?	232 ?	377 ?	464 ?	320 ?	124	71	139	251	191	206	38	8	0	0	0	0	0	2503
7	0	0	0	0	0	0	53	162	416	?	350 ?	502 ?	471 ?	?	639 ?	475	89	41	1	0	0	0	0	0	3198 ?
8	0	0	0	0	0	0	25	116	335	513 ?	540	526	490	557 ?	128 ?	125	67	43	5	0	0	0	0	0	3468
9	0	0	0	0	0	0	41	213	408	468 ?	426	477	560 ?	416	462	286	228	97	3	0	0	0	0	0	4084
10	0	0	0	0	0	0	32	176	383	561 ?	?	566 ?	685 ?	?	639 ?	509	296	65	4	0	0	0	0	0	3917 ?
11	0	0	0	0	0	0	39	211	421	?	?	437 ?	?	389 ?	163	336	251 ?	74	8	0	0	0	0	0	2328 ?
12	0	0	0	0	0	0	2	46	339	255	421	281	231	85	160	53	107	76	3	0	0	0	0	0	2059
13	0	0	0	0	0	0	41	209	366	540 ?	?	518 ?	506 ?	490 ?	463	491	321	89	6	0	0	0	0	0	4041 ?
14	0	0	0	0	0	0	26	152	90	319	465	395	321	588	455	255	186	34	4	0	0	0	0	0	3289
15	0	0	0	0	0	0	4	34	27	39	41	54	52	125	149	66	51	61	5	0	0	0	0	0	709
16	0	0	0	0	0	0	39	205	338 ?	?	?	?	?	731 ?	?	432 ?	304	104	4	0	0	0	0	0	2156 ?
17	0	0	0	0	0	0	44	205 ?	379 ?	?	?	?	?	?	600 ?	487	283	93	4	0	0	0	0	0	2096 ?
18	0	0	0	0	0	0	5	32	41	113	232	278	419	209	139	119	60	11	1	0	0	0	0	0	1658
19	0	0	0	0	0	0	6	26	111	158	282	311	333	111	104	84	73	11	1	0	0	0	0	0	1612
20	0	0	0	0	0	0	12	58	164	157	100	141	204	150	119	80	86	28	1	0	0	0	0	0	1299
21	0	0	0	0	0	0	6	45	222 ?	326	289 ?	401	228	240	320	271	206	97	2	0	0	0	0	0	2653
22	0	0	0	0	0	0	28	170	348	316	500	678 ?	598 ?	549 ?	247 ?	88	159	80	1	0	0	0	0	0	3763
23	0	0	0	0	0	0	25	163	277	427	580 ?	277	299	286 ?	148	217	213	16	1	0	0	0	0	0	2931
24	0	0	0	0	0	0	17	137	419 ?	507 ?	486 ?	516	443	527 ?	215	189	114	44	2	0	0	0	0	0	3618
25	0	0	0	0	0	0	21	159	353 ?	440 ?	332	470 ?	623 ?	309	149	77	45	15	1	0	0	0	0	0	2994
26	0	0	0	0	0	0	9	71	98	196	188	409	439	167	26	36	37	11	0	0	0	0	0	0	1688
27	0	0	0	0	0	0	28	172 ?	282	286	407 ?	387 ?	480	255 ?	80	203 ?	103	19	0	0	0	0	0	0	2702 ?
28	0	0	0	0	0	0	31	178	364 ?	?	?	?	?	591 ?	548 ?	314	185	63	1	0	0	0	0	0	2274 ?
29	0	0	0	0	0	0	33	170 ?	326 ?	195	239 ?	513 ?	271 ?	?	?	330 ?	237	66	0	0	0	0	0	0	2381 ?
30	0	0	0	0	0	0	21	157	373	384 ?	581 ?	561 ?	589 ?	617	368	253	184	52	0	0	0	0	0	0	4142 ?
Avg	0	0	0	0	0	0	31	152	305	333	357	401	402	368	295	277	197	70	4	0	0	0	0	0	2553
S D	0	0	0	0	0	0	19	67	120	152	150	154	171	196	191	169	110	46	4	0	0	0	0	0	966
S/A	0	0	0	0	0	0	0.62	0.44	0.4	0.45	0.42	0.39	0.43	0.53	0.65	0.61	0.56	0.66	0.94	0	0	0	0	0	0.38
Min	0	0	0	0	0	0	2	26	27	39	41	54	52	85	26	36	37	11	0	0	0	0	0	0	633
Max	0	0	0	0	0	0	82	232	421	561	581	678	685	731	639	541	384	171	14	0	0	0	0	0	4142

Daylight Data Recovery: 0% missing; 26% exceed the 15% QC threshold -- 4453 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: 7.60 uV/Wm-2
Serial Number: 25951F3
Calibration Date: 5/18/98