

Global Solar Radiation on a Horizontal Surface

Bethune-Cookman College - September 2000

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	50	225	437	622	761	782	856	706	410	126	52	53	14	0	0	0	0	0	5093
2	0	0	0	0	0	0	52	214	429	628	740	717	519	694	648	311	187	86	13	0	0	0	0	0	5239
3	0	0	0	0	0	0	45	218	430	626	821	812	588	880	787	623	302	46	1	0	0	0	0	0	6178
4	0	0	0	0	0	0	45	226	435	624	666	783	455	542	596	437	216	61	12	0	0	0	0	0	5097
5	0	0	0	0	0	0	37	221	426	619	726	633	877	904	77	8	23	37	4	0	0	0	0	0	4592
6	0	0	0	0	0	0	47	231	442	642	897	443	317	766	806	398	170	39	3	0	0	0	0	0	5201
7	0	0	0	0	0	0	10	38	364	650	782	621	214	97	197	488	289	65	10	0	0	0	0	0	3824
8	0	0	0	0	0	0	35	119	395	495	345	448	521	375	310	189	128	29	5	0	0	0	0	0	3393
9	0	0	0	0	0	0	36	144	356	121	11	10	21	38	46	60	13	4	1	0	0	0	0	0	861
10	0	0	0	0	0	0	32	181	436	633	744	909	913	875	706	374	147	70	9	0	0	0	0	0	6029
11	0	0	0	0	0	0	42	225	425	644	808	918	940	890	770	591	345	133	12	0	0	0	0	0	6744
12	0	0	0	0	0	0	16	178	438	638	803	899	923	878	761	584	367	133	10	0	0	0	0	0	6626
13	0	0	0	0	0	0	42	228	442	579	784	908	931	874	758	576	357	134	8	0	0	0	0	0	6618
14	0	0	0	0	0	0	39	204	429	610	773	831	844	847	720	545	336	127	7	0	0	0	0	0	6314
15	0	0	0	0	0	0	35	195	409	597	768	874	854	756	421	459	304	110	6	0	0	0	0	0	5788
16	0	0	0	0	0	0	27	115	223	344	298	124	163	85	97	114	98	20	2	0	0	0	0	0	1710
17	0	0	0	0	0	0	1	9	25	171	232	135	61	104	134	196	92	30	7	0	0	0	0	0	1196
18	0	0	0	0	0	0	36	213	430	599	791	881	925	763	664	559	347	122	3	0	0	0	0	0	6334
19	0	0	0	0	0	0	23	179	397	608	737	863	880	838	287	39	162	93	2	0	0	0	0	0	5108
20	0	0	0	0	0	0	21	160	334	427	398	643	107	367	269	116	60	13	0	0	0	0	0	0	2914
21	0	0	0	0	0	0	26	169	306	323	551	350	533	685	431	271	180	53	0	0	0	0	0	0	3878
22	0	0	0	0	0	0	11	49	117	210	398	340	342	275	131	148	55	5	0	0	0	0	0	0	2081
23	0	0	0	0	0	0	25	200	313	603	757	641	648	569	454	501	179	19	0	0	0	0	0	0	4909
24	0	0	0	0	0	0	16	96	445	567	473	702	458	682	680	497	252	46	3	0	0	0	0	0	4917
25	0	0	0	0	0	0	23	177	384	557	715	833	667	517	587	516	277	60	1	0	0	0	0	0	5315
26	0	0	0	0	0	0	34	157	385	480	515	781	775	464	475	275	215	67	1	0	0	0	0	0	4624
27	0	0	0	0	0	0	12	92	330	457	646	772	709	679	193	76	43	3	0	0	0	0	0	0	4012
28	0	0	0	0	0	0	24	189	388	227	126	58	47	45	63	167	193	120	1	0	0	0	0	0	1648
29	0	0	0	0	0	0	26	165	234	701	788	700	878	702	499	396	149	95	2	0	0	0	0	0	5334
30	0	0	0	0	0	0	15	175	421	597	459	461	454	855	731	460	203	51	1	0	0	0	0	0	4883
Avg	0	0	0	0	0	0	29	166	367	520	610	629	581	592	457	337	191	64	5	0	0	0	0	0	4549
S D	0	0	0	0	0	0	13	59	99	159	227	270	302	284	253	193	106	41	4	0	0	0	0	0	1655
S/A	0	0	0	0	0	0	0.44	0.35	0.27	0.31	0.37	0.43	0.52	0.48	0.55	0.57	0.56	0.65	0.93	0	0	0	0	0	0.36
Min	0	0	0	0	0	0	1	9	25	121	11	10	21	38	46	8	13	3	0	0	0	0	0	0	861
Max	0	0	0	0	0	0	52	231	445	701	897	918	940	904	806	623	367	134	14	0	0	0	0	0	6744

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: 5/18/1998

1	0	0	0	0	0	0	265	18	22	20	30	39	34	45	52	21	14	24	23	0	0	0	0	0	607
2	0	0	0	0	0	0	45	30	38	34	45	55	54	59	62	46	57	42	21	0	0	0	0	0	586
3	0	0	0	0	0	0	34	25	29	19	34	41	36	33	35	46	46	25	4	0	0	0	0	0	405
4	0	0	0	0	0	0	50	36	20	13	34	39	40	37	35	49	42	32	19	0	0	0	0	0	446
5	0	0	0	0	0	0	28	37	31	24	41	49	44	57	8	2	7	22	8	0	0	0	0	0	358
6	0	0	0	0	0	0	41	27	42	30	38	38	31	70	33	41	47	19	4	0	0	0	0	0	462
7	0	0	0	0	0	0	20	13	33	33	37	41	30	16	34	77	45	32	11	0	0	0	0	0	421
8	0	0	0	0	0	0	37	51	47	47	56	67	72	60	57	39	39	16	6	0	0	0	0	0	594
9	0	0	0	0	0	0	34	50	68	25	2	1	3	6	8	13	3	2	5	0	0	0	0	0	221
10	0	0	0	0	0	0	53	57	48	11	15	23	17	23	39	65	48	28	13	0	0	0	0	0	441
11	0	0	0	0	0	0	76	20	15	6	3	18	17	19	22	25	26	24	46	0	0	0	0	0	318
12	0	0	0	0	0	0	19	13	17	3	4	16	13	17	22	23	18	23	47	0	0	0	0	0	237
13	0	0	0	0	0	0	39	24	24	23	11	22	18	18	21	25	22	20	35	0	0	0	0	0	302
14	0	0	0	0	0	0	42	9	43	12	21	41	33	18	27	34	30	23	22	0	0	0	0	0	355
15	0	0	0	0	0	0	36	29	28	21	21	27	30	44	58	58	56	42	12	0	0	0	0	0	461
16	0	0	0	0	0	0	29	47	61	66	47	19	24	14	19	27	30	11	1	0	0	0	0	0	395
17	0	0	0	0	0	0	1	4	7	34	40	22	10	17	26	43	31	22	16	0	0	0	0	0	273
18	0	0	0	0	0	0	31	23	12	18	24	23	21	38	41	35	24	14	10	0	0	0	0	0	314
19	0	0	0	0	0	0	20	47	50	39	41	25	26	33	17	9	53	56	2	0	0	0	0	0	419
20	0	0	0	0	0	0	34	52	54	59	43	43	13	42	38	24	21	6	0	0	0	0	0	0	432
21	0	0	0	0	0	0	27	45	26	60	80	43	61	71	63	61	62	31	2	0	0	0	0	0	632
22	0	0	0	0	0	0	20	24	35	44	63	54	54	48	25	32	18	2	3	0	0	0	0	0	421
23	0	0	0	0	0	0	26	72	15	13	27	48	42	53	61	61	41	11	0	0	0	0	0	0	470
24	0	0	0	0	0	0	16	19	36	21	31	35	29	27	35	37	34	26	10	0	0	0	0	0	356
25	0	0	0	0	0	0	21	33	31	22	32	41	49	48	58	55	52	23	9	0	0	0	0	0	474
26	0	0	0	0	0	0	40	53	47	51	43	37	45	43	69	48	56	36	6	0	0	0	0	0	575
27	0	0	0	0	0	0	17	45	49	38	60	32	45	55	30	13	9	2	1	0	0	0	0	0	397
28	0	0	0	0	0	0	26	39	59	43	21	8	6	6	12	39	74	61	2	0	0	0	0	0	396
29	0	0	0	0	0	0	32	39	54	48	46	33	27	52	49	51	40	59	2	0	0	0	0	0	532
30	0	0	0	0	0	0	25	63	54	7	27	62	51	127	78	82	68	47	10	0	0	0	0	0	701
Avg	0	0	0	0	0	0	39	35	36	29	34	35	33	40	38	39	37	26	12	0	0	0	0	0	433
S D	0	0	0	0	0	0	44	17	16	17	18	15	17	24	19	19	18	16	12	0	0	0	0	0	116
S/A	0	0	0	0	0	0	1.12	0.48	0.43	0.57	0.52	0.43	0.51	0.61	0.49	0.49	0.49	0.6	1.06	0	0	0	0	0	0.27
Min	0	0	0	0	0	0	1	4	7	3	2	1	3	6	8	2	3	2	0	0	0	0	0	0	221
Max	0	0	0	0	0	0	265	72	68	66	80	67	72	127	78	82	74	61	47	0	0	0	0	0	701

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 4453 total daylight 5-minute measurements.

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 - September 2000

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	46	220	405	589 ?	636 ?	608 ?	576 ?	495 ?	290	111	45	47	13	0	0	0	0	0	4082 ?
2	0	0	0	0	0	0	48	205	409	577 ?	631 ?	615 ?	469	561 ?	585	280	160	74	11	0	0	0	0	0	4625
3	0	0	0	0	0	0	41	210	415	562 ?	?	573 ?	370 ?	601 ?	?	566 ?	260	39	1	0	0	0	0	0	3639 ?
4	0	0	0	0	0	0	44	215	425	572 ?	553 ?	564 ?	373	446	382 ?	405	196	52	10	0	0	0	0	0	4237 ?
5	0	0	0	0	0	0	34	211	410	561 ?	461 ?	379 ?	717 ?	695 ?	69	7	20	31	4	0	0	0	0	0	3597 ?
6	0	0	0	0	0	0	47	207	419 ?	528 ?	?	325	237	582 ?	534 ?	303	148	34	3	0	0	0	0	0	3366 ?
7	0	0	0	0	0	0	9	34	178 ?	561 ?	647 ?	310 ?	187	84	170	427	268	57	9	0	0	0	0	0	2939
8	0	0	0	0	0	0	33	103	289 ?	371 ?	300	389	454	323	266	163	109	25	5	0	0	0	0	0	2829
9	0	0	0	0	0	0	32	129	310	105	10	9	17	33	39	51	12	4	1	0	0	0	0	0	750
10	0	0	0	0	0	0	28	164	334 ?	566 ?	434 ?	?	788 ?	?	507 ?	304	125	64	8	0	0	0	0	0	3321 ?
11	0	0	0	0	0	0	37	220	407	?	?	?	?	?	?	?	322	129	9	0	0	0	0	0	1125 ?
12	0	0	0	0	0	0	14	175	403 ?	?	?	754 ?	?	?	?	?	359	129	8	0	0	0	0	0	1842 ?
13	0	0	0	0	0	0	38	205 ?	380 ?	490 ?	648 ?	?	?	?	?	467 ?	347	131	5	0	0	0	0	0	2713 ?
14	0	0	0	0	0	0	35	195	409	527 ?	?	527 ?	616 ?	?	?	499 ?	323	123	6	0	0	0	0	0	3259 ?
15	0	0	0	0	0	0	31	187	395	532 ?	?	?	601 ?	553 ?	341	351 ?	230 ?	100	5	0	0	0	0	0	3327 ?
16	0	0	0	0	0	0	24	101	193	300	261	107	141	72	83	98	85	17	2	0	0	0	0	0	1485
17	0	0	0	0	0	0	1	8	21	148	201	116	52	90	114	171	79	25	6	0	0	0	0	0	1031
18	0	0	0	0	0	0	33	206	401 ?	533 ?	489 ?	655 ?	718 ?	610 ?	519 ?	487 ?	313 ?	120	3	0	0	0	0	0	5089 ?
19	0	0	0	0	0	0	21	155	344 ?	490 ?	450 ?	?	?	?	104 ?	34	141	81	2	0	0	0	0	0	1824 ?
20	0	0	0	0	0	0	18	145	288	365	364	479 ?	95	239	240	102	51	11	0	0	0	0	0	0	2398
21	0	0	0	0	0	0	24	147	257	283	488	272	448	537 ?	386	235	155	46	0	0	0	0	0	0	3276
22	0	0	0	0	0	0	9	42	100	180	349	294	295	235	112	130	48	5	0	0	0	0	0	0	1800
23	0	0	0	0	0	0	23	179	306	557 ?	648 ?	588	326 ?	466	366	425 ?	161	16	0	0	0	0	0	0	4063 ?
24	0	0	0	0	0	0	16	93	483 ?	440 ?	449	581 ?	295 ?	326 ?	?	467	238	42	3	0	0	0	0	0	3430 ?
25	0	0	0	0	0	0	22	168	369	543	652 ?	573 ?	572	333 ?	406 ?	441 ?	257	56	1	0	0	0	0	0	4392 ?
26	0	0	0	0	0	0	33	143	330 ?	447	453	577 ?	514 ?	314 ?	363	212	193	61	1	0	0	0	0	0	3642
27	0	0	0	0	0	0	10	80	306	405	541 ?	593 ?	564 ?	500 ?	171	68	40	3	0	0	0	0	0	0	3283
28	0	0	0	0	0	0	24	155	317 ?	200	110	52	42	40	54	145	152	89	2	0	0	0	0	0	1381
29	0	0	0	0	0	0	23	126	209	397 ?	601 ?	438 ?	?	517 ?	379 ?	322 ?	120	86	2	0	0	0	0	0	3219 ?
30	0	0	0	0	0	0	13	147	348 ?	544 ?	372	373	311	622 ?	564 ?	383 ?	149	44	1	0	0	0	0	0	3874 ?
Avg	0	0	0	0	0	0	27	153	329	442	448	430	391	386	294	273	170	58	4	0	0	0	0	0	2995
S D	0	0	0	0	0	0	12	57	102	143	174	199	220	204	172	163	101	40	4	0	0	0	0	0	1118
S/A	0	0	0	0	0	0	0.45	0.38	0.31	0.32	0.39	0.46	0.56	0.53	0.59	0.6	0.59	0.68	0.9	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	1	8	21	105	10	9	17	33	39	7	12	3	0	0	0	0	0	0	750
Max	0	0	0	0	0	0	48	220	483	589	652	754	788	695	585	566	359	131	13	0	0	0	0	0	5089

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:	5/18/1998