POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1947

By LUCY T. DAY

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[Communicated by the 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 towards the north. Areas are corrected for foreshortening and expressed in millionths of Sun's hemisphere. For each day under Mount Wilson group number, longitude, latitude, area of spot or group, and spot count, are included respectively: number of groups, 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
1947	*h m*		°	°	°	°				
June 1	11 18	8607	−71	359	+11	72	145	1	F	U. S. Naval.
		8605	−33	37	−14	35	61	3		
		8605	−24	46	−13	25	97	9		
		8606	−29	41	−22	34	97	5		
		8606	−20	50	−21	28	109	6		
		8603	−19	51	−32	35	24	3		
		8604	−15	55	−12	17	16	1		
		8601	−13	57	+21	25	73	4		
		8602	−9	61	+15	18	48	3		
		8594	+3	73	−46	46	6	1		
		8594	+15	85	−43	44	61	1		
		8593	+21	91	−20	28	24	2		
		8593	+31	101	−21	36	194	6		
		8600	+23	93	+18	30	61	8		
		8599	+29	99	−23	34	194	8		
		8598	+53	123	−5	53	194	4		
		8591	+56	126	−23	58	242	1		
		8609	+60	130	+21	62	12	2		
		8608	+65	135	+13	66	73	8		
		(15)		(70)	(−1)		1,731	76		
2	10 38	8607	−58	359	+11	60	121	1	F	Do.
		8605	−17	40	−14	21	36	2		
		8605	−11	46	−13	16	73	3		
		8606	−12	45	−22	23	242	10		
		8603	−7	50	−32	32	73	4		
		8604	−1	56	−12	11	12	2		
		8601	+1	58	+21	22	48	1		
		8602	+4	61	+15	16	61	2		
		8594	+18	75	−45	46	24	1		
		8594	+27	84	−43	48	48	1		
		8600	+38	95	+18	42	24	2		
		8599	+41	98	−23	45	242	8		
		8593	+42	99	−21	45	194	1		
		8598	+66	123	−4	66	194	5		
		8591	+68	125	−23	70	242	1		
		8608	+77	134	+15	78	145	4		
		(14)		(57)	(−1)		1,779	48		
3	10 8	8611	−80	324	+23	80	291	3	G	Do.
		8611	−76	328	+23	77	48	1		
		8607	−46	358	+11	48	121	1		
		8606	−3	41	−22	22	170	11		
		8606	+6	50	−21	22	48	4		
		8606	+7	51	−19	21	24	10		
		8605	+1	45	−13	13	48	3		
		8603	+4	48	−32	32	73	4		
		8603	+9	53	−33	34	48	8		
		8601	+13	57	+20	23	12	8		
		8602	+17	61	+14	24	6	2		
		8594	+40	84	−43	55	24	3		
		8599	+50	94	−22	52	48	6		
		8599	+56	100	−22	58	145	6		
		8593	+56	100	−20	59	145	1		
		8598	+78	122	−3	78	97	2		
		8591	+80	124	−22	80	194	2		
		(12)		(44)	(0)		1,542	75		
4	10 15	8612	−82	308	+20	82	97	2	G	Do.
		8612	−78	312	+20	79	194	4		
		8612	−78	312	+24	80	97	1		
		8613	−81	309	+15	82	36	1		
		8611	−66	324	+24	69	194	5		
		8611	−64	326	+23	67	388	13		
		8611	−60	330	+22	62	48	1		
		8607	−32	358	+11	33	121	1		
		8607	−32	358	+13	34	12	8		
		8606	+11	41	−21	24	97	13		
		8606	+18	48	−19	27	73	14		
		8606	+20	50	−21	29	48	3		
		8605	+13	43	−13	18	12	6		
		8603	+16	46	−32	37	73	2		
		8603	+22	52	−33	39	48	3		
		8594	+50	80	−42	60	24	2		
		8599	+65	95	−24	68	24	2		
		8599	+70	100	−23	71	145	5		
		8593	+69	99	−21	70	194	4		
		(10)		(30)	(0)		1,925	90		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1947—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
1947	*h m*		°	°	°	°				
June 5	10 31	8612	−70	307	+15	70	36	1	G	U. S. Naval.
		8612	−70	307	+21	71	145	3		
		8612	−69	308	+19	71	73	1		
		8612	−66	311	+23	68	194	9		
		8611	−53	324	+24	58	267	16		
		8611	−48	329	+22	51	170	5		
		8607	−19	358	+11	22	61	1		
		8607	−18	359	+9	21	48	7		
		8606	+23	40	−21	31	73	5		
		8606	+32	49	−21	38	48	1		
		8605	+28	45	−12	31	12	3		
		8603	+29	46	−32	42	61	2		
		8603	+35	52	−33	46	48	1		
		8614	+39	56	+20	42	61	7		
		8593	+83	100	−21	83	194	3		
		8599	+83	100	−24	83	97	2		
		(10)		(17)	(0)		1,588	67		
6	10 44	8613	−56	308	+15	58	73	1	G	Do.
		8613	−55	309	+14	57	36	5		
		8612	−56	308	+21	58	242	7		
		8612	−55	309	+19	58	73	1		
		8612	−53	311	+23	57	194	6		
		8611	−40	324	+24	46	388	13		
		8611	−34	330	+22	40	339	6		
		8618	−28	336	+11	31	12	3		
		8616	−12	352	+8	15	12	1		
		8617	−9	355	+21	23	24	7		
		8607	−4	0	+9	10	145	12		
		8605	+26	30	−16	30	12	2		
		8606	+37	41	−22	41	97	12		
		8606	+46	50	−22	50	48	4		
		8603	+44	48	−33	50	48	3		
		8614	+52	56	+20	55	61	3		
		(11)		(4)	(0)		1,804	76		
7	12 5	8612	−42	308	+20	46	291	12	G	Do.
		8612	−38	312	+22	43	194	14		
		8613	−39	311	+15	42	158	15		
		8620	−28	322	−16	32	24	2		
		8611	−26	324	+24	35	533	31		
		8611	−19	331	+22	28	485	18		
		8617	+7	357	+20	21	97	2		
		8616	+11	1	+9	14	97	5		
		8619	+29	19	+21	35	12	1		
		8603	+50	40	−23	53	12	2		
		8606	+51	41	−22	53	73	7		
		8614	+66	56	+19	68	12	1		
		(10)		(350)	(0)		1,988	110		
8	12 21	8612	−28	308	+20	33	145	15	VG	Do.
		8612	−24	312	+22	32	97	20		
		8613	−28	308	+15	32	24	5		
		8613	−23	313	+15	28	194	16		
		8620	−13	323	−16	20	12	7		
		8611	−12	324	+24	27	388	20		
		8611	−5	331	+21	22	412	22		
		8617	+18	354	+21	28	48	6		
		8617	+22	358	+21	30	12	3		
		8606	+65	41	−22	67	73	4		
		8621	+72	48	−18	73	12	1		
		(7)		(336)	(0)		1,417	119		
9	9 51	8612	−17	307	+22	28	145	10	F	Mt. Wilson.
		8612	−13	311	+24	27	73	14		
		8613	−12	312	+14	18	97	10		
		8613	−7	317	+14	15	121	1		
		8620	−1	323	−15	15	12	1		
		8611	+3	327	+25	25	242	19		
		8611	+7	331	+22	23	436	7		
		8619	+55	19	+22	58	24	5		
		(5)		(324)	(0)		1,150	67		
10	11 9	8625	−65	245	−23	67	12	2	G	U. S. Naval.
		8624	−64	246	−31	68	12	1		
		8623	−61	249	+16	63	6	1		
		8622	−40	270	+15	43	6	1		
		8613	−3	307	+16	16	6	1		
		8613	+2	312	+15	15	48	9		
		8613	+7	317	+15	17	97	1		
		8612	0	310	+23	23	242	27		
		8611	+14	321	+23	27	242	7		
		8611	+20	330	+21	29	364	9		
		8617	+43	353	+20	47	6	1		
		(8)		(310)	(0)		1,041	60		
11	10 56	8624	−51	246	−30	58	24	2	G	Do.
		8622	−26	271	+12	28	24	2		
		8617	+9	306	+21	22	48	3		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1947—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
1947	*h m*		°	°	°	°				
June 11	10 56	8612	+13	310	+24	25	145	12	F	U. S. Naval.
		8612	+18	315	+23	27	24	2		
		8613	+16	313	+16	21	48	5		
		8613	+20	317	+15	24	109	1		
		8611	+27	324	+23	35	218	14		
		8611	+33	330	+22	39	436	22		
		8617	+55	352	+21	57	48	1		
		(6)		(297)	(+1)		1,124	64		
12	10 41	8626	−67	217	+9	69	48	4	G	Do.
		8622	−13	271	+12	17	24	3		
		8612	+22	306	+21	28	48	8		
		8612	+27	311	+24	34	97	16		
		8613	+33	317	+14	35	48	1		
		8611	+40	324	+25	45	97	6		
		8611	+47	331	+22	50	339	10		
		8617	+69	353	+21	70	6	1		
		(6)		(284)	(+1)		707	49		
13	13 24	8630	−68	202	−13	69	12	1	F	Do.
		8626	−51	219	+9	51	97	4		
		8626	−47	223	+9	47	61	1		
		8629	−8	262	−11	15	12	1		
		8628	+26	296	+21	32	24	2		
		8612	+40	310	+24	45	73	6		
		8613	+47	317	+14	49	73	2		
		8611	+54	324	+25	58	24	1		
		8611	+60	330	+21	61	485	4		
		(7)		(270)	(+1)		861	22		
14	10 25	8637	−88	170	−16	88	388	2	G	Do.
		8636	−80	178	+10	80	24	1		
		8635	−75	183	+22	76	73	2		
		8630	−55	203	−13	56	12	1		
		8626	−37	221	+8	38	73	9		
		8626	−33	225	+7	34	61	1		
		8634	−35	223	−16	38	12	2		
		8631	+11	269	−17	21	24	5		
		8628	+37	295	+21	41	6	1		
		8612	+45	303	+20	48	12	1		
		8613	+60	318	+14	60	24	4		
		8611	+74	332	+21	74	533	7		
		(11)		(258)	(+1)		1,242	36		
15	10 19	8639	−82	163	−21	82	48	1	F	Do.
		8637	−80	165	−15	80	242	3		
		8637	−70	175	−15	70	291	3		
		8637	−69	176	−16	69	109	4		
		8638	−78	167	+20	78	485	3		
		8636	−68	177	+8	68	24	1		
		8635	−61	184	+22	63	61	1		
		8630	−42	203	−14	44	12	1		
		8627	−37	208	−32	47	12	1		
		8634	−32	213	−15	36	24	2		
		8626	−25	220	+8	27	24	3		
		8626	−18	227	+7	19	61	2		
		8633	+7	252	−30	32	24	9		
		8632	+13	258	+4	14	73	4		
		8631	+27	272	−17	33	73	6		
		8612	+56	301	+12	57	12	1		
		(13)		(245)	(+1)		1,575	45		
16	10 18	8643	−73	159	+12	73	24	3	G	Do.
		8639	−68	164	−21	70	97	1		
		8637	−66	166	−15	68	291	5		
		8637	−59	173	−15	61	315	5		
		8637	−58	174	−16	60	194	3		
		8638	−64	168	+20	65	630	4		
		8636	−55	177	+9	56	24	1		
		8635	−48	184	+22	51	48	1		
		8630	−28	204	−13	32	6	1		
		8634	−19	213	−15	24	61	4		
		8626	−12	220	+9	14	36	4		
		8626	−3	229	+7	6	73	1		
		8642	−7	225	+20	20	12	2		
		8641	+1	233	+21	20	6	1		
		8640	+20	252	+26	32	12	2		
		8629	+38	270	−13	42	97	9		
		8631	+42	274	−19	45	73	4		
		(14)		(232)	(+1)		1,999	51		
17	10 52	8649	−82	136	+14	82	24	2	F	Do.
		8643	−59	159	+11	59	48	6		
		8639	−57	161	−21	60	170	3		
		8637	−51	167	−16	54	194	7		
		8637	−45	173	−17	47	291	8		
		8638	−50	168	+20	52	630	1		
		8636	−41	177	+8	41	12	1		
		8635	−35	183	+21	39	48	1		
		8630	−14	204	−14	20	24	2		
		8634	−5	213	−15	16	73	2		
		8626	+1	219	+8	7	24	9		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1947—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
1947	*h m*		°	°	°	°				
June 17	10 25	8626	+9	227	+7	11	48	1	G	U. S. Naval.
		8646	+3	221	−22	23	48	5		
		8645	+16	234	−16	22	6	3		
		8644	+33	251	−29	43	12	3		
		8629	+51	269	−12	53	121	7		
		8631	+53	271	−17	55	121	10		
		(15)		(218)	(+1)		1,894	71		
18	10 40	8649	−68	137	+13	68	36	1	F	Mt. Wilson.
		8656	−54	151	−15	56	48	1		
		8643	−45	160	+12	47	194	16		
		8638	−39	166	+20	42	533	1		
		8639	−38	167	−20	43	194	4		
		8637	−37	168	−15	40	145	6		
		8637	−30	175	−17	35	194	7		
		8655	−33	172	+32	37	24	3		
		8635	−22	183	+22	29	61	1		
		8653	−18	187	−11	22	12	1		
		8630	0	205	−12	13	48	4		
		8634	+9	214	−14	19	48	5		
		8626	+15	220	+10	17	73	6		
		8651	+27	232	+7	28	145	13		
		8629	+66	271	−12	67	339	11		
		8631	+69	274	−17	71	145	10		
		(15)		(205)	(+1)		2,239	90		
19	10 24	8649	−55	137	+13	57	24	2	VG	U. S. Naval.
		8656	−40	152	−16	43	48	5		
		8656	−35	157	−17	38	12	2		
		8643	−30	162	+11	32	170	18		
		8639	−29	163	−21	36	145	11		
		8638	−25	167	+20	31	533	1		
		8638	−24	168	+22	31	6	2		
		8637	−23	169	−14	26	242	30		
		8637	−17	175	−14	22	170	14		
		8636	−15	177	+9	17	12	5		
		8654	−11	181	−19	22	24	8		
		8635	−9	183	+21	22	48	1		
		8653	−2	190	−12	13	24	14		
		8634	+22	214	−14	25	48	7		
		8626	+28	220	+9	29	73	9		
		8646	+30	222	−22	37	170	12		
		8651	+38	230	+8	38	339	25		
		8650	+44	236	−9	45	97	6		
		8657	+60	252	+25	62	12	1		
		8629	+75	267	−13	75	97	7		
		8629	+82	274	−15	82	291	1		
		8631	+77	269	−17	78	145	7		
		(18)		(192)	(+1)		2,730	188		
20	10 18	8649	−42	137	+13	43	12	1	G	Do.
		8656	−25	154	−16	30	24	10		
		(*)	−17	162	+23	27	24	10		
		8643	−17	162	+12	20	61	15		
		8643	−13	166	+11	17	145	12		
		8639	−15	164	−21	27	97	10		
		8637	−10	169	−14	18	194	13		
		8637	−3	176	−15	16	145	5		
		8636	−1	178	+9	8	6	2		
		8654	+2	181	−19	21	12	1		
		8635	+4	183	+22	20	16	1		
		8653	+10	189	−11	17	97	11		
		8652	+20	199	+6	21	12	2		
		8630	+27	206	−12	31	24	4		
		8634	+35	214	−15	38	16	1		
		8626	+40	219	+9	41	218	10		
		8646	+42	221	−22	47	242	15		
		8651	+51	230	+7	51	194	15		
		8651	+60	239	+7	60	97	5		
		8650	+59	238	−9	60	145	5		
		8657	+72	251	+26	74	6	1		
		(18)		(179)	(+2)		1,787	149		
21	10 45	8649	−28	137	+14	32	6	1	G	Do.
		8656	−13	152	−16	22	48	8		
		8643	−3	162	+11	10	24	7		
		8643	0	165	+11	9	291	18		
		8639	−2	163	−21	23	97	15		
		8638	+1	166	+20	18	388	4		
		8637	+3	168	−17	19	145	18		
		8637	+12	177	−16	20	121	4		
		(*)	+12	177	+19	20	6	1		
		8654	+16	181	−20	25	12	3		
		8635	+17	182	+21	25	12	1		
		8653	+23	188	−11	26	73	2		
		8647	+42	207	+12	43	6	1		
		8634	+45	210	−12	45	97	5		
		8626	+54	219	+9	54	291	8		
		8646	+57	222	−22	60	218	11		
		8651	+63	228	+7	63	291	10		
		8651	+73	238	+7	73	97	4		
		8650	+72	237	−9	73	194	2		
		(16)		(165)	(+2)		2,417	123		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1947—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
1947	h m		°	°	°	°				
June 22	10 43	8659	−8	144	−23	25	36	4	G	U. S. Naval.
		8656	+2	154	−17	19	48	6		
		8643	+10	162	+11	14	121	7		
		8643	+16	168	+11	20	267	13		
		8638	+14	166	+20	23	339	3		
		8639	+17	169	−19	25	218	18		
		8660	+20	172	−11	24	73	3		
		8637	+23	175	−15	27	48	5		
		8635	+31	183	+21	36	48	6		
		8653	+37	189	−11	39	109	2		
		8647	+57	209	+13	59	73	2		
		8634	+58	210	−13	60	61	3		
		8626	+65	217	+10	65	194	1		
		8626	+73	225	+10	73	145	1		
		8646	+70	222	−21	72	339	5		
		8651	+80	232	+9	80	48	1		
		8650	+85	237	−9	85	145	1		
		(15)		(152)	(+2)		2,312	81		
23	10 20	8663	−63	76	+10	63	24	1	F	Do.
		8662	−12	127	+25	26	36	3		
		8661	−10	129	+14	15	24	1		
		8661	−5	134	+13	12	97	9		
		8659	+6	145	−24	26	24	1		
		8656	+15	154	−17	24	48	6		
		8643	+27	166	+11	29	194	20		
		8643	+31	170	+11	33	436	1		
		8638	+28	167	+20	32	315	1		
		8639	+30	169	−17	35	194	11		
		8637	+32	171	−16	35	145	10		
		8637	+40	179	−16	43	73	3		
		8660	+36	175	−11	38	73	8		
		8635	+44	183	+22	47	97	4		
		8653	+52	191	−11	53	48	1		
		8647	+69	208	+13	70	97	1		
		8634	+70	209	−13	71	12	1		
		8626	+78	217	+10	78	145	2		
		8646	+83	222	−21	83	242	3		
		(16)		(139)	(+2)		2,324	87		
24	10 23	8666	−80	46	−23	80	24	1	F	Do.
		8663	−50	76	+9	51	73	2		
		8663	−45	81	+7	46	24	2		
		8665	−15	111	−20	27	12	2		
		8662	+1	127	+25	24	242	10		
		8661	+7	133	+13	13	97	9		
		8664	+23	149	−25	35	24	4		
		8656	+32	158	−18	37	24	7		
		8643	+38	164	+9	39	170	13		
		8643	+45	171	+11	47	582	3		
		8638	+39	165	+20	42	388	2		
		8639	+41	167	−19	46	97	5		
		8637	+49	175	−17	52	145	7		
		8660	+49	175	−11	51	24	4		
		8635	+58	184	+23	60	48	5		
		8653	+66	192	−11	67	48	1		
		(14)		(126)	(+2)		2,022	77		
25	10 43	8668	−86	26	+14	86	242	1	G	Do.
		8666	−64	48	−22	66	48	5		
		8667	−40	72	−30	48	61	8		
		8663	−38	74	+9	39	24	1		
		8665	−5	107	−20	22	48	7		
		8662	+14	126	+25	26	339	18		
		8661	+21	133	+12	23	48	9		
		8638	+52	163	+20	54	291	1		
		8643	+52	163	+9	53	145	10		
		8643	+59	171	+11	60	727	5		
		8639	+58	170	−18	61	12	3		
		8637	+65	177	−16	68	48	8		
		8660	+65	177	−12	67	12	1		
		8635	+70	182	+22	71	48	2		
		8653	+79	191	−11	80	24	1		
		(14)		(121)	(+2)		2,117	80		
26	11 41	8668	−78	20	+14	78	242	4	G	Do.
		8668	−72	26	+13	72	291	1		
		8666	−50	48	−21	53	48	6		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1947—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
1947	h m		°	°	°	°				
June 26	11 41	8669	−33	65	−10	34	24	8		U. S. Naval.
		8667	−27	71	−30	41	121	9		
		8663	−24	74	+9	26	24	1		
		8665	+11	109	−20	25	24	4		
		8662	+27	125	+25	34	291	11		
		8661	+35	133	+14	37	24	3		
		8638	+66	164	+20	67	242	6		
		8643	+67	165	+9	67	145	4		
		8643	+73	171	+11	73	727	3		
		(10)		(98)	(+2)		2,203	60		
27	10 20	8671	−80	6	+16	80	242	4	VG	Do.
		8668	−65	21	+15	66	388	18		
		8668	−57	29	+14	59	388	4		
		8666	−46	40	−25	51	36	12		
		8666	−37	49	−22	44	24	4		
		8670	−36	50	+12	37	48	4		
		8672	−34	52	−14	36	6	2		
		(*)	−29	57	−23	37	12	1		
		8669	−23	63	−9	26	24	7		
		8667	−13	73	−29	32	121	15		
		8663	−10	76	+9	12	12	1		
		(*)	+23	109	+2	23	12	3		
		8665	+24	110	−19	32	12	4		
		8662	+42	128	+26	47	315	12		
		8638	+80	166	+20	80	242	1		
		8643	+85	171	+10	85	485	5		
		(14)		(86)	(+2)		2,367	97		
28	8 53	8674	−78	355	+21	78	24	1	G	Mt. Wilson.
		8676	−78	355	−25	80	12	1		
		8675	−75	358	−28	18	24	1		
		8671	−67	6	+19	69	48	3		
		8668	−51	22	+15	52	339	30		
		8668	−43	30	+14	44	436	1		
		8666	−31	42	−23	40	24	7		
		8666	−27	46	−21	36	24	10		
		8670	−22	51	+12	23	48	4		
		8669	−8	65	−8	14	73	15		
		8667	−3	70	−29	32	36	12		
		(*)	−1	72	−22	25	24	14		
		8673	+8	81	+30	28	12	2		
		8665	+36	109	−19	42	12	3		
		8662	+50	123	+27	53	194	6		
		8662	+57	130	+25	60	218	13		
		(13)		(73)	(+3)		1,548	123		
29	10 36	8677	−86	333	+20	86	48	1	VG	U. S. Naval.
		8676	−67	352	−18	69	12	1		
		8675	−64	355	−28	69	242	6		
		8675	−60	359	−30	66	291	1		
		8674	−60	359	+19	61	24	1		
		8671	−53	6	+17	55	48	7		
		8668	−37	22	+15	38	194	21		
		8668	−30	29	+14	32	436	1		
		8666	−12	47	−22	27	12	9		
		8670	−7	52	+12	11	61	4		
		8672	−1	58	−18	21	24	16		
		8669	+4	63	−9	12	12	4		
		8669	+7	66	−8	13	6	1		
		8667	+10	69	−29	33	12	3		
		8673	+23	82	+30	35	24	7		
		8665	+47	106	−19	52	6	2		
		8662	+66	125	+26	68	291	12		
		(14)		(59)	(+3)		1,743	97		
30	11 8	8677	−72	334	+20	72	97	1	G	Do.
		8675	−50	356	−28	57	194	5		
		8675	−47	359	−30	56	242	2		
		8674	−47	359	+19	48	12	1		
		8671	−38	8	+17	40	24	10		
		8668	−24	22	+15	26	145	7		
		8668	−16	30	+14	19	388	1		
		8679	−2	44	−17	20	24	7		
		8666	−1	45	−21	23	24	9		
		8678	+2	48	−3	6	12	5		
		8670	+6	52	+12	10	24	3		
		8672	+13	59	−18	25	12	6		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1947—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
1947	*h m*		°	°	°	°				
June 30	11 8	8669	+19	65	−7	21	24	4	G	U. S. Naval.
		8673	+36	82	+30	43	97	3		
		8662	+78	124	+27	78	291	5		
		(13)		(46)	(+3)		1,610	69		

Mean daily area for 30 days=1,759
Mean 10g +s for 30 days =202.9

(*) Not numbered.
VG=very good; G=good: F=fair; P=poor.

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR JUNE 1947

Dependent on observations at Zurich observatory and its stations at Locarno and Arosa.

June 1947	Relative numbers	June 1947	Relative numbers	June 1947	Relative numbers
1	225	11	104	21	246
2	206	12	93	22	232
3	179	13	90	23	232
4	143	14	99	24	195
5	143	15	134	25	204
6	150	16	164	26	151
7	158	17	197	27	150
8	132	18	228	28	148
9	114	19	274	29	163
10	120	20	251	30	143

Mean, 30 days = 168.9