

January 2010

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	0	5 ?	33 ?	67	94	85	77 ?	?	152 ?	14 ?	3	0	0	0	0	0	0	531 ?
2	0	0	0	0	0	0	0	3	31	105	198	244	281	285	255	183	41	7	0	0	0	0	0	0	1635
3	0	0	0	0	0	0	0	8	47	149	349	456	498	469 ?	364	234	83	8	0	0	0	0	0	0	2664
4	0	0	0	0	0	0	0	11	57	141	256	294	233	275	183	98	39	7	0	0	0	0	0	0	1593
5	0	0	0	0	0	0	0	7	39	100	196	283	308	178	126	69	30	6	0	0	0	0	0	0	1342
6	0	0	0	0	0	0	0	4	23	58	87	111	116	108	97	68	23	3	0	0	0	0	0	0	699
7	0	0	0	0	0	0	0	6	67	186	443	476 ?	286	243	137	51	26	4	0	0	0	0	0	0	1926
8	0	0	0	0	0	0	0	7	45	138	235	333	336	302 ?	195	122	51	8	0	0	0	0	0	0	1771
9	0	0	0	0	0	0	0	10	68	265	298	342	341	342	214	94	34	8	0	0	0	0	0	0	2016
10	0	0	0	0	0	0	0	5	38	145	197	394	534	482	393	258	99	12	0	0	0	0	0	0	2556
11	0	0	0	0	0	0	0	11	44	111	183	278	451	352	227	166	36	8	0	0	0	0	0	0	1867
12	0	0	0	0	0	0	0	1	18	101	190	181	294 ?	?	148 ?	110 ?	36 ?	7	0	0	0	0	0	0	1087 ?
13	0	0	0	0	0	0	0	7	63	307	409	473	501	477	393	255	104	13	0	0	0	0	0	0	3001
14	0	0	0	0	0	0	0	10	102	310	385	464	492	435	336	234	60	5	0	0	0	0	0	0	2834
15	0	0	0	0	0	0	0	9	78	233	432	486	504	469	274	103	41	13	0	0	0	0	0	0	2643
16	0	0	0	0	0	0	0	5	43	144	246	295	295	335	231	144	63	8	0	0	0	0	0	0	1808
17	0	0	0	0	0	0	0	2	48	108	81	171	132	161	150	56	14 ?	5	0	0	0	0	0	0	927
18	0	0	0	0	0	0	0	4	24	70	197	429	488	486	408	273	118	14	0	0	0	0	0	0	2512
19	0	0	0	0	0	0	0	3	16	66	162	198	409	241	103	111	28	9	0	0	0	0	0	0	1346
20	0	0	0	0	0	0	0	1	11	53 ?	41	59	54 ?	65	62	31	15 ?	3	0	0	0	0	0	0	396 ?
21	0	0	0	0	0	0	0	2	5 ?	?	?	?	?	79 ?	?	82 ?	33	5	0	0	0	0	0	0	206 ?
22	0	0	0	0	0	0	0	3	28	81	79	106	90	150	107	86	41	8	0	0	0	0	0	0	780
23	0	0	0	0	0	0	0	7	25	63	75	104	123	121	91	70	26	7	0	0	0	0	0	0	712
24	0	0	0	0	0	0	0	5	20	52	82	146	145	101	63	43	20	7	0	0	0	0	0	0	686
25	0	0	0	0	0	0	0	5	58	105	252	424	265	300	168	100	86	12	0	0	0	0	0	0	1774
26	0	0	0	0	0	0	0	3	12 ?	120 ?	156 ?	110	149	119 ?	106 ?	73 ?	34	5	0	0	0	0	0	0	887 ?
27	0	0	0	0	0	0	0	6	38	121	309	385	514	349	430	303	154	28	0	0	0	0	0	0	2636
28	0	0	0	0	0	0	0	11	55	76	132	346	522	456	449	317	153	29	0	0	0	0	0	0	2546
29	0	0	0	0	0	0	0	12	42	114	142	238	194	190	153	132	29	4	0	0	0	0	0	0	1251
30	0	0	0	0	0	0	0	4	17	49	88	172 ?	?	167 ?	94	86	37	8	0	0	0	0	0	0	724 ?
31	0	0	0	0	0	0	0	10	67	146	313	599	618	577	482	343	172	37	0	0	0	0	0	0	3363
Avg	0	0	0	0	0	0	0	6	40	125	209	290	319	280	222	144	56	10	0	0	0	0	0	0	1636
S D	0	0	0	0	0	0	0	3	23	72	116	147	167	151	130	89	44	8	0	0	0	0	0	0	872
S/A	0	0	0	0	0	0	0	0.56	0.58	0.58	0.56	0.51	0.52	0.54	0.58	0.62	0.78	0.8	0	0	0	0	0	0	0.53
Min	0	0	0	0	0	0	0	0	5	33	41	59	54	65	62	31	14	3	0	0	0	0	0	0	206
Max	0	0	0	0	0	0	0	12	102	310	443	599	618	577	482	343	172	37	0	0	0	0	0	0	3363
n	0	0	0	0	0	0	0	149	357	341	352	343	337	331	331	344	354	177	0	0	0	0	0	0	3418

Daylight Data Recovery: 0.0% missing; 0.0% untested; 7.0% exceed the 15% QC threshold -- 3674 total daylight measurements.

Instrument: Eppley PSP Serial Number: 25821F3 Calibration Factor: 9.020 $\mu\text{V}/\text{W}/\text{m}^2$ 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.

January 2010

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	?	?	*	*	?	?	85 ?	?	?	214 ?	?	0	0	0	0	0	0	299 *?
2	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
3	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	376 ?	?	0	0	0	0	0	0	*
4	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
5	0	0	0	0	0	0	0	*	*	*	*	*	?	?	?	?	?	?	0	0	0	0	0	0	?
6	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
7	0	0	0	0	0	0	0	*	*	*	*	773 ?	*	*	*	*	*	*	0	0	0	0	0	0	*
8	0	0	0	0	0	0	0	*	*	?	*	*	*	?	*	*	*	*	0	0	0	0	0	0	*
9	0	0	0	0	0	0	0	*	*	*	*	?	?	?	*	*	*	*	0	0	0	0	0	0	*
10	0	0	0	0	0	0	0	*	*	*	*	*	*	*	897 *?	*	*	*	0	0	0	0	0	0	*
11	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
12	0	0	0	0	0	0	0	?	?	?	?	109 ?	85 ?	?	?	?	95 ?	?	0	0	0	0	0	0	289 ?
13	0	0	0	0	0	0	0	*	*	?	*	*	*	?	?	*	*	*	0	0	0	0	0	0	*
14	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
15	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
16	0	0	0	0	0	0	0	?	?	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
17	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
18	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
19	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
20	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
21	0	0	0	0	0	0	0	*	*	*	185 ?	397	645 ?	86 ?	?	?	?	?	0	0	0	0	0	0	1312 *?
22	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
23	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
24	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
25	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
26	0	0	0	0	0	0	0	782	755 ?	63 ?	145 ?	120 ?	?	143 ?	179 ?	?	?	175 ?	0	0	0	0	0	0	2362 ?
27	0	0	0	0	0	0	0	*	?	?	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
28	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
29	0	0	0	0	0	0	0	*	*	*	*	*	?	*	*	*	*	?	0	0	0	0	0	0	*
30	0	0	0	0	0	0	0	*	?	51 ?	?	68 ?	?	?	?	?	?	?	0	0	0	0	0	0	?
31	0	0	0	0	0	0	0	*	*	*	199 *?	*	*	*	*	*	*	*	0	0	0	0	0	0	*
Avg	0	0	0	0	0	0	0	782	755	57	176	293	365	105	538	N/A	228	175	0	0	0	0	0	0	1326 *?
SD	0	0	0	0	0	0	0	0	0	9	28	298	396	33	508	0	141	0	0	0	0	0	0	0	1466
S/A	0	0	0	0	0	0	0	0	0	0.15	0.16	1.02	1.08	0.32	0.94	0	0.62	0	0	0	0	0	0	0	1.11
Min	0	0	0	0	0	0	0	782	755	51	145	68	85	85	179	N/A	95	175	0	0	0	0	0	0	289
Max	0	0	0	0	0	0	0	782	755	63	199	773	645	143	897	N/A	376	175	0	0	0	0	0	0	2362
n	0	0	0	0	0	0	0	5	7	9	7	29	10	13	5	0	16	2	0	0	0	0	0	0	53

Daylight Data Recovery: 77.1% missing; 0.0% untested; 20.0% exceed the 15% QC threshold -- 3674 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.

January 2010

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	0	6	29	69	98	88	93 ?	87	108	21	2	0	0	0	0	0	0	601
2	0	0	0	0	0	0	0	2	32	108	198	231	244	237	206	147	39	7	0	0	0	0	0	0	1450
3	0	0	0	0	0	0	0	7	47	147	256	113	69	69	62	47	26	6	0	0	0	0	0	0	847
4	0	0	0	0	0	0	0	12 ?	56	139	237	269	239	258	180	102	40	6	0	0	0	0	0	0	1539
5	0	0	0	0	0	0	0	6	39	104	199	278	286	186	131	72	31	6	0	0	0	0	0	0	1339
6	0	0	0	0	0	0	0	3	23	60	91	117	122	114	102	71	24	3	0	0	0	0	0	0	731
7	0	0	0	0	0	0	0	6	57	145	158	81 ?	219	247	141	54	28	4	0	0	0	0	0	0	1139
8	0	0	0	0	0	0	0	4	33	102	175	282	302	292 ?	202	127	52	8	0	0	0	0	0	0	1580
9	0	0	0	0	0	0	0	8	61	195	217	330	330	270	211	98	35	7	0	0	0	0	0	0	1763
10	0	0	0	0	0	0	0	5	39	132	201	277	146	73	57	46	27	7	0	0	0	0	0	0	1008
11	0	0	0	0	0	0	0	10	40	113	166	206	207	233	219	143	37	8	0	0	0	0	0	0	1383
12	0	0	0	0	0	0	0	1	18	105	181	189	294 ?	?	190	110	43	7	0	0	0	0	0	0	1137 ?
13	0	0	0	0	0	0	0	7	58	80	62	58	57	58	52	40	23	7	0	0	0	0	0	0	501
14	0	0	0	0	0	0	0	10	47	60	124	102	85	121	77	103	49	5	0	0	0	0	0	0	783
15	0	0	0	0	0	0	0	10	34	58	171	103	87	151	176	108	43	12	0	0	0	0	0	0	954
16	0	0	0	0	0	0	0	6	44	139	204	252	290	242	211	145	64	8	0	0	0	0	0	0	1606
17	0	0	0	0	0	0	0	2	49	104	85	180	141	169	158	52	14 ?	4	0	0	0	0	0	0	958
18	0	0	0	0	0	0	0	4	24	74	192	180	105	78	55	41	25	6	0	0	0	0	0	0	784
19	0	0	0	0	0	0	0	4	16	70	169	185	179	200	108	116	29	9	0	0	0	0	0	0	1085
20	0	0	0	0	0	0	0	1	12	30	43	61	52	69	66	32	14	3	0	0	0	0	0	0	384
21	0	0	0	0	0	0	0	1	4 ?	?	?	?	45	83	81	83	34	5	0	0	0	0	0	0	336 ?
22	0	0	0	0	0	0	0	3	29	86	84	114	97	160	114	92	43	8	0	0	0	0	0	0	831
23	0	0	0	0	0	0	0	7	27	66	78	109	129	125	95	75	27	6	0	0	0	0	0	0	744
24	0	0	0	0	0	0	0	5	21	56	88	158	157	109	68	46	21	8	0	0	0	0	0	0	736
25	0	0	0	0	0	0	0	6	52	85	212	219	232	204	161	105	74	12	0	0	0	0	0	0	1360
26	0	0	0	0	0	0	0	3	31	108	174 ?	113	161	137 ?	89	84	36	5	0	0	0	0	0	0	941 ?
27	0	0	0	0	0	0	0	6	40	125	246	245	147	266	185	90	42	12	0	0	0	0	0	0	1405
28	0	0	0	0	0	0	0	12	50	81	140	254	161	93	63	49	36	13	0	0	0	0	0	0	951
29	0	0	0	0	0	0	0	13	43	120	151	248	206	201	163	139	30	4	0	0	0	0	0	0	1317
30	0	0	0	0	0	0	0	4	17	52	95	186 ?	?	178 ?	101	92	39	8	0	0	0	0	0	0	773 ?
31	0	0	0	0	0	0	0	10	70	141	56	55	61	68	65	56	41	16	0	0	0	0	0	0	638
Avg	0	0	0	0	0	0	0	6	36	97	151	176	165	160	125	86	35	7	0	0	0	0	0	0	1019
S D	0	0	0	0	0	0	0	4	17	38	62	79	84	73	57	34	13	3	0	0	0	0	0	0	376
S/A	0	0	0	0	0	0	0	0.64	0.46	0.4	0.41	0.45	0.51	0.46	0.45	0.4	0.37	0.44	0	0	0	0	0	0	0.37
Min	0	0	0	0	0	0	0	0	4	29	43	55	45	58	52	32	14	2	0	0	0	0	0	0	336
Max	0	0	0	0	0	0	0	13	70	195	256	330	330	292	219	147	74	16	0	0	0	0	0	0	1763
n	0	0	0	0	0	0	0	138	367	360	352	344	352	344	369	372	365	177	0	0	0	0	0	0	3541

Daylight Data Recovery: 0.0% missing; 0.0% untested; 3.6% exceed the 15% QC threshold -- 3674 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.