

Bethune-Cookman College
29.18 N Latitude 81.02 W Longitude 20 Meters AMSL Time Zone -5

July 2001

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

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	14	72	195	305	468	790	1023	1126	968	843	604	272	129	58	11	0	0	0	0	6877	
2	0	0	0	0	0	21	121	301	340	772	884	972	1008	980	882	729	487	249	72	8	0	0	0	0	7825	
3	0	0	0	0	0	25	148	202	533	722	859	975	979	980	868	680	517	278	91	5	0	0	0	0	7864	
4	0	0	0	0	0	25	129	315	471	658	866	960	986	955	866	639	188	125	51	8	0	0	0	0	7240	
5	0	0	0	0	0	16	122	325	413	634	834	529	678	908	127	7	15	29	29	8	0	0	0	0	4674	
6	0	0	0	0	0	17	71	174	470	709	834	828	576	95	53	169	340	257	63	2	0	0	0	0	4660	
7	0	0	0	0	0	15	112	308	501	731	880	905	983	940	837	672	475	249	71	3	0	0	0	0	7684	
8	0	0	0	0	0	6	77	230	380	693	682	503	849	570	55	509	303	127	98	5	0	0	0	0	5087	
9	0	0	0	0	0	5	95	242	354	443	730	758	767	829	419	534	411	264	73	7	0	0	0	0	5931	
10	0	0	0	0	0	7	60	165	433	645	753	744	118	7	19	88	111	121	49	7	0	0	0	0	3328	
11	0	0	0	0	0	14	105	248	461	579	753	505	617	503	625	708	290	170	114	10	0	0	0	0	5700	
12	0	0	0	0	0	16	120	276	367	651	752	811	281	41	45	98	39	39	28	6	0	0	0	0	3571	
13	0	0	0	0	0	12	92	249	452	582	112	61	58	126	487	460	459	224	34	5	0	0	0	0	3414	
14	0	0	0	0	0	6	84	159	305	606	495	491	57	224	146	163	116	57	23	2	0	0	0	0	2935	
15	0	0	0	0	0	8	42	121	241	312	494	949	968	877	867	636	518	299	44	10	0	0	0	0	6385	
16	0	0	0	0	0	6	80	166	367	335	630	603	602	603	805	604	344	196	46	19	0	0	0	0	5407	
17	0	0	0	0	0	11	104	285	518	703	882	838	887	820	646	237	148	158	59	6	0	0	0	0	6302	
18	0	0	0	0	0	9	88	302	487	689	751	847	899	648	847	690	466	67 ?	9	4	0	0	0	0	6803	
19	0	0	0	0	0	10	87	250	454	640	702	924	811	606	32	149	269	154	85	7	0	0	0	0	5179	
20	0	0	0	0	0	10	93	216	433	613	445	749	629	281	129	78	24	39	33	4	0	0	0	0	3776	
21	0	0	0	0	0	3	45	176	357	478	472	564	963	712	640	665	230	112	60	8	0	0	0	0	5485	
22	0	0	0	0	0	3	32	221	483	518	814	990	1078	938	844	537	351	86	60	9	0	0	0	0	6964	
23	0	0	0	0	0	3	61	213	183	223	536	413	563	404	349	396	136	61	35	5	0	0	0	0	3582	
24	0	0	0	0	0	6	73	302	505	605	836	757	758	715	713	346	127	115	48	6	0	0	0	0	5911	
25	0	0	0	0	0	11	68	233	525	744	823	769	773	682	817	396	437	351	72	8	0	0	0	0	6709	
26	0	0	0	0	0	9	66	179	422	791	518	845	1004	931	155	58	101	83	28	4	0	0	0	0	5193	
27	0	0	0	0	0	5	59	260	469	536	470	517	847	956	597	715	325	164	88	6	0	0	0	0	6013	
28	0	0	0	0	0	10	95	274	452	455	830	986	993	942	831	670	465	265	81	5	0	0	0	0	7354	
29	0	0	0	0	0	5	70	263	474	652	835	950	986	933	849	673	426	276	90	8	0	0	0	0	7491	
30	0	0	0	0	0	10	90	275	466	632	838	867	862	879	746	671	369	174	30	1	0	0	0	0	6911	
31	0	0	0	0	0	3	4	8	20	42	271	254	605	597	369	314	218	126	33	3	0	0	0	0	2868	
Avg	0	0	0	0	0	10	83	230	408	576	689	738	752	666	533	448	290	163	57	6	0	0	0	0	5649	
S D	0	0	0	0	0	6	30	67	110	169	196	238	292	313	327	243	157	88	26	3	0	0	0	0	1544	
S/A	0	0	0	0	0	0.59	0.37	0.29	0.27	0.29	0.28	0.32	0.39	0.47	0.61	0.54	0.54	0.54	0.45	0.54	0	0	0	0	0.27	
Min	0	0	0	0	0	3	4	8	20	42	112	61	57	7	19	7	15	29	9	1	0	0	0	0	2868	
Max	0	0	0	0	0	25	148	325	533	791	884	1023	1126	980	882	729	518	351	114	19	0	0	0	0	7864	
n	0	0	0	0	0	157	372	372	372	372	372	372	371	370	372	372	372	372	369	372	124	0	0	0	0	5111

Daylight Data Recovery: 0.0% missing; 0.1% exceed the 15% QC threshold -- 5117 total daylight measurements.

Instrument: Eppley PSP Serial Number: 13434F3 Calibration Factor: 8.670 μV/W/m² Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Bethune-Cookman College
29.18 N Latitude 81.02 W Longitude 20 Meters AMSL Time Zone -5

July 2001

Estimated Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Instrument: Calculated
Watt-Hours per Square Meter

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	25	83	267	352	419	725	861	837	747	660	431	104	61	39	33	0	0	0	0	5643
2	0	0	0	0	0	54	311	536	318	795	888	910	926	927	896	831	602	343	49	27	0	0	0	0	8413
3	0	0	0	0	0	57	284	227	724	817	837	902	852	880	875	753	737	499	220	14	0	0	0	0	8679
4	0	0	0	0	0	48	211	456	558	615	707	832	834	815	764	574	67	27	37	22	0	0	0	0	6568
5	0	0	0	0	0	27	217	406	320	562	677	240	445	657	44	1	4	12	24	22	0	0	0	0	3657
6	0	0	0	0	0	34	35	59	478	712	667	536	250	13	7	31	150	217	66	22	0	0	0	0	3279
7	0	0	0	0	0	35	220	445	638	729	746	668	782	747	692	610	515	305	98	13	0	0	0	0	7242
8	0	0	0	0	0	18	74	138	205	618	314	173	505	267	8	244	102	55	124	7 ?	0	0	0	0	2852
9	0	0	0	0	0	19	57	101	163	218	375	324	202	428	132	236	140	199	57	25	0	0	0	0	2677
10	0	0	0	0	0	23	43	45	278	427	397	324	10	0	3	16	26	37	33	13	0	0	0	0	1673
11	0	0	0	0	0	33	61	125	296	288	419	157	218	161	277	360	39	45	104	21	0	0	0	0	2603
12	0	0	0	0	0	59	47	93	254	542	563	552	123	5	6	18	7	16	19	9 ?	0	0	0	0	2313
13	0	0	0	0	0	31	34	131	283	256	14	8	7	17	130	119	299	140	8	8	0	0	0	0	1486
14	0	0	0	0	0	21	50	45	94	216	46	84	6	27	24	29	28	23	16	2 ?	0	0	0	0	710
15	0	0	0	0	0	22	33	39	45	53	66	690	675	497	738	504	545	325	32	30	497	0	0	0	4294
16	0	0	0	0	0	20	56	30	150	98	225	93	94	139	467	399	202	134	30	76	0	0	0	0	2213
17	0	0	0	0	0	59	96	44	475	668	794	572	621	566	351	46	29	40	35	6	0	0	0	0	4401
18	0	0	0	0	0	112	53	52	387	715	651	616	623	413	784	715	549	29	10	9	0	0	0	0	5717
19	0	0	0	0	0	36	85	81	218	492	476	766	574	302	5	17	56	83	108	17	302	0	0	0	3317
20	0	0	0	0	0	29	67	49	110	324	39	253	307	108	21	13	6	11	28	10	0	0	0	0	1374
21	0	0	0	0	0	10	28	57	61	68	66	157	503	194	297	490	66	27	65	26	0	0	0	0	2114
22	0	0	0	0	0	11	23	43	82	298	484	702	845	707	653	296	217	18	57	38	0	0	0	0	4475
23	0	0	0	0	0	9	31	29	23	21	125	82	170	39	50	46	17	12	16	20	0	0	0	0	691
24	0	0	0	0	0	17	43	45	103	252	694	339	223	283	393	155	12	19	9	16	0	0	0	0	2603
25	0	0	0	0	0	60	48	69	52	258	607	455	511	341	599	166	325	464	72	9	0	0	0	0	4035
26	0	0	0	0	0	32	33	19	84	155	299	647	844	741	23	7	21	24	16	6	0	0	0	0	2950
27	0	0	0	0	0	22 ?	45	33	49	50	180	191	480	840	424	765	191	132	127	26	0	0	0	0	3554
28	0	0	0	0	0	43 ?	80	2 ?	25	57	566	852	839	830	780	722	598	434	126	13	0	0	0	0	5966
29	0	0	0	0	0	19	47	3 ?	10	35	505	836	856	822	811	701	520	423	148	24	0	0	0	0	5758
30	0	0	0	0	0	40	40	1	23	37	331	675	632	731	613	641	347	134	6	12	0	0	0	0	4264
31	0	0	0	0	0	0 ?	2	2	5	4	21	19	114	116	30	36	39	33	13	42	0	0	0	0	477
Avg	0	0	0	0	0	33	82	118	221	348	436	468	481	431	373	322	212	139	58	20	0	0	0	0	3742
S D	0	0	0	0	0	22	79	148	197	266	273	298	306	323	328	290	226	156	51	14	0	0	0	0	2171
S/A	0	0	0	0	0	0.66	0.96	1.25	0.89	0.76	0.63	0.64	0.64	0.75	0.88	0.9	1.07	1.12	0.89	0.72	0	0	0	0	0.58
Min	0	0	0	0	0	0	2	1	5	4	14	8	6	0	3	1	4	11	6	2	0	0	0	0	477
Max	0	0	0	0	0	112	311	536	724	817	888	910	926	927	896	831	737	499	220	76	0	0	0	0	8679
n	0	0	0	0	0	147	371	354	371	372	372	372	372	372	372	372	372	372	372	120	0	0	0	0	5083

Daylight Data Recovery: 0.0% missing; 0.7% exceed the 15% QC threshold -- 5117 total daylight measurements.

Instrument: Calculated Serial Number: Estimated Calibration Factor: Global = Diffuse + Direct * COS (Zenith Angle) Calibration Date: N/A

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Bethune-Cookman College
29.18 N Latitude 81.02 W Longitude 20 Meters AMSL Time Zone -5

July 2001

Diffuse Solar Radiation (Shadow Band) on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

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	13	54	79	98	148	141	190	295	249	261	279	209	103	51	10	0	0	0	0	2179
2	0	0	0	0	0	18	53	81	155	162	94	91	90	88	92	103	132	105	62	6	0	0	0	0	1332
3	0	0	0	0	0	21	89	99	97	98	115	103	135	133	97	109	84	76	43	5	0	0	0	0	1305
4	0	0	0	0	0	22	82	128	134	186	237	156	159	170	192	201	145	115	44	7	0	0	0	0	1976
5	0	0	0	0	0	15	74	162	223	202	236	296	237	275	86	7	13	25	25	7	0	0	0	0	1881
6	0	0	0	0	0	15	65	149	178	167	243	311	329	82	46	146	258	167	49	2	0	0	0	0	2208
7	0	0	0	0	0	14	64	126	119	176	219	261	208	221	226	212	171	127	48	3	0	0	0	0	2196
8	0	0	0	0	0	5	60	169	256	225	402	335	348	308	48	328	243	107	71	5	0	0	0	0	2912
9	0	0	0	0	0	4	82	203	251	284	391	448	567	418	299	356	329	185	61	6	0	0	0	0	3884
10	0	0	0	0	0	6	52	147	265	322	403	433	108	6	17	77	95	106	42	6	0	0	0	0	2087
11	0	0	0	0	0	12	93	199	286	357	381	354	401	346	388	435	267	153	93	9	0	0	0	0	3773
12	0	0	0	0	0	14	85	235	212	242	253	281	160	37	40	85	35	33	24	6	0	0	0	0	1742
13	0	0	0	0	0	11	86	192	288	392	100	53	51	110	372	373	284	164	32	5	0	0	0	0	2513
14	0	0	0	0	0	5	75	142	248	441	456	410	51	198	124	140	100	48	21	2	0	0	0	0	2460
15	0	0	0	0	0	7	36	105	215	272	435	284	301	400	214	253	203	163	38	8	0	0	0	0	2936
16	0	0	0	0	0	5	70	154	278	263	434	514	509	470	398	296	223	141	41	17	0	0	0	0	3813
17	0	0	0	0	0	9	87	268	232	201	183	289	273	276	332	202	131	143	52	5	0	0	0	0	2682
18	0	0	0	0	0	8	78	282	251	151	183	255	283	253	157	152	141	49 ?	8	4	0	0	0	0	2255
19	0	0	0	0	0	9	75	221	320	274	281	189	245	315	30	136	237	124	60	6	0	0	0	0	2520
20	0	0	0	0	0	9	81	197	367	368	411	504	326	175	110	67	21	35	29	3	0	0	0	0	2703
21	0	0	0	0	0	3	39	155	322	428	414	412	467	525	384	296	190	102	46	7	0	0	0	0	3789
22	0	0	0	0	0	3	28	204	423	288	395	315	245	262	265	318	221	79	50	7	0	0	0	0	3102
23	0	0	0	0	0	3	56	202	170	208	425	335	395	367	305	362	126	56	33	4	0	0	0	0	3046
24	0	0	0	0	0	5	65	260 ?	382 ?	334 ?	229	433	538	445	367	223	119	107	47	6	4	0	0	0	3562
25	0	0	0	0	0	10	61	206	355 ?	481 ?	292	335	270	355	293	266	262	171	56	8	0	0	0	0	3419
26	0	0	0	0	0	8	59	172	335	536 ?	255	228	174	219	135	54	89	74	24	4	0	0	0	0	2366
27	0	0	0	0	0	5	51	233	337 ?	456	313	332	375	154	222	143	219	116	60	5	0	0	0	0	3022
28	0	0	0	0	0	9	83	280	437	387	330	174	169	150	149	132	121	97	55	5	0	0	0	0	2576
29	0	0	0	0	0	4	64	267	467	499 ?	357	153	146	148	140	151	127	115	60	8	0	0	0	0	2707
30	0	0	0	0	0	8	84	276	453	580 ?	419 ?	225	242	183	208	194	161	121	29	1	0	0	0	0	3184
31	0	0	0	0	0	3	4	7	17	39	253	236	493	485	343	287	195	113	32	3	0	0	0	0	2509
Avg	0	0	0	0	0	9	66	181	264	296	299	288	277	252	205	206	166	107	45	6	0	0	0	0	2666
S D	0	0	0	0	0	5	20	67	112	136	110	118	142	136	121	108	79	43	17	3	0	0	0	0	695
S/A	0	0	0	0	0	0.58	0.31	0.37	0.42	0.46	0.37	0.41	0.51	0.54	0.59	0.53	0.48	0.4	0.39	0.52	0	0	0	0	0.26
Min	0	0	0	0	0	3	4	7	17	39	94	53	51	6	17	7	13	25	8	1	0	0	0	0	1305
Max	0	0	0	0	0	22	93	282	467	580	456	514	567	525	398	435	329	185	93	17	0	0	0	0	3884
n	0	0	0	0	0	157	370	366	348	340	367	372	371	370	371	372	372	369	372	124	0	0	0	0	5041

Daylight Data Recovery: 0.0% missing; 1.5% exceed the 15% QC threshold -- 5117 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25951F3 Calibration Factor: 7.600 μV/W/m² Calibration Date: 05/1998

Data & Flag	Hour Column	Day Column
<value> *	> 20% Missing	> 10% Missing
<value> ?	> 20% Fail QC	> 10% Fail QC
<blank> *	> 90% Missing	> 90% Missing
<blank> ?	> 90% Fail QC	> 90% Fail QC

Note: Daily values with a missing flag (*) are not used in monthly statistics.