

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	24	108 ?	?	496 ?	622	705	770	732	610	451	253	61	0	0	0	0	0	0	4834 ?
2	0	0	0	0	0	0	26	103 ?	345 ?	502	658	728	739	687	577	415	227	53	0	0	0	0	0	0	5061
3	0	0	0	0	0	0	23	151	341	506	633	729	741	687	579	426	230	50	0	0	0	0	0	0	5095
4	0	0	0	0	0	0	24	94 ?	436 ?	516	669	741	748	699	571	414	227	52	0	0	0	0	0	0	5190 ?
5	0	0	0	0	0	0	25	113	376 ?	461	654	740	741	693	587	348	42	15	0	0	0	0	0	0	4796
6	0	0	0	0	0	0	5	16	42	89	195	183	251	263	266	223	181	39	0	0	0	0	0	0	1752
7	0	0	0	0	0	0	44	201	269 ?	559	685	764	770	717	597	429	228	51	0	0	0	0	0	0	5316
8	0	0	0	0	0	0	44	227 ?	380	527	662	736	730	676	538	392	204	35	0	0	0	0	0	0	5150
9	0	0	0	0	0	0	19	154	347	522	656	734	743	687	544	405	209	44	0	0	0	0	0	0	5064
10	0	0	0	0	0	0	16	167	351	411	592	740	601	490	494	365	169	36	0	0	0	0	0	0	4434
11	0	0	0	0	0	0	17	140	330	496	621	725	639	422	386	264	146	32	0	0	0	0	0	0	4216
12	0	0	0	0	0	0	9	31	51	69	71	80	108	224	221	201	87	33	0	0	0	0	0	0	1184
13	0	0	0	0	0	0	16	161	371	175	185	323	139	182	98	161	66	7	0	0	0	0	0	0	1885
14	0	0	0	0	0	0	2	11	40	51	45	146	504	164	219	102	100 ?	25	0	0	0	0	0	0	1410
15	0	0	0	0	0	0	11	135	326	499	617	705	713	651	532	373	181	31	0	0	0	0	0	0	4775
16	0	0	0	0	0	0	14	134	322	149	24	357	522	389	417	246	119	15	0	0	0	0	0	0	2708
17	0	0	0	0	0	0	2	15	74	110	158	349	506	577	584	378	177	35	0	0	0	0	0	0	2966
18	0	0	0	0	0	0	23	?	339	488	620	689	696	637	516	356	166	26	0	0	0	0	0	0	4557
19	0	0	0	0	0	0	11	140	312	458	590	677	569	565	484	309	123	29	0	0	0	0	0	0	4268
20	0	0	0	0	0	0	10	115	291	458	588	656	664	603	482	330	151	25	0	0	0	0	0	0	4373
21	0	0	0	0	0	0	11	109	286	449	582	640	665	604	464	290	143	26	0	0	0	0	0	0	4268
22	0	0	0	0	0	0	11	100	212	425	571	639	641	586	468	324	147	19	0	0	0	0	0	0	4141
23	0	0	0	0	0	0	14	105	303	303	365	315	330	475	467	318	131	14	0	0	0	0	0	0	3141
24	0	0	0	0	0	0	6	94	265	431	567	636	613	312	311	271	131	19	0	0	0	0	0	0	3655
25	0	0	0	0	0	0	4	106	296	467	597	675	681	618	497	330	145	25	0	0	0	0	0	0	4441
26	0	0	0	0	0	0	7	101	289	470	599	661	668	584	390	211	148	23	0	0	0	0	0	0	4152
27	0	0	0	0	0	0	5	29	72	95	64	92	84	136	145	115	36	6	0	0	0	0	0	0	880
28	0	0	0	0	0	0	6	99 ?	376 ?	457	576	650	653	591	471	309	124	17	0	0	0	0	0	0	4329
29	0	0	0	0	0	0	6	120	298	439	563	636	642	582	464	303	122	14	0	0	0	0	0	0	4188
30	0	0	0	0	0	0	5	80	256	420	538	608	607	538	409	263	104	10	0	0	0	0	0	0	3838
31	0	0	0	0	0	0	10	78	225	413	534	604	609	549	434	283	108	10	0	0	0	0	0	0	3857
Avg	0	0	0	0	0	0	15	108	274	384	487	570	583	526	446	310	149	28	0	0	0	0	0	0	3868
S D	0	0	0	0	0	0	11	52	110	161	219	215	196	178	136	90	55	15	0	0	0	0	0	0	1266
S/A	0	0	0	0	0	0	0.74	0.48	0.4	0.42	0.45	0.38	0.34	0.34	0.3	0.29	0.37	0.52	0	0	0	0	0	0	0.33
Min	0	0	0	0	0	0	2	11	40	51	24	80	84	136	98	102	36	6	0	0	0	0	0	0	880
Max	0	0	0	0	0	0	44	227	436	559	685	764	770	732	610	451	253	61	0	0	0	0	0	0	5316
n	0	0	0	0	0	0	166	330	320	365	372	372	372	372	372	372	369	265	2	0	0	0	0	0	4051

Daylight Data Recovery: 0.0% missing; 2.5% exceed the 15% QC threshold -- 4153 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25821F3 Calibration Factor: 9.020 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

Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Instrument: Eppley NIP
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	48	378 ?	779 ?	733 ?	657	738	915	959	925	871	738	341	0	0	0	0	0	0	8081
2	0	0	0	0	0	0	118	433 ?	712 ?	749	781	826	824	821	803	735	585	231	0	0	0	0	0	0	7618
3	0	0	0	0	0	0	110	505	696	772	797	856	872	870	845	806	655	252	0	0	0	0	0	0	8037
4	0	0	0	0	0	0	57	315 ?	753 ?	830	872	853	862	898	824	772	645	289	0	0	0	0	0	0	7971
5	0	0	0	0	0	0	74	392	714 ?	710	788	861	779	831	777	496	0	0	0	0	0	0	0	0	6424
6	0	0	0	0	0	0	0	0	0	0	3	2	3	17	5	14	285	148	0	0	0	0	0	0	478
7	0	0	0	0	0	0	72	607	823 ?	957	982	1007	1004	999	966	903	765	363	0	0	0	0	0	0	9448
8	0	0	0	0	0	0	129	616	824	897	940	956	919	879	744	731	484	42	0	0	0	0	0	0	8162
9	0	0	0	0	0	0	116	639	823	908	958	986	986	972	839	866	700	289	0	0	0	0	0	0	9082
10	0	0	0	0	0	0	96	648	527	326	593	930	608	358	611	681	362	56	0	0	0	0	0	0	5794
11	0	0	0	0	0	0	74	586	799	869	871	917	611	213	308	261	322	100	0	0	0	0	0	0	5932
12	0	0	0	0	0	0	0	0	0	0	0	0	0	2	42	60	0	24	0	0	0	0	0	0	129
13	0	0	0	0	0	0	1	357	578	71	2	63	3	22	0	42	6	0	0	0	0	0	0	0	1145
14	0	0	0	0	0	0	0	0	0	0	0	1	445	7	19	2	93 ?	59	0	0	0	0	0	0	626
15	0	0	0	0	0	0	43	598	833	869	910	986	989	974	936	874	728	307	0	0	0	0	0	0	9046
16	0	0	0	0	0	0	74	545	699	124	0	180	430	177	360	267	203	0	0	0	0	0	0	0	3059
17	0	0	0	0	0	0	0	0	0	0	1	65	353	564	729	863	701	290	0	0	0	0	0	0	3567
18	0	0	0	0	0	0	77	632	857	939	983	1003	1005	991	941	852	695	310	0	0	0	0	0	0	9284
19	0	0	0	0	0	0	66	630	744	706	776	792	461	655	690	488	119	60	0	0	0	0	0	0	6186
20	0	0	0	0	0	0	20	441	703	814	878	902	914	886	829	762	597	237	0	0	0	0	0	0	7982
21	0	0	0	0	0	0	22	498	753	845	897	847	878	849	728	510	360	117	0	0	0	0	0	0	7303
22	0	0	0	0	0	0	5	349	282	629	829	862	865	863	805	710	552	176	0	0	0	0	0	0	6926
23	0	0	0	0	0	0	1	358	586	295	383	197	153	524	767	724	467	40	0	0	0	0	0	0	4495
24	0	0	0	0	0	0	1	406	651	772	847	873	770	267	396	547	500	105	0	0	0	0	0	0	6134
25	0	0	0	0	0	0	0	569	843	932	984	1013	1013	990	944	844	656	262	0	0	0	0	0	0	9048
26	0	0	0	0	0	0	0	517	807	908	925	957	934	828	553	421	559	92	0	0	0	0	0	0	7502
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
28	0	0	0	0	0	0	0	389 ?	833	928	977	1001	1001	982	941	850	627	286	0	0	0	0	0	0	8813
29	0	0	0	0	0	0	0	481	827	927	958	987	988	969	931	846	645	256	0	0	0	0	0	0	8816
30	0	0	0	0	0	0	0	398	756	867	891	890	878	781	603	488	182	5	0	0	0	0	0	0	6738
31	0	0	0	0	0	0	0	293	591	838	896	921	919	894	845	771	566	181	0	0	0	0	0	0	7714
Avg	0	0	0	0	0	0	39	406	606	620	657	693	690	646	636	582	445	159	0	0	0	0	0	0	6179
S D	0	0	0	0	0	0	44	209	295	359	381	385	347	368	325	305	255	121	0	0	0	0	0	0	2989
S/A	0	0	0	0	0	1.14	0.51	0.49	0.58	0.58	0.56	0.5	0.57	0.51	0.52	0.57	0.76	0	0	0	0	0	0	0	0.48
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Max	0	0	0	0	0	0	129	648	857	957	984	1013	1013	999	966	903	765	363	0	0	0	0	0	0	9448
n	0	0	0	0	0	0	166	344	337	365	372	372	372	372	372	372	369	265	2	0	0	0	0	0	4080

Daylight Data Recovery: 0.0% missing; 1.8% exceed the 15% QC threshold -- 4153 total daylight measurements.

Instrument: Eppley NIP Serial Number: 17664E6 Calibration Factor: 8.480 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

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	13	38	54 ?	85	182	164	102	77	67	60	44	19	0	0	0	0	0	0	904
2	0	0	0	0	0	0	17	45 ?	98 ?	128	151	138	141	128	107	87	64	24	0	0	0	0	0	0	1129
3	0	0	0	0	0	0	14	48	74	97	118	123	117	102	92	71	52	20	0	0	0	0	0	0	928
4	0	0	0	0	0	0	14	41 ?	69 ?	87	111	140	131	99	102	80	56	20	0	0	0	0	0	0	951
5	0	0	0	0	0	0	17	54	88 ?	108	155	140	190	144	150	122	38	13	0	0	0	0	0	0	1220
6	0	0	0	0	0	0	5	14	38	81	175	166	228	242	240	205	109	23	0	0	0	0	0	0	1525
7	0	0	0	0	0	0	14	43	49	60	68	71	71	67	60	51	37	15	0	0	0	0	0	0	606
8	0	0	0	0	0	0	14	46	60	69	77	81	88	97	115	83	76	31	0	0	0	0	0	0	837
9	0	0	0	0	0	0	10	36	50	60	62	64	64	63	81	50	39	15	0	0	0	0	0	0	596
10	0	0	0	0	0	0	9	49	167	233	211	108	164	238	152	86	65	30	0	0	0	0	0	0	1512
11	0	0	0	0	0	0	11	33	46	60	84	105	217	279	200	143	68	21	0	0	0	0	0	0	1267
12	0	0	0	0	0	0	8	29	48	65	66	74	100	208	187	161	78	29	0	0	0	0	0	0	1053
13	0	0	0	0	0	0	14	85	163	133	175	268	126	161	89	141	59	6	0	0	0	0	0	0	1420
14	0	0	0	0	0	0	1	10	38	47	42	135	192	154	199	94	81 ?	20	0	0	0	0	0	0	1013
15	0	0	0	0	0	0	8	30	42	78	69	60	58	54	47	39	27	8	0	0	0	0	0	0	520
16	0	0	0	0	0	0	10	46	89	95	22	227	232	272	231	136	72	14	0	0	0	0	0	0	1445
17	0	0	0	0	0	0	1	14	69	102	148	291	270	239	220	60	35	14	0	0	0	0	0	0	1461
18	0	0	0	0	0	0	8	37	43	47	51	50	50	45	45	44	31	7	0	0	0	0	0	0	458
19	0	0	0	0	0	0	7	44	70	121	130	166	254	162	127	119	100	24	0	0	0	0	0	0	1324
20	0	0	0	0	0	0	9	39	64	79	85	86	81	80	74	57	37	11	0	0	0	0	0	0	702
21	0	0	0	0	0	0	9	32	49	58	74	100	105	102	95	97	72	18	0	0	0	0	0	0	811
22	0	0	0	0	0	0	9	43	108	131	101	101	95	83	75	75	46	9	0	0	0	0	0	0	876
23	0	0	0	0	0	0	13	52	120	164	139	180	220	161	94	68	43	11	0	0	0	0	0	0	1265
24	0	0	0	0	0	0	6	35	64	81	94	98	127	145	118	89	42	13	0	0	0	0	0	0	914
25	0	0	0	0	0	0	4	24	41	50	55	59	60	59	54	46	32	12	0	0	0	0	0	0	496
26	0	0	0	0	0	0	7	27	46	69	94	84	98	111	115	74	50	19	0	0	0	0	0	0	794
27	0	0	0	0	0	0	5	27	67	88	59	87	78	127	136	105	33	6	0	0	0	0	0	0	817
28	0	0	0	0	0	0	5	25 ?	47	50	54	57	56	52	44	36	23	6	0	0	0	0	0	0	456
29	0	0	0	0	0	0	5	27	38	43	53	54	55	53	45	36	23	6	0	0	0	0	0	0	439
30	0	0	0	0	0	0	5	27	45	56	69	84	83	100	115	99	70	10	0	0	0	0	0	0	761
31	0	0	0	0	0	0	10	39	53	61	65	69	71	68	61	46	25	6	0	0	0	0	0	0	575
Avg	0	0	0	0	0	0	9	37	68	87	98	117	127	128	114	86	53	16	0	0	0	0	0	0	938
S D	0	0	0	0	0	0	4	14	33	40	48	61	66	69	58	41	22	7	0	0	0	0	0	0	343
S/A	0	0	0	0	0	0	0.48	0.39	0.5	0.47	0.49	0.52	0.52	0.54	0.51	0.47	0.43	0.48	0	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	1	10	38	43	22	50	50	45	44	36	23	6	0	0	0	0	0	0	439
Max	0	0	0	0	0	0	17	85	167	233	211	291	270	279	240	205	109	31	0	0	0	0	0	0	1525
n	0	0	0	0	0	0	166	351	353	371	372	372	372	372	372	372	369	265	2	0	0	0	0	0	4109

Daylight Data Recovery: 0.0% missing; 1.1% exceed the 15% QC threshold -- 4153 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17860F3 Calibration Factor: 7.010 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.