

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

October 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	0	33	191	413	515	702	875	906	812	650	504	283	84	5	0	0	0	0	0	5972
2	0	0	0	0	0	0	38	195	411	604	771	859	878	818	687	467	267	67	0	0	0	0	0	0	6063
3	0	0	0	0	0	0	28	177	405	595	743	854	871	813	679	489	272	69	0	0	0	0	0	0	5995
4	0	0	0	0	0	0	22	83	371	587	750	844	862	804	648	433	217	49	0	0	0	0	0	0	5671
5	0	0	0	0	0	0	19	177	249	501	664	625	377	677	484	505	180	38	0	0	0	0	0	0	4494
6	0	0	0	0	0	0	28	124	304	554	662	686	670	652	599	365	243	56	0	0	0	0	0	0	4944
7	0	0	0	0	0	0	18	111	92	140	477	194	243	105	88	58	46	3	0	0	0	0	0	0	1576
8	0	0	0	0	0	0	12	80	77	43	34	163	88	216	114	63	46	16	0	0	0	0	0	0	953
9	0	0	0	0	0	0	17	66	191	303	331	483	598	578	565	199	28	19	0	0	0	0	0	0	3378
10	0	0	0	0	0	0	24	144	343	506	304	510	647	544	452	172	41	10	0	0	0	0	0	0	3698
11	0	0	0	0	0	0	25	158	372	552	721	802	808	760	619	439	225	32	0	0	0	0	0	0	5513
12	0	0	0	0	0	0	34	192	328	542	700	797	546	726	375	211	95	26	0	0	0	0	0	0	4572
13	0	0	0	0	0	0	31	102	283	419	265	394	567	745	498	396	221	51	0	0	0	0	0	0	3973
14	0	0	0	0	0	0	32	94	268	299	398	558	553	432	191	53	12	7	0	0	0	0	0	0	2897
15	0	0	0	0	0	0	23	109	244	530	651	783	632	612	599	396	180	42	0	0	0	0	0	0	4801
16	0	0	0	0	0	0	12	81	127	177	333	429	391	380	282	183	100	21	0	0	0	0	0	0	2515
17	0	0	0	0	0	0	25	99	193	380	634	638	605	345	364	271	169	42	0	0	0	0	0	0	3765
18	0	0	0	0	0	0	22	148	358	537	694	786	813	743	422	310	192	30	0	0	0	0	0	0	5055
19	0	0	0	0	0	0	14	145	348	511	384	329	454	400	250	205	148	28	0	0	0	0	0	0	3217
20	0	0	0	0	0	0	17	82	251	382	543	659	604	554	450	257	84	22	0	0	0	0	0	0	3906
21	0	0	0	0	0	0	8	124	280	282	392	412	303	468	236	34	15	2	0	0	0	0	0	0	2556
22	0	0	0	0	0	0	5	82	319	340	681	604	657	629	444	389	158	35	0	0	0	0	0	0	4341
23	0	0	0	0	0	0	8	67	222	440	240	190	211	272	115	125	89	41	0	0	0	0	0	0	2018
24	0	0	0	0	0	0	16	78	196	293	325	629	541	713	559	224	96	35	0	0	0	0	0	0	3705
25	0	0	0	0	0	0	21	53	256	455	417	360	404	626	407	243	132	23	0	0	0	0	0	0	3395
26	0	0	0	0	0	0	5	35	232	393	592	538	463	500	622	317	128	45	0	0	0	0	0	0	3870
27	0	0	0	0	0	0	26	152	294	528	671	793	723	724	441	322	102	19	0	0	0	0	0	0	4796
28	0	0	0	0	0	0	10	82	187	477	661	770	773	561	291	208	116	24	0	0	0	0	0	0	4160
29	0	0	0	0	0	0	2	9	29	85	178	172	257	318	331	140	62	23	0	0	0	0	0	0	1604
30	0	0	0	0	0	0	5	6	62	170	81	90	129	211	284	84	49	7	0	0	0	0	0	0	1177
31	0	0	0	0	0	0	9	59	213	396	478	594	718	493	461	305	111	24	0	0	0	0	0	0	3863
Avg	0	0	0	0	0	0	19	107	255	404	499	562	558	556	426	270	132	32	0	0	0	0	0	0	3821
S D	0	0	0	0	0	0	10	52	104	157	212	237	229	200	175	143	80	20	1	0	0	0	0	0	1416
S/A	0	0	0	0	0	0	0.51	0.48	0.41	0.39	0.42	0.42	0.41	0.36	0.41	0.53	0.6	0.62	5.21	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	2	6	29	43	34	90	88	105	88	34	12	2	0	0	0	0	0	0	953
Max	0	0	0	0	0	0	38	195	413	604	771	875	906	818	687	505	283	84	5	0	0	0	0	0	6063
n	0	0	0	0	0	0	217	371	372	372	372	372	372	372	372	372	372	372	303	3	0	0	0	0	4242

Daylight Data Recovery: 0.0% missing; 0.0% exceed the 15% QC threshold -- 4243 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.

October 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	0	4 ?	7	8	5	23	22	32	38	35	28	31	47	38	0	0	0	0	0	320
2	0	0	0	0	0	0	144 ?	5 ?	6	0 ?	11	15	20	24	25	24	23	35	28	0	0	0	0	0	359 ?
3	0	0	0	0	0	0	15 ?	11 ?	5	0 ?	26	13	21	25	30	35	39	49	66	0	0	0	0	0	334 ?
4	0	0	0	0	0	0	20	34	36	7	9	21	30	39	43	41	53	40	0	0	0	0	0	0	374
5	0	0	0	0	0	0	25	45	61	26	61	56	34	54	42	51	33	26	0	0	0	0	0	0	514
6	0	0	0	0	0	0	45	34 ?	53	10 ?	28	39	56	48	44	58	69	36	0	0	0	0	0	0	521
7	0	0	0	0	0	0	31	47	23	20	60	14	23	3	7	8	9	1	0	0	0	0	0	0	247
8	0	0	0	0	0	0	13	25	9	6	4	24	10	23	9	5	3	8	0	0	0	0	0	0	138
9	0	0	0	0	0	0	27	31	53	49	48	64	73	61	53	33	10	15	0	0	0	0	0	0	516
10	0	0	0	0	0	0	59	18	31	32	45	74	75	63	70	26	4	6	0	0	0	0	0	0	501
11	0	0	0	0	0	0	21	7	25	4	16	26	28	34	45	40	34	17	0	0	0	0	0	0	297
12	0	0	0	0	0	0	37	47	37	8	28	33	50	51	63	47	5	14	0	0	0	0	0	0	421
13	0	0	0	0	0	0	49	28	57	25	29	56	81	55	50	47	43	33	0	0	0	0	0	0	552
14	0	0	0	0	0	0	62	34	58	58	62	61	64	66	25	8	4	4	0	0	0	0	0	0	506
15	0	0	0	0	0	0	53	26	52	30	24	31	55	59	49	49	43	36	0	0	0	0	0	0	505
16	0	0	0	0	0	0	20	40	14	5	49	45	46	52	37	11	4	8	0	0	0	0	0	0	331
17	0	0	0	0	0	0	43	35	43	60	64	70	69	40	57	59	48	25	0	0	0	0	0	0	612
18	0	0	0	0	0	0	16	10	38	7	14	30	28	35	48	46	35	26	0	0	0	0	0	0	332
19	0	0	0	0	0	0	21	4	38	15	34	19	36	38	31	36	36	16	0	0	0	0	0	0	324
20	0	0	0	0	0	0	38	36	58	33	46	67	78	67	63	59	9	4	0	0	0	0	0	0	558
21	0	0	0	0	0	0	11	39	45	49	56	48	18	66	13	2	2	3	0	0	0	0	0	0	352
22	0	0	0	0	0	0	6	21	77	40	42	57	37	63	65	62	39	37	0	0	0	0	0	0	547
23	0	0	0	0	0	0	18	14	34	47	16	7	6	22	5	6	9	25	0	0	0	0	0	0	209
24	0	0	0	0	0	0	51	20	39	40	43	47	29	48	67	33	33	36	0	0	0	0	0	0	486
25	0	0	0	0	0	0	78	18	35	29	36	28	37	46	52	36	30	14	0	0	0	0	0	0	436
26	0	0	0	0	0	0	13	14	40	21	61	57	58	51	54	48	34	37	0	0	0	0	0	0	488
27	0	0	0	0	0	0	42	19	39	14	22	32	37	44	58	52	31	16	0	0	0	0	0	0	404
28	0	0	0	0	0	0	7	27	42	24	19	31	42	58	38	28	35	13	0	0	0	0	0	0	364
29	0	0	0	0	0	0	2	2	3	3	7	9	8	10	28	7	6	6	0	0	0	0	0	0	90
30	0	0	0	0	0	0	11	3	3	4	3	6	3	5	27	5	9	2	0	0	0	0	0	0	81
31	0	0	0	0	0	0	20	35	42	55	48	57	43	52	55	40	34	18	0	0	0	0	0	0	500
Avg	0	0	0	0	0	0	32	24	36	23	33	37	40	43	42	33	26	21	4	0	0	0	0	0	394
S D	0	0	0	0	0	0	28	14	19	19	19	20	22	18	18	19	18	14	14	0	0	0	0	0	139
S/A	0	0	0	0	0	0	0.87	0.58	0.54	0.8	0.57	0.54	0.55	0.42	0.44	0.56	0.69	0.68	3.33	0	0	0	0	0	0.35
Min	0	0	0	0	0	0	2	2	3	0	3	6	3	3	5	2	2	1	0	0	0	0	0	0	81
Max	0	0	0	0	0	0	144	47	77	60	64	74	81	67	70	62	69	49	66	0	0	0	0	0	612
n	0	0	0	0	0	0	195	360	372	353	372	372	372	372	372	372	372	302	3	0	0	0	0	0	4189

Daylight Data Recovery: 0.0% missing; 1.3% exceed the 15% QC threshold -- 4243 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

October 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	0	33	188	366 ?	452 ?	470 ?	?	?	?	503 ?	447 ?	272	78	4	0	0	0	0	0	2814 ?
2	0	0	0	0	0	0	41	195	375 ?	?	?	?	?	?	?	358 ?	259	63	0	0	0	0	0	0	1291 ?
3	0	0	0	0	0	0	29	177	370 ?	?	569 ?	?	?	?	?	413 ?	259	63	0	0	0	0	0	0	1880 ?
4	0	0	0	0	0	0	21	73	210 ?	400 ?	?	?	?	?	543 ?	371 ?	199	43	0	0	0	0	0	0	1861 ?
5	0	0	0	0	0	0	17	132	221	422 ?	478 ?	484 ?	296	439 ?	345 ?	422 ?	155	34	0	0	0	0	0	0	3446 ?
6	0	0	0	0	0	0	25	120	250	448 ?	515 ?	544 ?	559 ?	465 ?	373 ?	313	204	51	0	0	0	0	0	0	3866 ?
7	0	0	0	0	0	0	16	99	82	128	432	183	224	103	83	54	43	3	0	0	0	0	0	0	1450
8	0	0	0	0	0	0	11	74	74	39	31	144	80	198	108	60	45	16	0	0	0	0	0	0	880
9	0	0	0	0	0	0	15	58	167	274	296	431	502	475 ?	370 ?	181	25	17	0	0	0	0	0	0	2812
10	0	0	0	0	0	0	22	140	329	426 ?	272	424	511 ?	470	358	158	40	10	0	0	0	0	0	0	3160
11	0	0	0	0	0	0	24	156	361	482 ?	?	?	688 ?	?	506 ?	410	215	30	0	0	0	0	0	0	2873 ?
12	0	0	0	0	0	0	32	176	298	490 ?	527 ?	?	393 ?	579 ?	333	188	93	24	0	0	0	0	0	0	3134 ?
13	0	0	0	0	0	0	29	97	235	231 ?	244	350	481	584 ?	424	373	208	47	0	0	0	0	0	0	3302 ?
14	0	0	0	0	0	0	29	86	243	264	353	510	458	384	175	49	11	7	0	0	0	0	0	0	2568
15	0	0	0	0	0	0	21	103	221	370 ?	458 ?	?	543	515 ?	479 ?	305 ?	167	38	0	0	0	0	0	0	3219 ?
16	0	0	0	0	0	0	10	72	121	174	298	395	355	342	259	178	99	20	0	0	0	0	0	0	2322
17	0	0	0	0	0	0	22	92	174	345	429 ?	568	495	315	307	243	145	39	0	0	0	0	0	0	3175
18	0	0	0	0	0	0	21	146	323 ?	533 ?	?	672 ?	?	?	336	266	175	27	0	0	0	0	0	0	2498 ?
19	0	0	0	0	0	0	13	144	332	457 ?	333	315	347	272 ?	231	163	137	27	0	0	0	0	0	0	2771
20	0	0	0	0	0	0	15	75	227	364	510	581 ?	522	476	369	230	82	22	0	0	0	0	0	0	3473
21	0	0	0	0	0	0	7	109	262	253	353	376	290	420	228	33	14	1	0	0	0	0	0	0	2347
22	0	0	0	0	0	0	5	77	255	318	550 ?	526	509 ?	512 ?	373	236 ?	147	32	0	0	0	0	0	0	3540 ?
23	0	0	0	0	0	0	8	64	186	316 ?	230	185	206	256	111	122	86	38	0	0	0	0	0	0	1808
24	0	0	0	0	0	0	14	75	180	271	296	496 ?	361 ?	?	439 ?	210	88	31	0	0	0	0	0	0	2461 ?
25	0	0	0	0	0	0	20	50	242	402 ?	345	265	312	424 ?	303 ?	227	124	22	0	0	0	0	0	0	2736 ?
26	0	0	0	0	0	0	5	32	215	349	517	457	420	413	494 ?	279	120	41	0	0	0	0	0	0	3342 ?
27	0	0	0	0	0	0	25	147	248	443 ?	?	?	446 ?	?	390	271 ?	94	18	0	0	0	0	0	0	2082 ?
28	0	0	0	0	0	0	10	76	171	334 ?	?	?	?	470 ?	269	196	106	22	0	0	0	0	0	0	1656 ?
29	0	0	0	0	0	0	2	9	28	83	173	165	250	311	315	137	60	23	0	0	0	0	0	0	1557
30	0	0	0	0	0	0	5	6	61	168	79	86	127	208	244	82	47	6	0	0	0	0	0	0	1118
31	0	0	0	0	0	0	9	53	197	358	407	490 ?	?	411	398 ?	283	79	22	0	0	0	0	0	0	2706 ?
Avg	0	0	0	0	0	0	18	100	227	331	367	393	391	393	333	234	123	30	0	0	0	0	0	0	2521 ?
S D	0	0	0	0	0	0	10	50	93	126	144	162	148	124	121	118	74	18	1	0	0	0	0	0	789
S/A	0	0	0	0	0	0	0.54	0.5	0.41	0.38	0.39	0.41	0.38	0.32	0.36	0.5	0.61	0.61	5.57	0	0	0	0	0	0.31
Min	0	0	0	0	0	0	2	6	28	39	31	86	80	103	83	33	11	1	0	0	0	0	0	0	880
Max	0	0	0	0	0	0	41	195	375	533	569	672	688	584	543	447	272	78	4	0	0	0	0	0	3866
n	0	0	0	0	0	0	217	363	338	247	229	225	231	215	262	322	365	303	3	0	0	0	0	0	3330

Daylight Data Recovery: 0.0% missing; 21.5% exceed the 15% QC threshold -- 4243 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.