

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

September 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	15	80	246	508	680	952	901	767	520	539	156	25	6	0	0	0	0	0	5396
2	0	0	0	0	0	0	51	187	393	615	669	815	822	705	546	611	81	13	0	0	0	0	0	0	5508
3	0	0	0	0	0	0	33	223	475	449	655	814	910	831	703	567	327	77	17	0	0	0	0	0	6082
4	0	0	0	0	0	0	45	229	437	649	736	753	935	886	759	537	321	74	7	0	0	0	0	0	6368
5	0	0	0	0	0	0	63	217	424	512	550	219	260	77	87	313	202	45	8	0	0	0	0	0	2976
6	0	0	0	0	0	0	13	55	189	451	738	586	166	198	16	4	13	21	4	0	0	0	0	0	2454
7	0	0	0	0	0	0	38	140	472	802	877	793	251	160	265	465	284	116	21	0	0	0	0	0	4683
8	0	0	0	0	0	0	23	188	435	522	561	733	933	881	711	513	279	57	6	0	0	0	0	0	5843
9	0	0	0	0	0	0	10	101	230	510	500	380	213	112	130	379	291	42	8	0	0	0	0	0	2907
10	0	0	0	0	0	0	34	212	392	519	434	655	696	736	428	527	280	146	22	0	0	0	0	0	5082
11	0	0	0	0	0	0	16	83	323	630	705	491	749	287	256	185	278	78	13	0	0	0	0	0	4094
12	0	0	0	0	0	0	13	68	78	302	564	591	502	800	749	376	189	109	6	0	0	0	0	0	4347
13	0	0	0	0	0	0	10	53	72	78	185	187	159	154	118	70	27	9	1	0	0	0	0	0	1123
14	0	0	0	0	0	0	3	29	39	17	69	143	86	83	59	27	14	3	1	0	0	0	0	0	572
15	0	0	0	0	0	0	41	45	109	273	308	376	502	309	256	151	45	12	1	0	0	0	0	0	2429
16	0	0	0	0	0	0	31	197	427	596	583	873	942	881	757	568	332	119	13	0	0	0	0	0	6317
17	0	0	0	0	0	0	66	226	421	633	807	905	935	877	742	550	318	109	11	0	0	0	0	0	6598
18	0	0	0	0	0	0	56	208	377	594	462	452	496	488	717	522	305	101	11	0	0	0	0	0	4789
19	0	0	0	0	0	0	42	192	397	586	425	778	562	606	565	518	267	99	6	0	0	0	0	0	5042
20	0	0	0	0	0	0	23	184	380	531	392	421	212	301	403	347	221	117	15	0	0	0	0	0	3546
21	0	0	0	0	0	0	33	166	388	581	538	860	754	814	665	501	299	79	5	0	0	0	0	0	5684
22	0	0	0	0	0	0	26	175	361	503	688	676	776	329	112	99	32	9	1	0	0	0	0	0	3786
23	0	0	0	0	0	0	33	210	390	592	748	837	870	821	683	511	277	57	7	0	0	0	0	0	6038
24	0	0	0	0	0	0	40	194	406	620	675	750	577	667	189	209	237	35	14	0	0	0	0	0	4613
25	0	0	0	0	0	0	52	145	266	212	368	749	597	489	616	347	128	29	1	0	0	0	0	0	4001
26	0	0	0	0	0	0	34	111	154	223	390	373	245	192	147	69	100	33	2	0	0	0	0	0	2071
27	0	0	0	0	0	0	7	37	106	199	148	227	343	335	173	112	57	40	4	0	0	0	0	0	1786
28	0	0	0	0	0	0	22	101	342	487	558	773	778	625	414	253	132	33	1	0	0	0	0	0	4518
29	0	0	0	0	0	0	2	9	36	46	99	156	212	46	77	109	98	22	1	0	0	0	0	0	915
30	0	0	0	0	0	0	19	163	344	544	538	355	451	162	399	251	105	67	6	0	0	0	0	0	3405
Avg	0	0	0	0	0	0	30	141	303	459	522	589	561	487	409	341	190	59	7	0	0	0	0	0	4099
S D	0	0	0	0	0	0	17	70	141	198	209	251	289	301	260	196	111	40	6	0	0	0	0	0	1726
S/A	0	0	0	0	0	0	0.59	0.49	0.46	0.43	0.4	0.43	0.51	0.62	0.64	0.58	0.58	0.69	0.82	0	0	0	0	0	0.42
Min	0	0	0	0	0	0	2	9	36	17	69	143	86	46	16	4	13	3	0	0	0	0	0	0	572
Max	0	0	0	0	0	0	66	229	475	802	877	952	942	886	759	611	332	146	22	0	0	0	0	0	6598
n	0	0	0	0	0	0	312	360	360	360	360	360	360	360	360	359	360	358	147	0	0	0	0	0	4416

Daylight Data Recovery: 0.0% missing; 0.1% exceed the 15% QC threshold -- 4419 total daylight measurements.

Instrument: Eppley PSP Serial Number: 13434F3 Calibration Factor: 8.670 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

September 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	16	35	55	56	35	38	41	50	59	78	48	10	7	0	0	0	0	0	530
2	0	0	0	0	0	0	41	49	41	24	39	52	53	44	41	35	22	6	1 ?	0	0	0	0	0	449
3	0	0	0	0	0	0	37	16	34	44	48	38	54	41	53	44	14	40	26	0	0	0	0	0	490
4	0	0	0	0	0	0	30	5	11	5	24	47	30	25	33	45	28	29	12	0	0	0	0	0	324
5	0	0	0	0	0	0	66	53	28	30	38	31	30	11	15	62	49	24	9	0	0	0	0	0	445
6	0	0	0	0	0	0	9	22	40	29	34	66	19	21	2	1	4	12	6	0	0	0	0	0	266
7	0	0	0	0	0	0	41	53	55	65	35	36	21	22	40	71	42	44	29	0	0	0	0	0	555
8	0	0	0	0	0	0	25	32	18	18	66	59	51	37	46	46	30	22	6	0	0	0	0	0	456
9	0	0	0	0	0	0	19	25	41	61	84	64	33	16	21	64	62	21	8	0	0	0	0	0	518
10	0	0	0	0	0	0	40	17	26	71	75	61	88	89	71	91	40	27 ?	74	0	0	0	0	0	770
11	0	0	0	0	0	0	16	33	47	9	40	53	67	35	48	46	50	19	18	0	0	0	0	0	480
12	0	0	0	0	0	0	84 ?	24	23	61	69	80	74	50	88	70	62	44	4 ?	0	0	0	0	0	732
13	0	0	0	0	0	0	49 ?	23	21	15	33	33	26	26	23	17	8	5	1	0	0	0	0	0	279
14	0	0	0	0	0	0	2	14	12	3	12	24	14	14	10	7	2	0 ?	2	0	0	0	0	0	115
15	0	0	0	0	0	0	38	15	29	53	50	48	59	50	49	35	15	6	4	0	0	0	0	0	450
16	0	0	0	0	0	0	32	33	19	27	68	44	37	36	40	36	14	25	65	0	0	0	0	0	476
17	0	0	0	0	0	0	88	65	11	11	24	33	48	42	37	32	8	22	45	0	0	0	0	0	467
18	0	0	0	0	0	0	34	26 ?	28	33	38	45	45	35	43	42	22	24	22	0	0	0	0	0	438
19	0	0	0	0	0	0	28	16	22	14	35	49	50	66	60	44	44	40	9	0	0	0	0	0	480
20	0	0	0	0	0	0	27	26	40	62	47	56	29	49	71	70	67	56	23	0	0	0	0	0	624
21	0	0	0	0	0	0	32	38	26	15	40	38	34	49	54	49	52	34	18	0	0	0	0	0	480
22	0	0	0	0	0	0	28	26	31	60	62	52	71	25	19	23	11	6	2	0	0	0	0	0	417
23	0	0	0	0	0	0	26	16	24	22	31	24	37	38	48	34	29	17	18	0	0	0	0	0	364
24	0	0	0	0	0	0	25	20	10	12	47	46	47	39	30	51	66	21	45	0	0	0	0	0	460
25	0	0	0	0	0	0	76	32	69	37	52	59	70	64	80	62	32	16	7	0	0	0	0	0	656
26	0	0	0	0	0	0	48	42	46	51	72	60	39	30	19	7	30	10	4	0	0	0	0	0	458
27	0	0	0	0	0	0	9	19	31	43	27	37	50	51	14	22	7	14	15	0	0	0	0	0	339
28	0	0	0	0	0	0	29	30	28	44	46	52	63	70	74	61	52	16	8	0	0	0	0	0	572
29	0	0	0	0	0	0	4	1	7	8	16	25	35	5	14	25	37	14	9	0	0	0	0	0	198
30	0	0	0	0	0	0	51	24	30	23	40	38	65	29	59	56	39	44	5	0	0	0	0	0	502
Avg	0	0	0	0	0	0	35	28	30	34	44	46	46	39	42	44	33	22	17	0	0	0	0	0	460
S D	0	0	0	0	0	0	22	14	15	21	18	14	18	19	22	22	20	14	18	0	0	0	0	0	141
S/A	0	0	0	0	0	0	0.61	0.52	0.49	0.62	0.4	0.29	0.39	0.48	0.53	0.5	0.6	0.63	1.1	0	0	0	0	0	0.31
Min	0	0	0	0	0	0	2	1	7	3	12	24	14	5	2	1	2	0	1	0	0	0	0	0	115
Max	0	0	0	0	0	0	88	65	69	71	84	80	88	89	88	91	67	56	74	0	0	0	0	0	770
n	0	0	0	0	0	0	293	348	359	360	360	360	359	360	360	360	360	360	349	141	0	0	0	0	4369

Daylight Data Recovery: 0.0% missing; 1.1% exceed the 15% QC threshold -- 4419 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

September 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	13	68	217	434	522 ?	?	606 ?	568 ?	443	427 ?	132	21	6	0	0	0	0	0	3456 ?
2	0	0	0	0	0	0	47	170	373	563 ?	626	478 ?	677 ?	461 ?	278 ?	?	70	10	0	0	0	0	0	0	3753 ?
3	0	0	0	0	0	0	29	219	402 ?	343 ?	526 ?	589 ?	713 ?	534 ?	493 ?	487 ?	321	67	14	0	0	0	0	0	4738 ?
4	0	0	0	0	0	0	42	216	413	?	507 ?	481 ?	?	?	?	481	308	66	6	0	0	0	0	0	2521 ?
5	0	0	0	0	0	0	56	203	398	391 ?	152 ?	191	232	67	75	272	178	38	7	0	0	0	0	0	2262
6	0	0	0	0	0	0	12	48	168	431	658 ?	435	152	179	14	4	11	18	4	0	0	0	0	0	2132
7	0	0	0	0	0	0	34	125	396 ?	?	?	592 ?	231	141	187	270 ?	232 ?	105	19	0	0	0	0	0	2331 ?
8	0	0	0	0	0	0	20	167	411 ?	432 ?	462	454 ?	665 ?	?	568 ?	431 ?	265	51	6	0	0	0	0	0	3933 ?
9	0	0	0	0	0	0	9	68	192	386 ?	408	323	183	98	114	338	205	37	8	0	0	0	0	0	2367
10	0	0	0	0	0	0	29	210	354	315 ?	373	460 ?	583	512 ?	372	432	235 ?	144	15	0	0	0	0	0	4032 ?
11	0	0	0	0	0	0	14	73	221 ?	?	363 ?	399	483 ?	256	219	157	255	56	11	0	0	0	0	0	2506 ?
12	0	0	0	0	0	0	13	61	66	260	484	521	435	563 ?	446 ?	332	162	97	6	0	0	0	0	0	3446 ?
13	0	0	0	0	0	0	10	46	61	68	158	159	136	132	101	60	24	7	1	0	0	0	0	0	962
14	0	0	0	0	0	0	3	25	33	15	59	122	73	71	51	23	13	6	1	0	0	0	0	0	495
15	0	0	0	0	0	0	36	41	94	237	228	293	413	266	219	130	38	10	1	0	0	0	0	0	2007
16	0	0	0	0	0	0	28	189	378 ?	515 ?	498	601 ?	?	?	?	468 ?	326	116	9	0	0	0	0	0	3126 ?
17	0	0	0	0	0	0	58	209	389 ?	?	?	?	?	?	?	479 ?	315	106	8	0	0	0	0	0	1564 ?
18	0	0	0	0	0	0	53	203	363	450 ?	275 ?	283 ?	360	279 ?	?	496	296	97	10	0	0	0	0	0	3164 ?
19	0	0	0	0	0	0	41	188	386	542 ?	366	540 ?	309 ?	441 ?	465 ?	482	249	91	6	0	0	0	0	0	4105 ?
20	0	0	0	0	0	0	20	177	360	470	354	373	186	260	351	305	194	105	15	0	0	0	0	0	3169
21	0	0	0	0	0	0	30	156	375	541 ?	391 ?	?	495 ?	675 ?	604 ?	472	278	73	5	0	0	0	0	0	4095 ?
22	0	0	0	0	0	0	24	167	345	422	531 ?	561 ?	608 ?	135 ?	98	86	27	8	1	0	0	0	0	0	3014 ?
23	0	0	0	0	0	0	32	207	378	441 ?	?	?	?	?	640 ?	465 ?	265	54	6	0	0	0	0	0	2488 ?
24	0	0	0	0	0	0	43	187	371 ?	518 ?	551 ?	525 ?	482	362 ?	168	179	211	32	12	0	0	0	0	0	3640 ?
25	0	0	0	0	0	0	45	138	233	188	287	584 ?	514	437	417 ?	281	116	26	1	0	0	0	0	0	3266 ?
26	0	0	0	0	0	0	30	100	131	189	335	323	211	168	133	65	87	31	2	0	0	0	0	0	1806
27	0	0	0	0	0	0	6	31	91	172	127	196	301	293	163	100	54	37	3	0	0	0	0	0	1573
28	0	0	0	0	0	0	19	93	328	417 ?	510	668 ?	637 ?	521	362	219	112	29	1	0	0	0	0	0	3916 ?
29	0	0	0	0	0	0	2	9	33	41	87	135	183	43	67	96	84	19	1	0	0	0	0	0	799
30	0	0	0	0	0	0	16	157	329	470 ?	396 ?	279	396	139	299	220	92	59	6	0	0	0	0	0	2858
Avg	0	0	0	0	0	0	27	132	276	356	379	406	395	304	283	285	172	54	6	0	0	0	0	0	2784 ?
S D	0	0	0	0	0	0	16	69	133	161	164	162	195	189	185	168	105	38	5	0	0	0	0	0	1067
S/A	0	0	0	0	0	0	0.59	0.52	0.48	0.45	0.43	0.4	0.49	0.62	0.66	0.59	0.61	0.71	0.78	0	0	0	0	0	0.38
Min	0	0	0	0	0	0	2	9	33	15	59	122	73	43	14	4	11	6	0	0	0	0	0	0	495
Max	0	0	0	0	0	0	58	219	413	563	658	668	713	675	640	496	326	144	19	0	0	0	0	0	4738
n	0	0	0	0	0	0	311	352	328	223	255	230	246	240	259	303	351	358	147	0	0	0	0	0	3609

Daylight Data Recovery: 0.0% missing; 18.3% exceed the 15% QC threshold -- 4419 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.