POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1945

By LUCY T. DAY

[Equatorial Division, U. S. Naval Observatory]

[Communicated by Commodore J. F. Hellweg, U. S. N. (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
1945	*h m*		°	°	°	°				
June 1	10 23	7768	−52	293	−7	52	6	2	G	U. S. Naval.
		7763	+38	23	−18	41	6	2		
		7767	+55	40	+31	61	121	9		
		7767	+60	45	+31	65	73	10		
				(345)	(−1)		206	23		
2	11 9	7769	−35	296	+21	40	12	2	F	Do.
		7767	+69	40	+31	71	97	1		
		7767	+72	43	+31	75	48	3		
				(331)	(0)		157	6		
3	10 10	7770	−74	245	−19	75	97	1	G	Mt. Wilson.
		7769	−22	297	+21	30	12	1		
		7767	+82	41	+30	82	73	2		
				(319)	(0)		182	4		
4	11 36	7770	−60	245	−19	62	73	1	G	U. S. Naval.
		(*)	−10	295	−8	13	12	1		
		7769	−9	296	+21	23	12	2		
				(305)	(0)		97	4		
5	10 22	7770	−47	245	−19	50	48	1	G	Do.
		7769	+4	296	+21	21	12	1		
		(*)	+70	2	−27	71	6	2		
				(292)	(0)		66	4		
6	10 33	7771	−44	235	−22	48	24	3	F	Do.
		7770	−34	245	−19	39	61	1		
		7769	+18	297	+20	27	24	1		
				(279)	(0)		109	5		
7	10 36	7771	−32	234	−22	38	12	4	F	Do.
		7770	−20	246	−19	27	48	1		
				(266)	(0)		60	5		
8	11 12	7770	−7	245	−19	21	36	1	F	Do.
				(252)	(0)		36	1		
9	10 37	7771	−12	227	−21	23	36	1	F	Mt. Wilson.
		7771	−10	229	−20	22	61	1		
		7771	−7	232	−20	22	61	1		
				(239)	(0)		158	3		
10	12 34	7773	−85	140	−32	85	242	1	F	U. S. Naval.
		7772	−79	146	−18	80	97	1		
		7771	+1	226	−21	21	109	1		
		7771	+6	231	−22	22	109	2		
				(225)	(0)		557	5		
11	10 41	7773	−72	141	−32	75	291	1	VG	Do.
		7772	−65	148	−17	67	61	3		
		7771	+12	225	−23	27	48	3		
		7771	+14	227	−22	26	145	6		
		7771	+18	231	−22	30	85	1		
				(213)	(+1)		630	14		
12	11 17	7775	−80	119	−24	80	194	2	G	Do.
		(*)	−65	134	−25	68	12	1		
		7773	−59	140	−32	65	388	1		
		7772	−50	149	−18	52	48	1		
		7774	+7	206	−23	25	12	2		
		7771	+25	224	−24	35	48	1		
		7771	+26	225	−23	35	24	1		
		7771	+27	226	−22	36	61	1		
		7771	+29	228	−22	37	12	1		
		7771	+31	230	−22	38	73	2		
				(199)	(+1)		872	13		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1945—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
1945	*h m*		°	°	°	°				
June 13	11 6	7775	−79	107	−28	79	291	3	G	U. S. Naval.
		7775	−68	118	−24	70	97	2		
		7775	−65	121	−24	68	145	2		
		7776	−65	121	−20	67	6	1		
		7773	−46	140	−32	54	339	1		
		7772	−37	149	−18	42	48	1		
		7774	+19	205	−23	31	48	7		
		7774	+21	207	−23	32	6	1		
		7771	+38	224	−23	43	6	1		
		7771	+39	225	−22	43	6	1		
		7771	+40	226	−21	45	48	4		
		7771	+44	230	−21	48	36	2		
				(186)	(+1)		1076	26		
14	10 30	7775	−65	108	−28	68	291	6	VG	Do.
		7775	−55	113	−23	58	97	2		
		7775	−52	121	−23	56	109	3		
		7776	−50	123	−22	53	6	1		
		7773	−34	139	−32	45	339	1		
		7772	−24	149	−18	31	48	2		
		7774	+31	204	−23	39	36	3		
		7771	+52	225	−22	56	12	2		
				(173)	(+1)		938	20		
15	10 24	7775	−50	110	−28	57	194	7	G	Do.
		(*)	−47	113	+25	51	6	3		
		7775	−40	120	−23	45	73	3		
		7775	−37	123	−23	43	97	3		
		7778	−31	129	+21	37	6	2		
		7773	−22	138	−32	39	339	1		
		7772	−11	149	−18	22	24	2		
		7777	−1	159	+22	21	24	2		
		7774	+45	205	−22	49	24	6		
				(160)	(+1)		787	29		
16	10 33	7779	−49	97	+26	53	12	3	VG	Do.
		7775	−37	109	−28	45	194	16		
		7775	−33	113	−26	41	12	1		
		7775	−27	119	−25	38	170	18		
		7776	−25	121	−20	33	6	4		
		7773	−9	137	−32	34	291	1		
		7773	−5	141	−31	33	12	6		
		7772	−1	145	−17	18	12	1		
		7772	+1	147	−17	18	12	1		
		(*)	+68	214	−19	69	24	4		
				(146)	(+1)		745	55		
17	11 27	7775	−27	106	−28	38	24	1	F	Do.
		7775	−23	110	−27	37	145	5		
		7775	−20	113	−26	33	48	2		
		7775	−14	119	−24	28	194	7		
		7776	−9	124	−19	22	12	1		
		7773	+5	138	−32	33	242	1		
		7772	+17	150	−19	27	36	1		
		7774	+64	197	−22	67	24	2		
				(133)	(+1)		725	20		
18	21 39	7775	−9	110	−28	30	170	6	F	Do.
		7775	−4	115	−26	37	73	2		
		7775	0	119	−23	24	36	1		
		7775	+2	121	−25	26	194	5		
		7776	+5	124	−19	20	12	3		
		7773	+19	138	−32	37	218	1		
		7772	+30	149	−19	36	36	1		
				(119)	(+1)		739	19		
19	11 16	7781	−81	25	−16	81	97	1	G	Do.
		7779	−12	94	+28	30	24	4		
		7779	−8	98	+27	26	36	2		
		7775	+4	110	−27	29	24	3		
		7775	+11	117	−23	27	12	1		
		7775	+12	118	−25	29	24	3		
		7775	+15	121	−25	30	194	5		
		7775	+18	124	−25	33	12	1		
		7780	+23	129	−14	27	24	4		
		7780	+25	131	−17	31	61	6		
		7773	+30	136	−32	43	218	1		
		7772	+41	147	−18	46	6	1		
		(*)	+51	157	−14	53	6	1		
				(106)	(+2)		738	33		

See footnotes at end of table.

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1945	*h m*		°	°	°	°				
June 20	10 18	7781	−70	24	−14	72	48	1	F	U. S. Naval.
		7781	−68	26	−14	70	121	1		
		7782	−19	75	+13	22	12	2		
		7782	−15	79	+11	18	6	1		
		7779	0	94	+28	26	48	5		
		7779	+6	100	+25	24	73	5		
		7775	+25	119	−25	36	36	8		
		7776	+25	119	−17	32	6	2		
		7775	+28	122	−26	40	194	2		
		7780	+39	133	−15	42	12	1		
		7780	+42	136	−17	45	24	1		
		7773	+42	136	−32	51	218	1		
				(94)	(+2)		798	30		
21	10 34	7781	−62	18	−19	65	73	2	G	Do.
		7781	−57	23	−15	59	48	1		
		7781	−55	25	−15	58	145	3		
		7779	+20	100	+25	30	61	5		
		7775	+40	120	−22	46	73	7		
		7775	+42	122	−24	48	206	6		
		7773	+56	136	−32	62	218	1		
				(80)	(+2)		824	25		
22	10 45	7781	−49	18	−19	52	73	10	VG	Do.
		7781	−43	24	−15	46	48	4		
		7781	−41	26	−15	44	194	3		
		7779	+27	94	+28	37	6	1		
		7779	+33	100	+25	43	48	1		
		7775	+53	120	−23	59	36	3		
		7775	+57	124	−24	61	242	2		
		7773	+69	136	−32	71	218	1		
				(67)	(+2)		865	25		
23	10 37	7781	−37	17	−19	42	73	8	G	Do.
		7781	−32	22	−17	37	24	6		
		7781	−30	24	−15	33	97	5		
		7781	−28	26	−15	32	145	1		
		7779	+46	100	+25	50	24	1		
		7775	+69	123	−25	71	242	1		
		7773	+83	137	−32	83	218	1		
				(54)	(+2)		823	23		
24	10 46	7781	−24	16	−23	33	6	1	G	Do.
		7781	−23	17	−19	30	73	6		
		7781	−20	20	−17	27	24	7		
		7781	−16	24	−15	23	145	10		
		7779	+59	99	+27	62	12	1		
		7779	+67	107	+26	70	12	2		
		7775	+84	124	−25	84	242	1		
				(40)	(+2)		514	28		
25	9 15	7781	−10	18	−19	23	61	4	G	Mt. Wilson.
		7781	−3	25	−15	17	170	16		
		7779	+75	103	+26	76	24	1		
				(28)	(+2)		255	21		
26	10 48	7783	−20	354	−18	28	12	1	P	U. S. Naval.
		7781	+6	20	−20	23	61	4		
		7781	+11	25	−16	20	48	1		
		7781	+12	26	−15	21	61	2		
		7781	+13	27	−14	20	24	1		
				(14)	(+2)		206	9		
27	11 12	7784	+18	19	−20	28	48	3	F	Do.
		7784	+19	20	−23	31	24	7		
		7781	+23	24	−16	28	24	2		
		7781	+25	26	−15	30	73	3		
		7781	+27	28	−14	31	48	1		
				(1)	(+2)		217	16		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR JUNE 1945—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
1945	*h m*		°	°	°	°				
June 28	10 42	7781	+30	18	−18	35	24	2	G	U. S. Naval.
		7784	+30	18	−23	37	16	4		
		7781	+32	20	−20	38	24	3		
		7784	+34	22	−22	40	48	4		
		7781	+38	26	−15	41	73	5		
				(348)	(+3)		185	18		
29	10 46	(*)	−30	304	−11	32	6	1	G	Do.
		7785	−20	314	−32	38	24	5		
		7784	+44	18	−23	50	48	5		
		7784	+49	23	−23	53	48	2		
		7781	+51	25	−15	54	61	1		
				(334)	(+3)		187	14		
30	10 39	7785	−6	315	−30	33	12	2	G	Do.
		7784	+57	18	−23	60	12	5		
		7784	+60	21	−23	64	24	1		
		7781	+64	25	−15	66	73	1		
				(321)	(+3)		121	9		

Mean daily area for 30 days=462

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

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR MAY 1945

[Based on observations at Zurich except as indicated by an asterisk. Data furnished through the courtesy of Prof. W. Brunner, Swiss Federal Observatory, Zurich, Switzerland]

May 1945	Relative numbers	May 1945	Relative numbers	May 1945	Relative numbers
1	*b* 62	11	20	21	27
2	55	12	8	22	19
3	52	13	0	23	*Ec* 26
4	*42	14	*d* 9	24	*d* 32
5	34	15	*Wc* 22	25	*Wc* 36
6	*Mac* 43	16	43	26	24
7	35	17	46	27	31
8	20	18	50	28	23
9	34	19	47	29	22
10	16	20	26	30	19
				31	28

Mean, 31 days=30.7

* Observed at Locarno.
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 disc; 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.