

February 2004

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	0	12	195	342	464	563	602	575	484	348	175	37	0	0	0	0	0	0	3796
2	0	0	0	0	0	0	0	14	119	300	429	261	196	218	161	101	46	9	0	0	0	0	0	0	1853
3	0	0	0	0	0	0	0	10	62	157 ?	157	187	201	288	198	107	44	7	0	0	0	0	0	0	1419
4	0	0	0	0	0	0	0	7	34	102	314	575	608	550	422	329	171	32	0	0	0	0	0	0	3144
5	0	0	0	0	0	0	0	7	23	89	90	130	61 ?	53 ?	38 ?	44 ?	27	5	0	0	0	0	0	0	568 ?
6	0	0	0	0	0	0	0	2	24	49	62	79	93	104	61	219	158	20	0	0	0	0	0	0	870
7	0	0	0	0	0	0	0	5	35	73	64	163	141	200	179	103	55	8	0	0	0	0	0	0	1027
8	0	0	0	0	0	0	0	15	78	205	309	472	656	619	522	379	198	40	0	0	0	0	0	0	3493
9	0	0	0	0	0	0	0	15	60	117	149	245	201	115	136	181	130	36	0	0	0	0	0	0	1386
10	0	0	0	0	0	0	0	4	22	54	75	140	189	170	387	332	106	28	0	0	0	0	0	0	1507
11	0	0	0	0	0	0	0	20	98	199	363	431	489	492	507	320	149	33	0	0	0	0	0	0	3101
12	0	0	0	0	0	0	0	3	33	107	210	225	161	309	127	110	46	23	0	0	0	0	0	0	1353
13	0	0	0	0	0	0	0	14	93	381	535	627	676	652	555	406	214	38	0	0	0	0	0	0	4191
14	0	0	0	0	0	0	0	9	55	109	183	164	201	225	179	109	94	38	0	0	0	0	0	0	1365
15	0	0	0	0	0	0	0	20	49	116	310	389	560	298	115	79	41	5	0	0	0	0	0	0	1984
16	0	0	0	0	0	0	0	18	138	442	544	644	685	657	564	421	226	38	0	0	0	0	0	0	4377
17	0	0	0	0	0	0	0	23	110	80	75	150	187	177	143	134	45	14	0	0	0	0	0	0	1138
18	0	0	0	0	0	0	0	29	199	391	546	654	699	622	582	432	251	70	0	0	0	0	0	0	4476
19	0	0	0	0	0	0	0	42	200	387	537	641	680	653	557	414	230	43	6	0	0	0	0	0	4390
20	0	0	0	0	0	0	0	52	175	374	378	499	574	620	368	83	48	16	4	0	0	0	0	0	3192
21	0	0	0	0	0	0	0	34	104	137	128	178	94	150	204	162	79	35	4	0	0	0	0	0	1310
22	0	0	0	0	0	0	0	19	78	236	450	583	717	694	578	410	219	69	2	0	0	0	0	0	4053
23	0	0	0	0	0	0	0	38	194	267	334	477	531	461	366	267	138	37	1	0	0	0	0	0	3111
24	0	0	0	0	0	0	0	5	126	144	112	88	119	109	93	57		? 5 ?	0	0	0	0	0	0	857 ?
25	0	0	0	0	0	0	0	46	214	389	622	676	532	611	504	346	185	77	3	0	0	0	0	0	4204
26	0	0	0	0	0	0	0	11	27	60	99	143	188	176	148	94	41	14	3	0	0	0	0	0	1002
27	0	0	0	0	0	0	0	54	243	403	572	664	675	628	562	492	287	89	0	0	0	0	0	0	4669
28	0	0	0	0	0	0	2	67 ?	? 510	604	707	744	720	620	474	287	89	5	0	0	0	0	0	0	4829 ?
29	0	0	0	0	0	0	6	59	229	417	579	545	518	482	420	453	245	109	2	0	0	0	0	0	4064
Avg	0	0	0	0	0	0	0	23	108	229	321	390	413	401	337	255	141	37	1	0	0	0	0	0	2646
S D	0	0	0	0	0	0	1	19	72	144	196	220	245	225	196	150	84	28	2	0	0	0	0	0	1450
S/A	0	0	0	0	0	0	4.23	0.82	0.67	0.63	0.61	0.56	0.59	0.56	0.58	0.59	0.6	0.76	1.68	0	0	0	0	0	0.55
Min	0	0	0	0	0	0	0	2	22	49	62	79	61	53	38	44	27	5	0	0	0	0	0	0	568
Max	0	0	0	0	0	0	6	67	243	510	622	707	744	720	620	492	287	109	6	0	0	0	0	0	4829
n	0	0	0	0	0	0	2	269	333	341	347	347	343	340	342	342	334	323	23	0	0	0	0	0	3686

Daylight Data Recovery: 0.0% missing; 1.9% exceed the 15% QC threshold -- 3756 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.

February 2004

**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	0	8	684	881	959	997	1008	999	969	898	754	396	0	0	0	0	0	0	8553
2	0	0	0	0	0	0	0	0	85	383	597	41	7	1	0	0	2	0	0	0	0	0	0	0	1116
3	0	0	0	0	0	0	0	1	37	99 ?	2	19	15	83	26	37	0	0	0	0	0	0	0	0	319
4	0	0	0	0	0	0	0	0	0	0	123	896	936	788	598	730	643	210	0	0	0	0	0	0	4924
5	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
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	177	2	0	0	0	0	0	0	250
7	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	6
8	0	0	0	0	0	0	0	0	1	33	67	289	782	1001	980	921	797	403	0	0	0	0	0	0	5275
9	0	0	0	0	0	0	0	0	1	2	1	4	1	1	1	3	95	41	0	0	0	0	0	0	148
10	0	0	0	0	0	0	0	0	0	0	0	1	1	1	222	575	154	42	0	0	0	0	0	0	996
11	0	0	0	0	0	0	0	0	7	34	175	299	382	349	528	227	164	6	0	0	0	0	0	0	2172
12	0	0	0	0	0	0	0	0	0	6	3	5	1	15	0	0	0	0	0	0	0	0	0	0	30
13	0	0	0	0	0	0	0	0	19	565	953	992	1027	1027	995	891	600	149	0	0	0	0	0	0	7218
14	0	0	0	0	0	0	0	0	0	1	2	1	2	2	1	0	1	49	0	0	0	0	0	0	59
15	0	0	0	0	0	0	0	0	0	0	53	58	243	9	0	0	0	0	0	0	0	0	0	0	364
16	0	0	0	0	0	0	0	0	45	645	812	955	1007	1008	975	924	713	107	0	0	0	0	0	0	7191
17	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	5
18	0	0	0	0	0	0	0	114	711	902	974	985	1018	745	955	944	816	428	0	0	0	0	0	0	8591
19	0	0	0	0	0	0	0	270	703	858	933	970	986	978	920	783	627	180	0	0	0	0	0	0	8208
20	0	0	0	0	0	0	0	121	322	508	163	263	545	733	233	0	0	0	0	0	0	0	0	0	2889
21	0	0	0	0	0	0	0	58	63	7	0	1	0	1	7	3	0	1	0	0	0	0	0	0	140
22	0	0	0	0	0	0	0	0	0	12	251	714	945	861	911	741	447	148	0	0	0	0	0	0	5031
23	0	0	0	0	0	0	0	14	251	98	83	174	269	206	86	58	8	0	0	0	0	0	0	0	1248
24	0	0	0	0	0	0	0	0	50	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
25	0	0	0	0	0	0	0	170	651	774	922	818	382	587	395	252	144	180	0	0	0	0	0	0	5276
26	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
27	0	0	0	0	0	0	0	206	688	442	867	811	791	592	728	931	816	557	2	0	0	0	0	0	7430
28	0	0	0	0	0	0	0	407	848	965	1016	1038	1037	1043	1009	961	837	471	7	0	0	0	0	0	9639
29	0	0	0	0	0	0	0	106	535	626	720	308	171	177	192	610	414	587	28	0	0	0	0	0	4475
Avg	0	0	0	0	0	0	0	51	197	270	334	367	399	387	370	364	283	136	1	0	0	0	0	0	3159
S D	0	0	0	0	0	0	0	100	295	353	411	422	436	428	420	408	331	190	5	0	0	0	0	0	3377
S/A	0	0	0	0	0	0	5.39	1.96	1.5	1.3	1.23	1.15	1.09	1.11	1.14	1.12	1.17	1.39	4.14	0	0	0	0	0	1.07
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	0	407	848	965	1016	1038	1037	1043	1009	961	837	587	28	0	0	0	0	0	9639
n	0	0	0	0	0	0	2	273	347	342	348	348	348	348	348	348	348	348	23	0	0	0	0	0	3749

Daylight Data Recovery: 0.0% missing; 0.2% exceed the 15% QC threshold -- 3756 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.

February 2004

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	0	11	44	51	52	57	58	55	50	44	33	14	0	0	0	0	0	0	467
2	0	0	0	0	0	0	0	15	104	175	167	249	205	236	172	106	45	9	0	0	0	0	0	0	1482
3	0	0	0	0	0	0	0	10	61	126 ?	168	190	206	254	196	100	48	6	0	0	0	0	0	0	1365
4	0	0	0	0	0	0	0	7	36	109	258	108	92	124	135	74	41	14	0	0	0	0	0	0	998
5	0	0	0	0	0	0	0	7	23	93	96	131	54	46	37	39	27	5	0	0	0	0	0	0	559
6	0	0	0	0	0	0	0	2	24	47	64	85	100	111	64	207	124	20	0	0	0	0	0	0	848
7	0	0	0	0	0	0	0	5	33	69	61	154	135	195	177	104	52	7	0	0	0	0	0	0	991
8	0	0	0	0	0	0	0	16	72	170	243	281	214	77	62	47	30	11	0	0	0	0	0	0	1223
9	0	0	0	0	0	0	0	17	63	123	161	260	217	124	146	187	118	32	0	0	0	0	0	0	1449
10	0	0	0	0	0	0	0	4	23	57	80	150	202	181	281	118	61	22	0	0	0	0	0	0	1178
11	0	0	0	0	0	0	0	20	97	184	268	240	241	273	236	225	102	32	0	0	0	0	0	0	1919
12	0	0	0	0	0	0	0	2	32	102	212	239	174	307	135	117	46	23	0	0	0	0	0	0	1390
13	0	0	0	0	0	0	0	16	90	172	82	73	71	67	59	58	74	19	0	0	0	0	0	0	780
14	0	0	0	0	0	0	0	9	59	116	197	178	216	242	192	117	100	36	0	0	0	0	0	0	1461
15	0	0	0	0	0	0	0	23	52	125	291	357	408	311	125	85	44	6	0	0	0	0	0	0	1827
16	0	0	0	0	0	0	0	20	112	127	129	98	79	73	67	55	49	23	0	0	0	0	0	0	831
17	0	0	0	0	0	0	0	26	117	86	80	162	202	192	154	144	48	14	0	0	0	0	0	0	1225
18	0	0	0	0	0	0	0	16	45	54	63	80	75	173	88	49	43	26	0	0	0	0	0	0	712
19	0	0	0	0	0	0	0	17	43	58	65	70	69	67	69	85	65	29	6	0	0	0	0	0	643
20	0	0	0	0	0	0	0	39	90	171	289	325	207	144	216	87	51	17	4	0	0	0	0	0	1640
21	0	0	0	0	0	0	0	29	95	141	137	189	100	160	209	167	84	37	3	0	0	0	0	0	1351
22	0	0	0	0	0	0	0	19	81	234	283	129	110	141	79	86	92	49	2	0	0	0	0	0	1305
23	0	0	0	0	0	0	0	35	130	230	285	361	336	318	319	243	141	39	1	0	0	0	0	0	2439
24	0	0	0	0	0	0	0	5	113	150	118	93	126	104	100	56	19 ?	5	0	0	0	0	0	0	888
25	0	0	0	0	0	0	0	26	66	85	128	163	261	225	274	228	141	52	3	0	0	0	0	0	1652
26	0	0	0	0	0	0	0	11	28	65	105	153	204	189	159	101	44	14	2	0	0	0	0	0	1075
27	0	0	0	0	0	0	0	25	83	198	101	155	146	235	138	79	51	21	1	0	0	0	0	0	1233
28	0	0	0	0	0	0	?	25	49	52	54	59	61	58	52	47	40	30	6	0	0	0	0	0	533
29	0	0	0	0	0	0	?	49	71	145	173	345	398	363	318	174	128	34	2	0	0	0	0	0	2200
Avg	0	0	0	0	0	0	0	17	67	121	152	177	171	174	149	111	67	22	1	0	0	0	0	0	1230
S D	0	0	0	0	0	0	0	11	32	55	82	93	97	90	83	61	36	13	2	0	0	0	0	0	489
S/A	0	0	0	0	0	0	0	0.66	0.47	0.45	0.54	0.52	0.56	0.52	0.56	0.55	0.54	0.58	1.7	0	0	0	0	0	0.4
Min	0	0	0	0	0	0	0	2	23	47	52	57	54	46	37	39	19	5	0	0	0	0	0	0	467
Max	0	0	0	0	0	0	0	49	130	234	291	361	408	363	319	243	141	52	6	0	0	0	0	0	2439
n	0	0	0	0	0	0	0	263	347	342	348	348	348	348	348	348	340	324	23	0	0	0	0	0	3727

Daylight Data Recovery: 0.0% missing; 0.8% exceed the 15% QC threshold -- 3756 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.