POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR AUGUST 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*		°	°	°	°				
Aug. 1	10 46	7807	−22	236	+24	28	12	1	F	U. S. Naval.
		7807	−19	239	+23	26	12	1		
		7805	+3	261	+16	10	97	1		
				(258)	(+6)		121	3		
2	12 32	7810	−37	206	−20	46	6	1	F	Do.
		7807	−3	240	+24	19	6	3		
		7807	+2	245	+24	18	12	1		
		7805	+17	260	+17	21	97	1		
		7809	+38	281	+35	46	12	2		
				(243)	(+6)		133	8		
3	10 22	7811	−79	152	−16	80	24	2	F	Do.
		7807	+4	235	+24	18	12	1		
		7807	+7	238	+23	19	16	1		
		7805	+29	260	+17	31	97	1		
				(231)	(+6)		149	5		
4	10 32	7811	−67	151	−18	71	12	3	G	Do.
		7811	−66	152	−15	69	6	1		
		7811	−64	154	−17	68	61	2		
		7805	+40	258	+18	41	24	5		
		7805	+42	260	+17	43	73	1		
		7809	+61	279	+34	65	6	2		
				(218)	(+6)		182	14		
5	11 7	7812	−70	135	−18	73	12	1	G	Do.
		7811	−54	151	−19	60	61	1		
		7811	−51	154	−17	57	36	4		
		7805	+54	259	+17	55	6	1		
		7805	+55	260	+18	56	24	1		
				(205)	(+6)		139	8		
6	9 19	7813	−85	107	+22	85	194	2	G	Mt. Wilson.
		7812	−59	133	−17	63	24	4		
		7811	−43	149	−18	50	48	1		
		7811	−41	151	−18	48	6	1		
		7805	+67	259	+18	67	36	1		
				(192)	(+6)		308	9		
7	10 31	7813	−80	98	+22	80	48	1	G	U. S. Naval.
		7813	−74	104	+23	74	291	1		
		7812	−46	132	−16	51	12	2		
		7811	−29	149	−19	38	48	2		
		*	+50	228	+30	53	12	3		
		7805	+80	258	+18	80	24	1		
				(178)	(+6)		435	10		
8	10 36	7813	−68	97	+22	69	48	1	G	Do.
		7813	−60	105	+23	64	24	2		
		7813	−59	106	+23	60	291	1		
		7814	−42	123	+7	42	6	1		
		7811	−14	151	−19	28	12	2		
				(165)	(+6)		381	7		
9	10 38	7815	−70	82	−25	75	12	1	G	Do.
		7813	−52	100	+23	53	48	1		
		7813	−51	101	+22	53	36	1		
		7813	−45	107	+21	47	121	5		
		7813	−44	108	+23	46	218	10		
		7812	−22	130	−20	33	6	1		
		7812	−18	134	−18	31	12	4		
				(152)	(+6)		453	23		
10	10 35	7815	−57	82	−26	63	12	3	G	Do.
		7813	−40	99	+21	42	61	7		
		7813	−40	99	+25	43	24	5		
		7813	−31	108	+23	34	206	5		
		7813	−31	108	+21	33	97	7		
		7812	−9	130	−21	29	12	4		
				(139)	(+6)		412	31		

See footnotes at end of table.

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POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR AUGUST 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*		°	°	°	°				
11	10 32	7815	−54	72	−28	63	6	1	F	U. S. Naval.
		7815	−45	81	−25	54	6	1		
		7813	−28	98	+24	33	121	10		
		7813	−27	99	+21	31	48	1		
		7813	−24	102	+22	27	48	10		
		7813	−17	109	+21	23	24	3		
		7816	+2	128	−15	21	12	3		
		7812	+4	130	−22	29	12	3		
				(126)	(+6)		277	32		
12	10 30	7819	−80	32	+20	80	6	1	F	Do.
		7819	−75	37	+21	75	6	1		
		7815	−39	73	−26	50	6	3		
		7813	−15	97	+25	25	73	8		
		7813	−12	100	+22	20	24	1		
		7813	−10	102	+23	20	109	10		
		7813	−6	106	+22	17	121	3		
		7818	−5	107	−16	23	12	2		
		7818	−3	109	−16	24	12	1		
		7817	+61	173	+24	62	48	2		
				(112)	(+7)		417	32		
13	10 47	7819	−60	39	+22	61	6	2	VG	Do.
		7815	−29	70	−26	43	6	1		
		7815	−25	74	−26	40	6	2		
		7820	−20	79	+25	27	12	1		
		7813	−2	97	+25	19	339	25		
		7813	+3	102	+24	18	194	16		
		7813	+7	106	+22	17	145	3		
		7817	+75	174	+23	75	12	2		
		7817	+78	177	+24	78	12	1		
				(99)	(+7)		732	53		
14	11 56	7822	−80	5	+18	80	97	2	VG	Do.
		7822	−78	7	+19	78	97	1		
		7821	−30	55	−19	39	12	4		
		7821	−27	58	−19	37	12	2		
		7815	−10	75	−26	35	12	1		
		7820	−7	78	+25	20	12	1		
		7815	−6	79	−26	35	6	2		
		7813	+13	98	+27	25	533	22		
		7813	+17	102	+25	25	242	19		
		7813	+20	105	+22	24	97	6		
		7812	+45	130	−21	53	16	4		
				(85)	(+7)		1,136	64		
15	10 0	7822	−65	8	+19	65	85	1	F	Do.
		7815	+4	77	−25	33	12	1		
		7815	+8	81	−25	34	6	1		
		7813	+24	97	+26	29	388	15		
		7813	+30	103	+24	34	291	12		
		7813	+32	105	+21	33	73	13		
				(73)	(+7)		855	43		
16	11 9	7822	−51	8	+19	51	24	2	F	Do.
		7813	+36	95	+27	40	339	6		
		7813	+37	96	+30	42	12	1		
		7813	+43	102	+25	45	339	10		
		7813	+45	104	+23	46	48	2		
				(59)	(+7)		762	21		
17	10 22	7822	−39	7	+19	40	12	1	G	Do.
		7813	+48	94	+27	50	315	4		
		7813	+57	103	+25	57	194	8		
		7813	+59	105	+22	59	24	2		
				(46)	(+7)		545	15		
18	10 20	7822	−25	8	+19	27	12	1	G	Do.
		7823	+54	87	−23	60	48	3		
		7813	+60	93	+27	61	291	2		
		7813	+69	102	+25	70	194	2		
				(33)	(+7)		545	8		
19	10 49	7824	−68	312	+28	69	12	1	F	Do.
		7823	+65	85	−25	70	24	3		
		7813	+72	92	+27	72	194	2		
		7813	+84	104	+25	84	97	3		
				(20)	(+7)		327	9		
20	10 26	7824	−55	312	+28	57	12	1	F	Do.
		7813	+87	94	+25	87	194	1		
				(7)	(+7)		206	2		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR AUGUST 1945—Continued

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1945	*h m*		°	°	°	°				
21	11 45			None	None				(†)	Mt. Wilson.
22	11 15	7825	−23	317	−20	35	6	1	(†)	Do.
				(340)	(+7)		6	1		
23	9 56	7825	−7	320	−20	28	24	7	G	Do.
				(327)	(+7)		24	7		
24	10 41	7828	0	314	+27	20	6	1	F	Do.
		7825	+7	321	−20	28	16	3		
		7827	+49	3	−12	52	6	1		
		7827	+50	4	−11	53	12	2		
		7826	+66	20	−20	69	12	1		
				(314)	(+7)		52	8		
25	9 28	7825	+20	321	−20	33	24	4	G	Do.
				(301)	(+7)		24	4		
26	9 31	7829	−20	268	−29	41	12	1	F	Do.
				(288)	(+7)		12	1		
27	9 32			None	None				(†)	Do.
28	10 18	7830	−60	201	−17	64	24	1	G	U. S. Naval.
		7830	−57	204	−17	61	48	1		
				(261)	(+7)		72	2		
29	10 45	7830	−47	201	−17	52	24	6	G	Do.
		7830	−42	206	−17	49	48	4		
		7831	+59	307	+34	60	12	2		
				(248)	(+7)		84	12		
30	10 32	7830	−30	204	−16	38	6	1	G	Do.
		7830	−28	206	−17	37	24	4		
				(234)	(+7)		30	5		
31	10 57	7833	−70	151	−22	73	48	2	G	Do.
		7833	−68	153	−21	71	97	1		
		7830	−15	206	−17	28	12	1		
		7832	+40	261	−20	48	12	2		
				(221)	(+7)		169	6		

Mean daily area for 31 days=290

*Not numbered.
†Data from Mount Wilson charts.
VG=very good; G=good; F=fair; P=poor.

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR JUNE 1945 AND AUGUST 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]

June 1945	Relative numbers	June 1945	Relative numbers	June 1945	Relative numbers
1	20	11	*d*35	21	62
2	10	12	*d*42	22	56
3	*d*22	13	50	23	48
4	8	14	53	24	39
5	22	15	53	25	*a*28
6	22	16	68	26	*Mc*25
7	23	17	*a*70	27	26
8	8	18	*Eac*67	28	23
9	*Mc**19	19	59	29	19
10	*a*21	20	*ad*64	30	23

Mean, 30 days=36.2

August 1945	Relative numbers	August 1945	Relative numbers	August 1945	Relative numbers
1	*a*23	11	38	21	0
2	26	12	53	22	0
3	24	13	*b*63	23	8
4	23	14	70	24	16
5	19	15	71	25	8
6	17	16	51	26	0
7	*d*36	17	34	27	0
8	17	18	34	28	*Ec*9
9	30	19	34	29	10
10	35	20	*18	30	8
				31	20

Mean, 31 days=25.6

*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.