

August 2005

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	25	142	313	525	695	820	860	884	830	649	448	99	41	48	0	0	0	0	0	6378	
2	0	0	0	0	0	25	134	313	506	667	774	464	779	713	634	465	229	92	45	0	0	0	0	0	5840	
3	0	0	0	0	0	24	134	317	515	683	703	845	695	766	625	505	293	148	26	0	0	0	0	0	6281	
4	0	0	0	0	0	23	131	314	517	681	812	846	695	640	665	511	340	159	28	0	0	0	0	0	6361	
5	0	0	0	0	0	21	122	301	504	673	799	800	618	310	619	318	66	32 ?	20	0	0	0	0	0	5202	
6	0	0	0	0	0	20	116	271	476	652	781	850	864	791	707	518	424	129 ?	0	0	0	0	0	0	6600	
7	0	0	0	0	0	19	82	289	493	656	776	849	846	751	671	523	325	147	30	0	0	0	0	0	6457	
8	0	0	0	0	0	15	98	296	492	669	812	820	782	784	708	531	373	165	29	0	0	0	0	0	6574	
9	0	0	0	0	0	22	133	304	504	689	898	931	915	754	703	553	373	117	17	0	0	0	0	0	6915	
10	0	0	0	0	0	19	124	241	488	696	852	907	915	625	515	429	187	216	38	0	0	0	0	0	6252	
11	0	0	0	0	0	20	122	298	497	665	795	869	916	829	683	538	340	165	46	0	0	0	0	0	6783	
12	0	0	0	0	0	22	94	210	250	709	801	840	908	813	706	539	242	127	30	0	0	0	0	0	6292	
13	0	0	0	0	0	16	115	298	501	643	787	852	843	772	730	547	327	110	25	0	0	0	0	0	6567	
14	0	0	0	0	0	16	121	304	500	667	782	875	729	583	602	566	349	151	20	0	0	0	0	0	6264	
15	0	0	0	0	0	20	123	323	525	684	815	882	891	837	710	546	359	144	18	0	0	0	0	0	6877	
16	0	0	0	0	0	21	140	336	512	682	805	862	883	813	718	533	334	119	15	0	0	0	0	0	6774	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18	0	0	0	0	0	16	112	292	486	660	763	873	885	845	685	528	328	137	22	0	0	0	0	0	6631	
19	0	0	0	0	0	16	112	294	491	663	791	813	869	794	661	528	316	123	20	0	0	0	0	0	6489	
20	0	0	0	0	0	13	105	290	491	656	787	706	716	473	458	425	297	118	25	0	0	0	0	0	5560	
21	0	0	0	0	0	6	104	252	481	650	784	816	823	792	703	519	299	134	25	0	0	0	0	0	6388	
22	0	0	0	0	0	12	118	282	492	664	792	858	864	824	613	141	118	31	9	0	0	0	0	0	5819	
23	0	0	0	0	0	16	105	283	480	639	751	843	772	601	562	581	277	31 ?	0	0	0	0	0	0	5941	
24	0	0	0	0	0	20	134	227	209	564	613	745	754	621	456	386	277	102	14	0	0	0	0	0	5121	
25	0	0	0	0	0	17	106	284	474	646	779	886	870	710	673	503	295	120	23	0	0	0	0	0	6387	
26	0	0	0	0	0	9	93	268	463	615	755	855	776	710	656	458	291	107	13	0	0	0	0	0	6068	
27	0	0	0	0	0	11	71	204	374	548	763	381	496	221	244	414	137	43	5	0	0	0	0	0	3912	
28	0	0	0	0	0	10	83	276	474	652	790	864	898	721	303	349	158	47	21	0	0	0	0	0	5646	
29	0	0	0	0	0	2	20	38	67	61	79	88 ?	92 ?	62 ?	57 ??	*	*	*	*	*	*	*	*	*	*	567 *?
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
31	0	0	0	0	0	11	96	281	487	667	787	858	824	767	563	430	281	98	8	0	0	0	0	0	6158	
Avg	0	0	0	0	0	17	110	276	458	638	760	791	786	681	596	476	276	113	22	0	0	0	0	0	6162	
S D	0	0	0	0	0	6	25	56	105	116	139	179	166	192	158	94	90	47	12	0	0	0	0	0	638	
S/A	0	0	0	0	0	0.34	0.23	0.2	0.23	0.18	0.18	0.23	0.21	0.28	0.27	0.2	0.33	0.42	0.56	0	0	0	0	0	0.1	
Min	0	0	0	0	0	2	20	38	67	61	79	88	92	62	57	141	66	31	0	0	0	0	0	0	3912	
Max	0	0	0	0	0	25	142	336	525	709	898	931	916	845	730	581	424	216	48	0	0	0	0	0	6915	
n	0	0	0	0	0	215	347	348	347	348	346	344	343	338	338	336	334	322	240	0	0	0	0	0	4462	

Daylight Data Recovery: 7.2% missing; 0.9% exceed the 15% QC threshold -- 4950 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18036F3 Calibration Factor: 7.430 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.

August 2005

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	0	0	0	*
2	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
3	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
4	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
5	0	0	0	0	0	?	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
6	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
7	0	0	0	0	0	*	?	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
8	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
9	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
10	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
11	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
12	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
13	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
14	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
15	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
16	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
18	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
19	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
20	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
21	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
22	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
23	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
24	0	0	0	0	0	*	*	?	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
25	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
26	0	0	0	0	0	503 *	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
27	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
28	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
29	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
31	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
Avg	0	0	0	0	0	503	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	N/A	*
SD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	503	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0	N/A
Max	0	0	0	0	0	503	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0	N/A
n	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 99.1% missing; 0.8% exceed the 15% QC threshold -- 4950 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25796E6 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.

August 2005

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	23	90	146	168	189	219	335	322	300	312	243	103	45	54	0	0	0	0	0	2549	
2	0	0	0	0	0	23	91	156	209	317	421	371	376	303	290	265	162	82	41	0	0	0	0	0	3105	
3	0	0	0	0	0	23	91	151	187	273	335	353	344	362	319	284	174	104	25	0	0	0	0	0	3023	
4	0	0	0	0	0	24	91	152	189	212	215	286	291	288	254	205	166	99	25	0	0	0	0	0	2497	
5	0	0	0	0	0	23	94	163	201	237	282	384	421	248	431	262	68	31 ?	21	0	0	0	0	0	2869	
6	0	0	0	0	0	18	90	169	239	289	300	317	340	354	337	285	318 ?	60 ?	0	0	0	0	0	0	3115	
7	0	0	0	0	0	20	79	167	241	283	322	345	356	353	310	253	190	107	29	0	0	0	0	0	3054	
8	0	0	0	0	0	15	78	166	214	240	258	345	296	257	247	176	131	78	23	0	0	0	0	0	2523	
9	0	0	0	0	0	19	71	111	142	168	282	283	314	287	233	198	184	99	18	0	0	0	0	0	2409	
10	0	0	0	0	0	18	82	167	180	224	245	238	238	298	297	246	182	160	35	0	0	0	0	0	2611	
11	0	0	0	0	0	19	80	141	182	207	229	235	272	227	207	173	138	106	44	0	0	0	0	0	2262	
12	0	0	0	0	0	26	88	156	216	305	237	249	294	250	242	286	198	120	30	0	0	0	0	0	2696	
13	0	0	0	0	0	16	82	145	191	238	264	292	300	286	246	224	144	80	23	0	0	0	0	0	2531	
14	0	0	0	0	0	15	71	124	164	188	221	226	270	268	223	151	110	76	16	0	0	0	0	0	2121	
15	0	0	0	0	0	17	60	84	98	103	104	114	121	137	116	108	128	93	13	0	0	0	0	0	1296	
16	0	0	0	0	0	17	66	92	95	103	109	126	119	112	116	177	248	122	15	0	0	0	0	0	1517	
17	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
18	0	0	0	0	0	17	64	115	210	192	204	230	228	250	426	?	344 ?	142	20	0	0	0	0	0	2442 ?	
19	0	0	0	0	0	14	65	116	152	172	210	226	211	338	493 ?	?	310 ?	124	18	0	0	0	0	0	2452 ?	
20	0	0	0	0	0	12	65	120	148	184	201	236	285	399	278 ?	372 ?	230 ?	117	23	0	0	0	0	0	2670 ?	
21	0	0	0	0	0	7	84	152	149	175	168	271	474	?	?	?	210 ?	92 ?	23	0	0	0	0	0	1805 ?	
22	0	0	0	0	0	14	82	113	115	119	132	203	575 ?	?	204 ?	148	125	32	9	0	0	0	0	0	1872 ?	
23	0	0	0	0	0	14	60	102	132	165	198	443	324 ?	397 ?	303 ?	?	270 ?	28	0	0	0	0	0	0	2435 ?	
24	0	0	0	0	0	24	118	207	216	369	510	621 ?	630 ?	428 ?	310 ?	320 ?	304 ?	117	14	0	0	0	0	0	4188 ?	
25	0	0	0	0	0	19	61	105	142	209	494 ?	?	?	257 ?	?	?	168 ?	124	24	0	0	0	0	0	1602 ?	
26	0	0	0	0	0	9	71	148	216	435	?	?	692 ?	542 ?	?	?	301 ?	120	13	0	0	0	0	0	2547 ?	
27	0	0	0	0	0	11	65	155	280	415 ?	102 ?	397	446	229	256	334 ?	145	45	5	0	0	0	0	0	2884 ?	
28	0	0	0	0	0	11	61	191	386 ?	?	?	?	?	431 ?	292	295 ?	110	51	22	0	0	0	0	0	1851 ?	
29	0	0	0	0	0	2	21	39	68	63	82	80	78	50	52 ?	*	*	*	*	0	0	0	0	0	0	534 *
30	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	*
31	0	0	0	0	0	11	103	293 ?	?	?	?	?	?	?	428 ?	320 ?	335 ?	102	7	0	0	0	0	0	1599 ?	
Avg	0	0	0	0	0	17	77	143	183	225	244	288	331	294	278	242	196	91	21	0	0	0	0	0	2447 ?	
S D	0	0	0	0	0	6	18	45	63	90	109	113	145	104	99	69	79	35	12	0	0	0	0	0	609	
S/A	0	0	0	0	0	0.34	0.23	0.32	0.34	0.4	0.45	0.39	0.44	0.35	0.36	0.28	0.4	0.38	0.58	0	0	0	0	0	0.25	
Min	0	0	0	0	0	2	21	39	68	63	82	80	78	50	52	108	68	28	0	0	0	0	0	0	1296	
Max	0	0	0	0	0	26	118	293	386	435	510	621	692	542	493	372	344	160	54	0	0	0	0	0	4188	
n	0	0	0	0	0	205	347	339	331	318	297	294	279	267	259	234	261	314	238	0	0	0	0	0	0	3882

Daylight Data Recovery: 7.2% missing; 12.2% exceed the 15% QC threshold -- 4950 total daylight measurements.

Instrument: Eppley PSP Serial Number: 18039F3 Calibration Factor: 7.470 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.