

November 2009

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	1	8	49	84	99	99	174	182	148	102	67	18	0	0	0	0	0	0	1032
2	0	0	0	0	0	0	4	62	198	374	514	579	586	535	426	278	103	10	0	0	0	0	0	0	3668
3	0	0	0	0	0	0	5	63	219	370	317	541	514	517	419	269	100	10	0	0	0	0	0	0	3344
4	0	0	0	0	0	0	5	94	243	341	303	441	177	206	168	176	47	8	0	0	0	0	0	0	2207
5	0	0	0	0	0	0	3	29	110	197	160	285	390	305	376	261	92	10	0	0	0	0	0	0	2219
6	0	0	0	0	0	0	3	83	261	376	494	558	563	513	409	258	89	5	0	0	0	0	0	0	3614
7	0	0	0	0	0	0	3	43	206	366	493	560	565	512	405	253	88	7	0	0	0	0	0	0	3503
8	0	0	0	0	0	0	0	48	204	360	474	536	542	487	384	238	35	3	0	0	0	0	0	0	3313
9	0	0	0	0	0	0	0	40	187	261	382	282	340	240	146	59	23	1	0	0	0	0	0	0	1963
10	0	0	0	0	0	0	0	9	27	41	59	49	58	50	39	25 ?	7 ?	0	0	0	0	0	0	0	364
11	0	0	0	0	0	0	0	6	?	46	76	72	56	46 ?	35 ?	32	12	2	0	0	0	0	0	0	383 ?
12	0	0	0	0	0	0	0	4	22	56	78	90	110	59	41	54	31	4	0	0	0	0	0	0	550
13	0	0	0	0	0	0	0	33	187	287	333	445	544	451	274	219	67	2	0	0	0	0	0	0	2842
14	0	0	0	0	0	0	0	52	93	288	435	507	529	474	373	227	81	5	0	0	0	0	0	0	3063
15	0	0	0	0	0	0	0	39	193 ?	314	437	493	528	428	359	233	63	0	0	0	0	0	0	0	3088
16	0	0	0	0	0	0	0	30	144	342	456	511	521	467	367	222	65	0	0	0	0	0	0	0	3126
17	0	0	0	0	0	0	0	15	92	197	550	256	177	402	235	92	24	2	0	0	0	0	0	0	2042
18	0	0	0	0	0	0	0	18	55	92	130	118	109	57	54	34 ?	15	4	0	0	0	0	0	0	686
19	0	0	0	0	0	0	0	14	81	121	486	564	518	252	80	25	9	1	0	0	0	0	0	0	2151
20	0	0	0	0	0	0	0	23	63	107	175	284	517	457	362	214	42	1	0	0	0	0	0	0	2244
21	0	0	0	0	0	0	0	17	85	247	410	473	493	437	325	205	52	0	0	0	0	0	0	0	2744
22	0	0	0	0	0	0	0	27	158	300	412	309	283	269	165	76	18	2	0	0	0	0	0	0	2020
23	0	0	0	0	0	0	0	5	11 ?	43 ?	47	52	54	69	68	50	17	3	0	0	0	0	0	0	419 ?
24	0	0	0	0	0	0	0	10	45	156	273	513	476	498	293	232	58	2	0	0	0	0	0	0	2556
25	0	0	0	0	0	0	0	5	20 ?	53	183	423	513	435	295	213	59	4	0	0	0	0	0	0	2202
26	0	0	0	0	0	0	0	22	118	188	245	252	142	224	102	87	28	3	0	0	0	0	0	0	1410
27	0	0	0	0	0	0	0	4	12 ?	125	171	164	114	104	106	111	30	4	0	0	0	0	0	0	945
28	0	0	0	0	0	0	0	28	177	296	415	480	491	440	346	205	56	1	0	0	0	0	0	0	2936
29	0	0	0	0	0	0	0	22	130	287	407	471	413	387	160	92	38	4	0	0	0	0	0	0	2410
30	0	0	0	0	0	0	0	2	16	67	66 ?	65	?	51 ?	41	28 ?	7	2	0	0	0	0	0	0	345 ?
Avg	0	0	0	0	0	0	1	28	117	213	303	349	362	319	233	152	47	4	0	0	0	0	0	0	2113
S D	0	0	0	0	0	0	2	24	78	121	164	187	194	175	140	91	30	4	0	0	0	0	0	0	1082
S/A	0	0	0	0	0	0	1.89	0.84	0.66	0.57	0.54	0.54	0.54	0.55	0.6	0.59	0.62	1	0	0	0	0	0	0	0.51
Min	0	0	0	0	0	0	0	2	11	41	47	49	54	46	35	25	7	0	0	0	0	0	0	0	345
Max	0	0	0	0	0	0	5	94	261	376	550	579	586	535	426	278	103	18	0	0	0	0	0	0	3668
n	0	0	0	0	0	0	13	323	325	354	356	360	345	347	355	339	355	68	0	0	0	0	0	0	3542

Daylight Data Recovery: 0.0% missing; 0.0% untested; 2.8% exceed the 15% QC threshold -- 3644 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.

November 2009

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	0	0	*
2	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
3	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
4	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	*
6	0	0	0	0	0	0	?	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
7	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
8	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	*
10	0	0	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
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	139 ?	?	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
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	?	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
27	0	0	0	0	0	0	0	*	*	*	*	?	?	?	?	?	?	?	0	0	0	0	0	0	?
28	0	0	0	0	0	0	0	650 ?	597 *?	*	*	*	*	*	*	*	*	*	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	*	*	*	*	*	*	*	*	*	*	*	0	0	0	0	0	0	*
Avg	0	0	0	0	0	0	0	395	597	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 *
SD	0	0	0	0	0	0	0	362	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	0.92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	139	597	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	0	0	650	597	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	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daylight Data Recovery: 96.2% missing; 0.0% untested; 3.6% exceed the 15% QC threshold -- 3644 total daylight measurements.

Instrument: Eppley NIP Serial Number: 17664E6 Calibration Factor: 8.480 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.

November 2009

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	1	8	51	89	104	105	184	191	156	107	60	15	0	0	0	0	0	0	1072
2	0	0	0	0	0	0	3	47	203	?	370 ?	89	55	54	48	37	23	6	0	0	0	0	0	0	935 ?
3	0	0	0	0	0	0	6 ?	55	52	105	251	122	128	80	61	52	31	7	0	0	0	0	0	0	952
4	0	0	0	0	0	0	4 ?	26	87	120	201	196	186	210	171	138	40	7	0	0	0	0	0	0	1387
5	0	0	0	0	0	0	2	30	113	192	172	248	223	114	83	68	35	8	0	0	0	0	0	0	1288
6	0	0	0	0	0	0	3	27	55	56	63	63	56	51	47	39	23	3	0	0	0	0	0	0	484
7	0	0	0	0	0	0	?	21	44	53	58	60	59	57	52	45	27	6	0	0	0	0	0	0	481
8	0	0	0	0	0	0	0	20	42	53	59	61	55	51	47	41	24	2	0	0	0	0	0	0	456
9	0	0	0	0	0	0	0	35	102	109	108	246	294	253	157	64	25	1	0	0	0	0	0	0	1393
10	0	0	0	0	0	0	0	9	29	44	64	53	63	54	42	22	8	0	0	0	0	0	0	0	388
11	0	0	0	0	0	0	0	6	16	48	81	78	57	43	34	34	12	2	0	0	0	0	0	0	410
12	0	0	0	0	0	0	0	4	22	59	84	97	118	63	44	58	33	3	0	0	0	0	0	0	585
13	0	0	0	0	0	0	0	18	36	148	204	108	66	202	133	40	25	2	0	0	0	0	0	0	983
14	0	0	0	0	0	0	0	35	79	102	101	72	46	44	40	35	37	5	0	0	0	0	0	0	594
15	0	0	0	0	0	0	0	20	33	44	71	83	51	55	47	45	14	1	0	0	0	0	0	0	464
16	0	0	0	0	0	0	0	17	33	38	45	44	44	41	38	32	16	1	0	0	0	0	0	0	348
17	0	0	0	0	0	0	0	14	73	155	310	157	154	243	192	91	23	1	0	0	0	0	0	0	1413
18	0	0	0	0	0	0	0	20	58	99	139	128	117	56	58	30	16	4	0	0	0	0	0	0	725
19	0	0	0	0	0	0	0	14	69	100	152	186	172	162	86	26	9	1	0	0	0	0	0	0	976
20	0	0	0	0	0	0	0	22	66	113	169	217	139	56	53	37	16	0	0	0	0	0	0	0	887
21	0	0	0	0	0	0	0	18	81	92	75	91	82	90	61	33	14	0	0	0	0	0	0	0	638
22	0	0	0	0	0	0	0	20	75	77	120	198	270	255	159	82	18	1	0	0	0	0	0	0	1275
23	0	0	0	0	0	0	0	4	14	35	51	55	57	75	73	54	18	2	0	0	0	0	0	0	438
24	0	0	0	0	0	0	0	10	47	159	239	200	167	148	134	58	17	3	0	0	0	0	0	0	1182
25	0	0	0	0	0	0	0	4	17	56	175	187	237	184	146	62	30	4	0	0	0	0	0	0	1102
26	0	0	0	0	0	0	0	20	95	161	176	156	149	161	105	69	27	2	0	0	0	0	0	0	1122
27	0	0	0	0	0	0	0	4	12	122	156	152	116	109	99	95	29	4	0	0	0	0	0	0	898
28	0	0	0	0	0	0	0	17	50	50	55	54	50	48	44	35	16	1	0	0	0	0	0	0	419
29	0	0	0	0	0	0	0	15	46	40	47	51	83	115	162	95	35	4	0	0	0	0	0	0	693
30	0	0	0	0	0	0	0	2	16	71	56	69	32 ?	44	42	20	7	1	0	0	0	0	0	0	359
Avg	0	0	0	0	0	0	1	19	57	89	132	121	117	110	87	55	24	3	0	0	0	0	0	0	812
S D	0	0	0	0	0	0	2	13	39	44	83	64	73	71	50	28	11	3	0	0	0	0	0	0	354
S/A	0	0	0	0	0	0	2.38	0.67	0.68	0.49	0.63	0.53	0.62	0.65	0.58	0.51	0.48	0.97	0	0	0	0	0	0	0.44
Min	0	0	0	0	0	0	0	2	12	35	45	44	32	41	34	20	7	0	0	0	0	0	0	0	348
Max	0	0	0	0	0	0	6	55	203	192	370	248	294	255	192	138	60	15	0	0	0	0	0	0	1413
n	0	0	0	0	0	0	10	313	356	348	352	360	355	360	360	360	360	68	0	0	0	0	0	0	3603

Daylight Data Recovery: 0.0% missing; 0.0% untested; 1.1% exceed the 15% QC threshold -- 3644 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.