POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MAY 1946

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 toward 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 areas of spot 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
1946	*h m*		°	°	°	°				
May 1	12 8	8040	−70	187	−30	70	48	2	G	U. S. Naval.
		8039	−52	205	−19	54	48	5		
		8039	−49	208	−18	51	97	7		
		8038	−38	219	−29	43	267	10		
		8033	−37	220	−15	38	242	1		
		8033	−35	222	−16	37	97	9		
		8033	−31	226	−17	33	242	6		
		8032	−30	227	−26	37	12	6		
		8036	−13	244	−25	25	36	1		
		8036	−8	249	−23	22	48	5		
		8029	−8	249	+27	32	145	1		
		8037	+3	260	−36	33	12	4		
		8028	+17	274	−21	23	121	10		
		8035	+59	316	+22	62	24	1		
		8034	+60	317	−23	61	12	1		
		8035	+65	322	+22	69	48	4		
		8026	+75	332	+33	80	24	2		
		8027	+80	337	−18	80	97	3		
		(13)		(257)	(−4)		1,620	78		
2	8 48	8040	−57	188	−30	60	48	2	VG	Mt. Wilson.
		8039	−42	203	−19	43	145	25		
		8039	−36	209	−17	38	291	14		
		8038	−26	219	−28	35	485	20		
		8033	−25	220	−15	26	291	23		
		8033	−21	224	−16	24	242	17		
		8032	−18	227	−26	27	12	1		
		8036	− 3	242	−26	22	36	2		
		8029	+ 3	248	+27	32	145	1		
		8036	+ 4	249	−23	19	121	16		
		8037	+17	262	−34	34	36	12		
		8028	+30	275	−21	34	97	17		
		8035	+71	316	+25	75	145	1		
		8035	+75	320	+22	77	97	2		
		(10)		(245)	(−4)		2,191	153		
3	10 26	8041	−70	161	−28	70	145	1	F	U. S. Naval.
		8040	−44	187	−30	50	48	2		
		8039	−27	204	−20	31	48	8		
		8039	−25	206	−17	28	48	10		
		8039	−20	211	−18	24	291	14		
		8038	−14	217	−27	27	339	14		
		8033	−11	220	−14	15	194	3		
		8038	−10	221	−27	26	242	12		
		8033	− 6	225	−15	13	242	22		
		8032	− 3	228	−26	24	12	3		
		8036	+16	247	−24	25	12	3		
		8029	+17	248	+27	36	145	1		
		8036	+20	251	−23	26	73	4		
		8028	+45	276	−22	46	48	3		
		(9)		(231)	(−4)		1,887	100		
4	9 23	8041	−59	159	−27	61	97	10	VG	Mt. Wilson.
		8041	−57	161	−30	60	242	7		
		8040	−30	188	−30	38	48	15		
		8039	−13	205	−19	21	121	30		
		8039	− 6	212	−17	16	339	6		
		8038	− 1	217	−28	25	485	20		
		8038	+ 3	221	−27	25	194	23		
		8033	+ 3	221	−15	12	194	1		
		8033	+ 5	223	−18	16	73	32		
		8033	+ 8	226	−16	15	509	14		
		8036	+27	245	−24	32	24	20		
		8029	+30	248	+27	42	121	1		
		8036	+33	251	−22	37	73	4		
		8028	+58	276	−21	59	24	4		
		(8)		(218)	(−4)		2,544	187		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MAY 1946—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
1946	*h m*		°	°	°	°				
May 5	11 29	8041	−47	157	−28	51	121	7	G	U. S. Naval.
		8041	−42	162	−30	47	194	1		
		8040	−20	184	−30	32	6	1		
		(*)	−15	189	−27	28	6	1		
		(*)	−15	189	+11	21	12	3		
		8039	0	204	−20	16	73	10		
		8039	+9	213	−19	18	339	1		
		8038	+15	219	−27	28	582	25		
		8033	+15	219	−15	19	170	1		
		8033	+20	224	−15	22	158	15		
		8032	+26	230	−25	32	6	2		
		8036	+40	244	−25	43	12	3		
		8029	+42	246	+27	51	121	1		
		8036	+46	250	−24	49	97	6		
		8028	+70	274	−21	70	6	2		
		(11)		(204)	(−4)		1,903	79		
6	11 19	8042	−77	114	−36	78	194	1	G	Do.
		8043	−75	116	+28	80	24	4		
		8041	−32	159	−29	40	73	9		
		8041	−29	162	−30	38	170	3		
		8039	+13	204	−20	21	48	8		
		8039	+21	212	−19	26	339	2		
		8038	+26	217	−27	33	242	15		
		8033	+29	220	−15	31	145	2		
		8038	+33	224	−27	40	194	1		
		8033	+34	225	−15	36	73	7		
		8032	+40	231	−25	43	6	2		
		8036	+52	243	−24	54	24	2		
		8029	+54	245	+27	61	97	1		
		8036	+60	251	−24	61	73	4		
		(9)		(191)	(−4)		1,702	61		
7	12 53	8043	−65	112	+26	70	12	2	G	Do.
		8042	−63	114	−35	67	218	1		
		8041	−20	157	−28	31	73	10		
		8041	−16	161	−30	30	194	4		
		8039	+26	203	−20	30	12	9		
		8039	+35	212	−19	37	339	2		
		8038	+39	216	−27	43	218	11		
		8033	+43	220	−17	48	194	2		
		8044	+45	222	−41	55	12	1		
		8033	+48	225	−17	49	24	3		
		8038	+48	225	−27	52	194	1		
		8036	+66	243	−25	67	12	2		
		8029	+68	245	+27	71	97	1		
		8036	+75	252	−24	75	6	1		
		(9)		(177)	(−4)		1,605	50		
8	10 53	8042	−50	115	−35	56	206	1	G	Do.
		8041	−7	158	−27	25	61	9		
		8041	−3	162	−30	27	121	12		
		8039	+39	204	−20	41	24	2		
		8039	+48	213	−18	50	339	1		
		8038	+50	215	−28	53	121	12		
		8033	+54	219	−16	55	97	3		
		8038	+60	225	−27	63	109	1		
		8029	+80	245	+27	80	97	1		
		8029	+84	249	+27	85	97	1		
		(6)		(165)	(−3)		1,272	43		
9	11 2	8042	−38	113	−35	48	170	1	F	Do.
		8041	+7	158	−30	28	48	4		
		8041	+11	162	−31	30	97	8		
		8039	+59	210	−19	60	291	2		
		8038	+61	212	−28	65	97	9		
		8033	+68	219	−17	69	48	1		
		8038	+71	222	−27	72	97	1		
		(5)		(151)	(−3)		848	26		
10	10 56	8045	−45	93	+15	48	73	5	F	Do.
		8045	−41	97	+14	44	73	2		
		8042	−25	113	−35	40	194	1		
		8041	+20	158	−29	32	24	2		
		8041	+25	163	−30	36	24	2		
		8039	+72	210	−19	72	291	1		
		8038	+75	213	−28	76	97	2		
		(5)		(138)	(−3)		776	15		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MAY 1946—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
1946	*h m*		°	°	°	°				
May 11	10 36	8045	−31	94	+15	35	121	12	P	U. S. Naval.
		8045	−27	98	+14	33	73	6		
		8042	−12	113	−35	35	145	6		
		8041	+35	160	−30	43	12	1		
		8041	+36	161	−29	43	24	1		
		8039	+86	211	−18	86	242	1		
		(4)		(125)	(−3)		617	27		
12	10 42	8045	−17	95	+15	25	242	6	F	Do.
		8045	−15	97	+9	20	12	3		
		8045	−14	98	+14	21	145	2		
		8042	−7	105	−35	34	6	2		
		8042	−2	110	−37	36	6	2		
		8042	+2	114	−35	34	48	1		
		(*)	+46	158	−18	48	12	2		
		8041	+49	161	−30	53	36	4		
		(4)		(112)	(−3)		507	22		
13	11 2	8045	−4	95	+15	18	242	6	F	Do.
		8046	−1	98	+30	32	24	5		
		8045	−1	98	+15	17	24	4		
		8045	+1	100	+13	15	12	3		
		8045	+3	102	+13	17	218	1		
		8042	+12	111	−36	35	48	1		
		8041	+60	159	−32	64	12	1		
		(4)		(99)	(−3)		580	21		
14	8 58	8045	+7	93	+15	20	218	7	G	Mt. Wilson.
		8046	+12	98	+29	33	48	15		
		8045	+15	101	+12	21	170	2		
		8042	+26	112	−34	39	16	1		
		8041	+75	161	−30	78	24	1		
		(4)		(86)	(−3)		476	26		
15	8 50	8045	+20	93	+15	27	194	4	G	Do.
		8045	+22	95	+14	27	24	4		
		8045	+28	101	+12	32	145	1		
		(1)		(73)	(−3)		363	9		
16	13 35	8047	−68	350	+27	71	97	1	F	U. S. Naval.
		8048	−68	350	+23	70	73	7		
		8051	−45	13	+19	50	6	1		
		8049	−16	42	−25	32	12	4		
		8045	+37	95	+16	41	97	7		
		8045	+43	101	+15	45	12	3		
		8045	+44	102	+13	46	121	1		
		(5)		(58)	(−3)		418	24		
17	11 0	8054	−86	320	+24	88	194	1	F	Do.
		8052	−68	338	+15	68	48	4		
		8048	−61	345	+21	64	48	2		
		8048	−57	349	+21	61	61	4		
		8047	−57	349	+26	62	61	1		
		8050	−28	18	−9	29	6	2		
		8049	−3	43	−26	25	12	2		
		8045	+48	94	+17	51	61	6		
		8045	+56	102	+15	58	97	1		
		8053	+59	105	+13	61	97	6		
		(8)		(46)	(−2)		685	29		
18	10 38	8054	−70	323	+25	72	291	1	G	Do.
		8052	−60	333	+17	62	24	2		
		8952	−54	339	+15	58	24	3		
		8048	−49	344	+22	54	24	2		
		8047	−43	350	+26	50	48	1		
		8057	−33	0	−14	35	24	2		
		8057	−31	2	−13	32	24	3		
		8051	−17	16	+18	26	6	1		
		8049	+7	40	−26	25	12	1		
		8055	+46	79	−10	46	12	5		
		8055	+48	81	−11	49	6	1		
		8045	+61	94	+18	64	24	1		
		8045	+68	101	+16	69	73	1		
		8053	+72	105	+13	73	242	2		
		(10)		(33)	(−2)		834	26		
1946	*h m*		°	°	°	°				
May 19	12 5	(*)	−70	309	+26	73	97	2	G	U. S. Naval.
		8054	−55	324	+24	60	242	2		
		8052	−45	334	+16	47	48	3		
		8052	−44	335	+15	47	24	4		
		8052	−43	336	+17	47	73	6		
		8052	−40	339	+14	43	24	4		
		8059	−36	343	+25	43	6	3		
		8048	−33	346	+22	40	12	2		
		8047	−29	350	+25	38	24	1		
		8048	−26	353	+22	35	12	1		
		8057	−18	1	−16	23	12	2		
		8057	−16	3	−15	20	24	2		
		8057	−14	5	−15	19	48	4		
		8051	−2	17	+18	21	12	1		
		8058	+69	88	+18	71	24	1		
		8045	+76	95	+15	77	24	2		
		8053	+85	104	+12	86	145	3		
		(11)		(19)	(−2)		851	43		
20	10 37	8061	−55	311	+19	58	24	3	P	Do.
		8054	−44	322	+24	50	242	1		
		8052	−33	333	+16	37	194	8		
		8052	−30	336	+15	35	48	5		
		8052	−29	337	+17	34	97	3		
		8052	−27	339	+15	32	145	9		
		8059	−23	343	+26	36	24	1		
		8048	−22	344	+23	33	12	1		
		8047	−17	349	+25	32	24	1		
		8057	−6	0	−16	16	48	8		
		8057	−1	5	−15	14	36	2		
		8051	+11	17	+18	23	12	1		
		8058	+80	86	+18	80	24	1		
		(9)		(6)	(−2)		930	44		
21	11 2	8061	−46	307	+20	50	48	2	P	Do.
		8061	−43	310	+18	47	12	1		
		8061	−41	312	+18	45	48	3		
		8061	−38	315	+19	42	24	2		
		8054	−31	322	+24	40	242	1		
		8060	−27	326	+34	43	48	8		
		8052	−21	332	+16	27	170	5		
		8052	−14	339	+15	23	121	6		
		8059	−10	343	+25	28	6	1		
		8048	−8	345	+23	27	6	1		
		8047	−5	348	+25	27	12	1		
		8048	−3	350	+23	25	12	1		
		8057	+7	0	−15	16	24	3		
		8057	+10	3	−14	16	24	2		
		(8)		(353)	(−2)		797	37		
22	13 30	8061	−22	316	+19	30	97	3	F	Do.
		8054	−16	322	+24	30	145	1		
		8060	−11	327	+33	36	12	2		
		8052	−5	333	+15	18	194	5		
		8052	0	338	+14	16	145	7		
		8052	+1	339	+16	17	48	2		
		8057	+23	1	−14	25	73	4		
		8057	+26	4	−13	29	61	3		
		(5)		(338)	(−2)		775	27		
23	10 36	8063	−38	289	+30	48	24	3	VG	Do.
		8061	−19	308	+19	27	6	1		
		8061	−15	312	+20	27	73	11		
		8061	−10	317	+19	23	194	7		
		8054	−10	317	+23	26	24	3		
		8054	−5	322	+24	26	194	1		
		8060	0	327	+33	35	6	1		
		8062	+1	328	−19	17	24	12		
		8052	+6	333	+15	18	194	10		
		8052	+10	337	+16	20	24	7		
		8052	+12	339	+15	21	73	8		
		8059	+16	343	+23	30	36	4		
		8057	+34	1	−14	36	145	6		
		8057	+36	3	−13	38	61	8		
		(8)		(327)	(−2)		1,078	82		
24	10 54	8063	−25	289	+30	40	24	6	F	Mt. Wilson.
		8064	−10	304	+36	39	6	1		
		8061	−3	311	+20	22	73	5		
		8061	+3	317	+19	21	97	5		

See footnotes at end of table.

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POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MAY 1946—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
1946	*h m*		°	°	°	°				
May 24	10 54	8061	+5	319	+19	21	97	1		Mt. Wilson.
		8054	+7	321	+25	28	194	1		
		8060	+11	325	+34	38	6	1		
		8062	+13	327	−19	21	12	1		
		8052	+20	334	+15	26	194	1		
		8052	+25	339	+15	30	97	3		
		8059	+28	342	+24	38	97	4		
		8057	+47	1	−14	48	97	7		
		8057	+51	5	−14	52	48	4		
		(9)		(314)	(−2)		1,042	40		
25	10 19	8065	−85	215	−20	85	48	1	G	U. S. Naval.
		(*)	−62	238	+28	67	16	2		
		8063	−7	293	+30	32	12	2		
		8061	+8	308	+20	22	24	1		
		8061	+10	310	+21	23	194	5		
		8061	+14	314	+20	25	48	9		
		8061	+18	318	+20	27	145	2		
		8054	+20	320	+24	33	194	1		
		8062	+33	333	−22	38	24	4		
		8052	+33	333	+15	37	242	6		
		8052	+36	336	+15	39	97	8		
		8052	+38	338	+14	41	48	3		
		8059	+39	339	+25	46	48	2		
		8059	+41	341	+23	47	145	7		
		8057	+60	0	−14	60	73	3		
		8057	+64	4	−13	64	24	1		
		(9)		(300)	(−1)		1,382	57		
26	11 25	8065	−73	213	−19	73	97	1	F	Do.
		8061	+20	306	+20	28	36	7		
		8061	+23	309	+22	32	158	1		
		8061	+24	310	+19	31	97	10		
		8061	+30	316	+19	35	73	12		
		8061	+32	318	+19	37	194	1		
		8054	+32	318	+24	39	206	1		
		8052	+46	332	+16	49	121	9		
		8062	+47	333	−21	51	73	9		
		8052	+50	336	+16	52	97	10		
		8059	+55	341	+24	60	97	3		
		8057	+75	1	−13	75	48	2		
		(7)		(286)	(−1)		1,297	66		
27	10 46	8065	−59	215	−19	61	61	1	G	Do.
		8066	−16	258	−19	23	61	10		
		8061	+35	309	+19	40	48	3		
		8061	+36	310	+22	41	170	1		
		8061	+39	313	+18	43	61	12		
		8061	+45	319	+19	49	291	8		
		8054	+45	319	+24	50	218	1		
		8062	+57	331	−21	59	48	4		
		8052	+59	333	+16	60	48	4		
		8052	+60	334	+18	62	6	1		
		8052	+62	336	+15	63	48	5		
		8062	+64	338	−21	65	12	1		
		8052	+68	342	+15	69	12	4		
		8059	+69	343	+24	71	36	1		
		(7)		(274)	(−1)		1,120	56		
28	8 47	8065	−44	217	−19	47	48	1	F	Mt. Wilson.
		8066	−2	259	−18	17	24	4		
		8061	+49	310	+21	52	73	1		
		8061	+49	310	+19	52	109	1		
		8061	+57	318	+17	59	194	1		
		8054	+59	320	+24	62	291	1		
		8062	+70	331	−21	70	48	3		
		8052	+73	334	+16	75	145	4		
		(6)		(261)	(−1)		932	16		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MAY 1946—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
1946	*h m*		°	°	°	°				
May 29	11 0	8065	−30	217	−19	34	48	6	F	U. S. Naval.
		8067	−5	242	+30	31	12	1		
		8067	−2	245	+29	30	24	1		
		8066	+15	262	−19	22	12	1		
		8061	+58	305	+21	60	24	2		
		8061	+61	308	+22	63	218	2		
		8061	+69	316	+18	70	412	1		
		8054	+69	316	+24	71	206	1		
		(5)		(247)	(−1)		956	15		
30	13 20	8065	−14	218	−18	22	48	1	G	Do.
		8067	+13	245	+28	33	12	1		
		8061	+76	308	+22	78	194	1		
		8061	+80	312	+18	80	24	1		
		8061	+86	318	+17	86	291	1		
		8054	+86	318	+24	88	194	1		
		(4)		(232)	(−1)		763	6		
31	11 14	8068	−68	152	+18	79	6	1	G	Do.
		8068	−64	156	+17	66	61	1		
		8065	−3	217	−19	18	48	1		
		(2)		(220)	(−1)		115	3		

Mean daily area for 31 days=1,060
Mean 10 g+s for 31 days=116.7

*Not numbered.
VG=very good; G=good: F=fair; P=poor.
g=number of groups; s=number of spots.

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR MAY 1946

[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 1946	Relative numbers	May 1946	Relative numbers	May 1946	Relative numbers
1	163	11	52	21	78
2	150	12	41	22	84
3	156	13	36	23	88
4	145	14	40	24	102
5	150	15	17	25	110
6	116	16	37	26	85
7	103	17	66	27	104
8	82	18	92	28	76
9	72	19	85	29	59
10	61	20	89	30	41
				31	37

Mean, 31 days=84.4