TABLE 2.—*Daily totals and weekly means of solar radiation (direct + diffuse) received on a horizontal surface*—Continued

LATE DATA

	1940, week beginning—												
	July 1	July 8	July 15	July 22	July 29	Aug. 5	Aug. 12	Aug. 19	Aug. 26	Sept. 2	Sept. 9	Sept. 16	Sept. 23
	cal.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
Indio, Calif.	748	667	766	688	698	641	638	638	573	581	544	513	498
Torrey Pines, Calif.	594	700	663	----	----	616	521	587	549	544	546	453	483

	Week beginning—												
	Sept. 30	Oct. 7	Oct. 14	Oct. 21	Oct. 28	Nov. 4	Nov. 11	Nov. 18	Nov. 26	Dec. 5	Dec. 9	Dec. 16	Dec. 23
	cal.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
Indio, Calif.	463	482	444	385	397	382	----	298	330	299	241	207	174
Torrey Pines, Calif.	452	430	425	340	394	342	----	----	----	----	----	----	----

	1941, week beginning—												
	Jan. 1	Jan. 8	Jan. 15	Jan. 22	Jan. 29	Feb. 5	Feb. 12	Feb. 19	Feb. 26	Mar. 5	Mar. 12	Mar. 19	Mar. 26
	cal.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
Indio, Calif.	301	----	----	----	350	325	319	381	330	472	423	564	498
Torrey Pines, Calif.	----	----	----	----	----	----	----	----	----	----	----	----	----

	Week beginning—												
	Apr. 2	Apr. 9	Apr. 16	Apr. 23	Apr. 30	May 7	May 14	May 21	May 28	June 4	June 11	June 18	June 25
	cal.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
Indio, Calif.	621	520	625	628	632	727	732	683	712	712	740	763	751
Torrey Pines, Calif.	624	407	686	399	499	682	590	651	632	496	562	692	----

POSITIONS, AREAS, AND COUNTS OF SUN SPOTS FOR SEPTEMBER 1941

[Communicated by Capt. J. F. Hellweg, U. S. Navy (Ret.), Superintendent, U. S. Naval Observatory.] *All measurements and spot counts were made at the Naval Observatory from plates taken at the observatories indicated.* Difference in longitude is measured from the central meridian, positive toward the west. Latitude is positive toward the north. Areas are corrected for foreshortening and expressed in millionths of Sun's hemisphere. For each day, under longitude, latitude, area of spot or group, and spot count, are included assumed longitude of center of the disk, assumed latitude of center of the disk, total area of spots and groups, and total spot count.

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1941	*h m*		°	°	°	°				
Sept. 1	10 40	7275	−67	344	+3	67	24	6	G	U. S. Naval.
		7274	−64	347	−9	65	291	10		
		7273	−59	352	+13	59	97	9		
		7272	−50	1	−16	54	24	3		
		7269	−6	45	+10	6	97	7		
		7264	+78	129	+13	78	388	9		
				(51)	(+7)		921	44		
Sept. 2	11 25	7275	−54	344	+3	54	18	4	VG	Do.
		7274	−50	348	−8	53	291	12		
		7273	−43	355	+13	43	315	22		
		7272	−35	3	−15	41	24	2		
		7269	+8	46	+9	9	48	9		
		7276	+50	88	+14	50	48	4		
		(*)	+59	97	−4	61	24	6		
		7264	+88	126	+14	88	145	1		
				(38)	(+7)		913	60		
Sept. 3	11 37	7274	−35	350	−8	38	291	12	G	Do.
		7273	−29	356	+13	30	242	20		
		7272	−22	3	−15	31	24	3		
		7269	+21	46	+10	22	24	2		
				(25)	(+7)		581	37		
Sept. 4	11 34	7277	−66	305	+12	67	12	1	G	Mt. Wilson.
		7274	−21	350	−8	26	291	12		
		7273	−20	351	+15	22	48	1		
		7273	−11	0	+12	13	145	15		
		7269	+36	47	+9	36	24	5		
				(11)	(+7)		520	34		

POSITIONS, AREAS, AND COUNTS OF SUN SPOTS FOR SEPTEMBER 1941—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1941	*h m*		°	°	°	°				
Sept. 5	12 23	7277	−52	306	+12	52	48	5	G	U. S. Naval.
		7273	−7	351	+15	11	48	10		
		7274	−6	352	−8	16	291	14		
		7273	+3	1	+12	6	97	8		
				(358)	(+7)		484	37		
Sept. 6	10 50	7277	−39	306	+12	39	48	10	VG	Do.
		7274	+6	351	−7	15	364	24		
		7273	+7	352	+14	10	24	4		
		7273	+16	1	+12	17	48	7		
				(345)	(+7)		484	45		
Sept. 7	14 35	7278	+5	335	−9	17	48	9	G	Do.
		7274	+21	351	−7	26	388	16		
		7273	+31	1	+12	32	48	10		
				(330)	(+7)		484	35		
Sept. 8	10 59	7278	+19	338	−9	25	97	10	VG	Do.
		7279	+29	348	−3	32	36	6		
		7274	+35	354	−7	38	412	22		
		7273	+43	2	+14	44	97	11		
				(319)	(+7)		642	49		
Sept. 9	11 21	7278	+32	337	−9	35	73	8	G	Do.
		7274	+43	348	−7	45	48	15		
		7274	+49	354	−7	51	339	1		
		7273	+59	4	+12	60	73	1		
				(305)	(+7)		533	25		
Sept. 10	11 23	7281	−81	211	+10	81	485	3	G	Do.
		7280	−67	225	−8	69	12	1		
		7278	+45	337	−9	47	24	6		
		7274	+61	353	−7	63	339	4		
		7273	+72	4	+12	72	73	1		
				(292)	(+7)		933	15		

POSITIONS, AREAS, AND COUNTS OF SUN SPOTS FOR SEPTEMBER 1941—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1941	*h m*		°	°	°	°				
Sept. 11	11 16	7281	−88	191	+10	88	97	2	G	U. S. Naval.
		7281	−73	206	+11	73	824	12		
		7283	−70	209	+18	71	194	7		
		7280	−50	229	−10	53	24	3		
		7282	−21	258	−10	27	24	4		
		7278	+60	339	−8	62	12	1		
		7274	+75	354	−7	76	339	1		
				(279)	(+7)		1,514	30		
Sept. 12	11 31	7281	−69	197	+8	69	48	3	G	Do.
		7281	−63	203	+11	63	315	7		
		7283	−55	211	+18	55	291	10		
		7281	−53	213	+11	53	606	5		
		7280	−35	231	−10	38	24	5		
		7282	−9	257	−10	19	24	2		
		7278	+80	346	−8	80	12	1		
				(266)	(+7)		1,320	33		
Sept. 13	10 41	7281	−56	197	+8	56	12	1	G	Do.
		7281	−51	202	+11	51	242	1		
		7281	−41	212	+11	41	630	15		
		7283	−41	212	+18	42	436	16		
		7280	−20	233	−10	27	24	4		
		7284	+3	256	+8	3	48	7		
		7282	+5	258	−9	17	12	1		
				(253)	(+7)		1,404	45		
Sept. 14	10 55	7281	−42	198	+8	42	24	3	VG	Mt. Wilson.
		7281	−39	201	+11	39	315	7		
		7281	−28	212	+11	28	824	19		
		7283	−28	212	+18	30	436	14		
		7280	−7	233	−8	17	24	5		
		7284	+18	258	+7	18	12	1		
		7285	+25	265	+16	26	24	1		
				(240)	(+7)		1,659	50		
Sept. 15	10 55	7281	−34	192	+11	35	24	1	VG	U. S. Naval.
		7281	−29	197	+8	29	12	1		
		7281	−24	202	+11	25	533	14		
		7281	−23	203	+8	24	12	1		
		7281	−13	213	+11	13	824	25		
		7283	−13	213	+18	17	533	21		
		7280	+9	235	−9	18	97	8		
		7286	+40	266	+10	40	24	5		
				(226)	(+7)		2,059	76		
Sept. 16	10 53	7287	−68	145	−12	70	133	6	VG	Do.
		7281	−20	193	+11	21	12	3		
		7281	−10	203	+11	12	630	28		
		7283	−2	211	+18	12	485	18		
		7281	0	213	+10	3	1,067	63		
		7280	+22	235	−9	27	97	13		
		7278	+51	264	+10	51	24	3		
				(213)	(+7)		2,448	134		
Sept. 17	11 10	7289	−80	120	+17	80	194	3	VG	Do.
		7288	−57	143	+8	57	24	3		
		7287	−55	145	−12	58	242	9		
		7281	+1	201	+11	4	388	7		
		7281	+7	207	+11	8	630	35		
		7283	+11	211	+18	17	436	30		
		7281	+13	213	+11	15	1,164	55		
		7280	+36	236	−9	39	97	15		
				(200)	(+7)		3,175	157		
Sept. 18	10 45	7289	−67	120	+16	68	97	6	G	Do.
		7288	−42	145	+8	42	36	1		
		7287	−41	146	−12	44	242	12		
		7281	+8	195	+11	10	36	6		
		7281	+13	200	+11	13	436	3		
		7281	+20	207	+11	21	630	25		
		7283	+25	212	+19	27	242	16		
		7281	+27	214	+11	27	1,164	40		
		7280	+50	237	−9	52	121	18		
				(187)	(+7)		3,004	127		

POSITIONS, AREAS, AND COUNTS OF SUN SPOTS FOR SEPTEMBER 1941—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1941	*h m*		°	°	°	°				
Sept. 19	11 24	7289	−53	120	+16	53	24	4	VG	U. S. Naval.
		7288	−28	145	+8	28	48	1		
		7287	−27	146	−12	33	291	16		
		7281	+28	201	+12	29	339	6		
		7281	+32	205	+12	32	630	25		
		7283	+37	210	+19	38	242	26		
		7281	+41	214	+12	41	1,164	50		
		7280	+63	236	−9	65	121	14		
				(173)	(+7)		2,859	142		
Sept. 20	10 45	7287	−14	146	−12	24	242	13	G	Do.
		7288	−12	148	+7	12	48	1		
		7281	+41	201	+11	41	388	8		
		7281	+47	207	+11	47	630	20		
		7283	+49	209	+18	49	242	20		
		7281	+55	215	+11	55	1,067	30		
		7280	+76	236	−9	76	48	4		
				(160)	(+7)		2,665	96		
Sept. 21	11 6	7290	−7	140	+9	8	24	3	F	Mt. Wilson
		7287	−3	144	−14	21	48	6		
		7287	+3	150	−11	18	194	1		
		7288	+4	151	+6	5	48	4		
		7281	+58	205	+12	58	388	5		
		7281	+65	212	+12	65	1,697	25		
		7283	+65	212	+19	65	194	10		
				(147)	(+7)		2,593	54		
Sept. 22	11 40	7290	+8	142	+9	8	48	7	G	U. S. Naval
		7287	+10	144	−15	25	24	4		
		7287	+14	148	−12	23	194	2		
		7288	+18	152	+6	18	24	1		
		7292	+33	167	+15	34	48	9		
		7281	+69	203	+12	69	388	6		
		7281	+80	214	+11	80	1,697	25		
		7283	+80	214	+19	80	48	8		
				(134)	(+7)		2,471	62		
Sept. 23	11 1	(*)	−78	43	+17	78	12	3	VG	Do.
		7290	+22	143	+9	22	73	13		
		7287	+28	149	−12	33	194	1		
		7288	+31	152	+5	31	24	4		
		7292	+49	170	+15	49	242	20		
		7281	+85	206	+12	85	727	4		
				(121)	(+7)		1,272	45		
Sept. 24	10 59	7294	+10	118	+15	14	12	1	F	Do
		7293	+29	137	−13	35	24	4		
		7290	+35	143	+9	35	73	12		
		7287	+41	149	−12	45	194	1		
		7288	+44	152	+5	44	24	1		
		7292	+61	169	+15	61	291	6		
				(108)	(+7)		618	25		
Sept. 25	10 38	7296	−29	66	−11	34	12	4	VG	Do.
		7294	+29	124	+15	30	12	5		
		7293	+43	138	−13	46	48	8		
		7290	+49	144	+9	49	145	15		
		7287	+55	150	−12	57	218	1		
		7295	+58	153	−2	60	24	3		
		7292	+75	170	+15	75	242	6		
				(95)	(+7)		701	42		
Sept. 26	11 23	7299	−88	353	−8	88	24	1	G	Do.
		7298	−80	1	−6	80	24	1		
		7297	−75	6	+1	75	679	4		
		7293	+60	141	−15	63	12	3		
		7290	+65	146	+9	65	73	4		
		7287	+70	151	−13	73	194	2		
				(81)	(+7)		1,006	15		
Sept. 27	10 40	7299	−82	346	−6	82	291	6	G	Do.
		7299	−73	355	−8	74	388	14		
		7298	−65	3	−5	66	24	1		
		7297	−61	7	+2	62	679	3		
		7290	+79	147	+9	79	97	5		
		7287	+85	153	−12	85	145	1		
				(68)	(+7)		1,624	30		

POSITIONS, AREAS, AND COUNTS OF SUN SPOTS FOR SEPTEMBER 1941—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic: Difference in longitude	Heliographic: Longitude	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count	Plate quality	Observatory
1941	*h m*		°	°	°	°				
Sept. 28	11 22	7299	−69	346	−6	70	145	11	G	U. S. Naval.
		7299	−61	354	−8	63	121	6		
		7298	−51	4	−6	52	24	1		
		7297	−48	7	+1	48	679	4		
				(55)	(+7)		969	22		
Sept. 29	11 5	7299	−54	348	−6	56	121	9	G	Do.
		7299	−49	353	−8	52	121	7		
		7298	−37	5	−6	39	24	1		
		7297	−35	7	+1	36	606	3		
				(42)	(+7)		872	20		
Sept. 30	13 47	7299	−39	348	−6	42	121	7	F	Do.
		7299	−34	353	−8	36	121	7		
		7298	−23	4	−6	26	48	1		
		7297	−20	7	+1	22	606	4		
				(27)	(+7)		896	19		

Mean daily area for 30 days=1,387.

*=not numbered.
VG=very good; G=good; F=fair; P=poor.

PROVISIONAL SUNSPOT RELATIVE NUMBERS FOR AUGUST, 1941

[Based on observations at Zurich. Data furnished through the courtesy of Prof. W Brunner; Eidgen, Sternwarte, Zurich, Switzerland]

August 1941	Relative numbers	August 1941	Relative numbers	August 1941	Relative numbers
1	108	11	68	21	70
2	*Ec* 97	12	52	22	*a* 76
3	*ad* 94	13	32	23	73
4	94	14	16	24	82
5	88	15	8	25	68
6	*b* 90	16	*d* 16	26	*a* 66
7	*a* 86	17	13	27	*d* 72
8	*a* 57	18	16	28	79
9	50	19	34	29	64
10	56	20	*Mcd* 48	30	50
				31	*d* 48

Mean, 31 days=60.2

a=Passage of an average-sized group through the central meridian.
b=Passage of a large group through the central meridian.
c=New formation of a group developing into a middle-sized or large center of activity. *E*, on the eastern part of the sun's disk; *W*, on the western part; *M*, in the central-circle zone.
d=Entrance of a large or average-sized center of activity on the east limb.