POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MARCH 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 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
1946	*h m*		°	°	°	°				
Mar. 1	10 36	7982	−82	260	−22	82	145	1	G	U. S. Naval.
		7980	−74	268	−20	75	291	2		
		7978	−70	272	+29	78	194	4		
		7978	−63	279	+27	70	776	8		
		7978	−62	280	+26	68	970	14		
		7979	−50	292	+22	57	194	5		
		7978	−45	297	+25	56	36	1		
		7979	−43	299	+21	51	48	2		
		7977	−31	311	−21	33	48	6		
		7977	−26	316	−22	28	242	5		
		7975	−22	320	+23	28	6	1		
		7973	+7	349	+24	33	24	2		
		7970	+13	355	+22	32	48	4		
		7968	+30	12	−19	31	170	2		
		7981	+58	40	+22	63	97	1		
		7963	+85	67	−13	85	97	1		
		(11)		(342)	(−7)		3,386	59		
2	14 46	7982	−70	257	−22	71	97	1	F	Mt. Wilson.
		7980	−62	265	−20	63	73	1		
		7980	−58	269	−18	58	242	2		
		7978	−55	272	+31	65	194	1		
		7978	−48	279	+29	59	1,697	15		
		7978	−41	286	+25	52	24	1		
		7979	−34	293	+24	46	61	3		
		7978	−29	298	+26	43	48	1		
		7978	−26	301	+25	41	73	18		
		7979	−26	301	+23	40	48	2		
		7977	−9	318	−20	16	194	5		
		7970	+36	3	+27	48	145	7		
		7970	+38	5	+25	50	170	10		
		7968	+48	15	−19	48	194	1		
		(7)		(327)	(−7)		3,260	68		
3	11 4	7982	−60	256	−23	60	73	1	P	Do.
		7980	−52	264	−20	52	61	1		
		7980	−48	268	−18	48	194	1		
		7978	−47	269	+30	58	170	1		
		7978	−40	276	+31	54	1,503	10		
		7978	−34	282	+27	47	24	1		
		7979	−25	291	+23	39	73	2		
		7978	−21	295	+26	38	61	1		
		7979	−18	298	+23	35	61	1		
		7978	−15	301	+26	36	61	4		
		7977	0	316	−20	13	194	1		
		7970	+41	357	+25	52	291	8		
		7970	+48	4	+24	56	121	3		
		7968	+58	14	−19	58	170	1		
		(7)		(316)	(−7)		3,057	36		
4	11 21	7982	−47	255	−23	48	48	1	G	U. S. Naval.
		7980	−39	263	−21	41	61	1		
		7980	−33	269	−20	35	218	1		
		7978	−31	271	+29	46	218	2		
		7978	−25	277	+29	43	1,454	4		
		7978	−19	283	+27	38	291	8		
		7979	−10	292	+21	30	97	4		
		7978	−5	297	+24	32	61	1		
		7978	0	302	+24	31	61	1		
		7977	+9	311	−21	17	48	1		
		7977	+13	315	−21	19	194	2		
		7975	+17	319	+23	34	24	5		
		7970	+54	356	+25	62	436	7		
		7970	+60	2	+24	66	61	4		
		7968	+70	12	−19	70	194	1		
		(8)		(302)	(−7)		3,466	43		
5	11 10	7983	−45	244	+20	53	12	1	G	Do.
		7982	−31	258	−24	35	12	2		
		7980	−25	264	−21	28	121	8		
		7980	−21	268	−20	25	206	1		
		7978	−19	270	+29	41	218	4		
		7978	−13	276	+29	38	1,164	7		
		7978	−7	282	+27	36	242	5		
		7979	+3	292	+21	29	97	8		
		7978	+8	297	+25	34	12	3		
		7977	+27	316	−21	30	73	11		
		7975	+30	319	+25	43	12	6		
		7970	+68	357	+25	72	339	5		
		7970	+73	2	+24	78	145	2		
		7968	+83	12	−19	83	194	1		
		(9)		(289)	(−7)		2,847	64		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MARCH 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*		°	°	°	°				
Mar. 6	11 12	7984	−45	231	−24	47	6	4	G	U. S. Naval.
		7983	−35	241	+20	44	24	1		
		7983	−31	245	+19	40	12	4		
		7980	−13	263	−21	19	73	18		
		7980	−8	268	−19	15	194	1		
		7978	−7	269	+29	37	218	7		
		7980	−3	273	−20	13	12	4		
		7978	+1	277	+30	37	1,164	15		
		7978	+7	283	+27	35	121	7		
		7979	+17	293	+21	33	48	6		
		7979	+18	294	+19	32	24	7		
		7977	+40	316	−21	42	73	12		
		7970	+82	358	+24	85	339	3		
		(7)		(276)	(−7)		2,308	89		
7	11 3	7986	−84	179	−28	84	97	1	G	Mt. Wilson.
		7985	−44	219	−18	45	12	1		
		7983	−21	242	+20	35	12	1		
		7983	−15	248	+20	31	6	2		
		7980	+3	266	−22	15	24	8		
		7980	+5	268	−19	13	194	1		
		7978	+7	270	+30	38	194	7		
		7978	+14	277	+31	41	1,212	17		
		7978	+20	283	+27	40	145	11		
		7978	+31	294	+27	45	12	1		
		7979	+31	294	+21	43	24	3		
		7977	+54	317	−21	55	73	4		
		(7)		(263)	(−7)		2,005	57		
8	10 58	7986	−80	170	−28	80	48	1	G	Do.
		7986	−70	180	−28	71	145	1		
		7987	−15	235	−21	20	12	3		
		7982	+1	251	−26	19	6	1		
		7980	+13	263	−22	19	48	13		
		7980	+19	269	−19	23	194	1		
		7978	+19	269	+28	40	170	5		
		7978	+26	276	+29	44	1,115	9		
		7978	+28	278	+31	47	242	8		
		7977	+68	318	−22	68	48	4		
		(6)		(250)	(−7)		2,028	46		
9	12 4	7986	−61	175	−30	62	73	1	F	U. S. Naval.
		7988	−59	177	+3	60	6	3		
		7986	−58	178	−29	59	194	2		
		7987	−3	233	−18	13	6	1		
		7982	+10	246	−26	21	24	1		
		7982	+15	251	−25	24	24	5		
		7980	+29	265	−22	32	97	8		
		7980	+31	267	−19	32	194	1		
		7978	+31	267	+29	47	61	2		
		7978	+39	275	+29	52	1,018	6		
		7978	+47	283	+27	57	12	1		
		7977	+80	316	−20	86	48	1		
		(7)		(236)	(−7)		1,757	32		
10	10 37	7991	−83	141	−37	83	97	1	G	Mt. Wilson.
		7986	−51	173	−29	54	48	2		
		7986	−45	179	−28	47	97	3		
		7990	+16	240	+22	32	12	4		
		7987	+17	241	−19	21	12	1		
		7982	+24	248	−26	30	48	14		
		7980	+39	263	−23	41	12	8		
		7989	+40	264	−28	43	12	4		
		7980	+45	269	−19	46	170	1		
		7978	+45	269	+29	55	48	2		
		7978	+52	276	+29	62	1,018	15		
		(8)		(224)	(−7)		1,574	55		
11	10 43	7991	−85	125	−40	85	145	4	F	U. S. Naval.
		7991	−70	140	−37	70	242	3		
		7986	−37	173	−29	42	36	2		
		7986	−32	178	−28	37	97	1		
		7992	+35	245	+20	44	36	1		
		7982	+35	245	−25	38	48	1		
		7992	+37	247	+18	45	36	1		
		7982	+39	249	−24	42	97	4		
		7980	+58	268	−19	58	145	1		
		7978	+58	268	+27	65	73	4		
		7978	+64	274	+29	71	776	4		
		(6)		(210)	(−7)		1,731	26		
12	10 47	7991	−71	126	−40	71	73	4	F	Do.
		7991	−61	136	−37	63	48	1		
		7991	−56	141	−37	59	145	3		
		7986	−18	179	−28	27	97	1		
		7982	+46	243	−26	48	73	3		
		7992	+49	246	+20	55	48	1		
		7982	+52	249	−25	53	145	4		
		7980	+71	268	−19	72	121	1		
		7978	+74	271	+29	80	679	2		
		(6)		(197)	(−7)		1,429	20		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MARCH 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*		°	°	°	°				
Mar. 13	11 10	7991	−60	124	−40	63	73	3	G	U. S. Naval.
		7991	−58	126	−40	62	24	4		
		7991	−47	137	−38	52	61	1		
		7991	−43	141	−38	50	97	2		
		7986	− 6	178	−27	21	97	1		
		(*)	+58	242	−14	58	24	2		
		7982	+59	243	−26	60	145	1		
		7992	+61	245	+21	67	24	1		
		7982	+66	250	−25	66	315	4		
		7982	+77	261	−29	78	73	3		
		7980	+85	269	−19	85	121	1		
		(6)		(184)	(−7)		1,054	23		
14	11 16	7994	−87	84	−21	87	388	2	G	Do.
		7994	−82	89	−20	82	242	2		
		7991	−47	124	−41	55	48	6		
		7991	−33	138	−37	43	48	4		
		7991	−29	142	−37	40	97	1		
		7986	+5	176	−28	22	6	1		
		7986	+8	179	−27	23	97	1		
		7993	+19	190	+27	38	6	1		
		7982	+71	242	−25	72	170	1		
		7982	+80	251	−24	80	291	2		
		(5)		(171)	(−7)		1,393	21		
15	11 28	7994	−73	84	−20	74	339	6	F	Do.
		7994	−69	88	−19	70	218	4		
		7991	−35	122	−41	46	6	1		
		7991	−19	138	−37	35	48	5		
		7991	−16	141	−37	34	97	1		
		7986	+20	177	−27	27	97	1		
		7982	+85	242	−25	85	145	1		
		(4)		(157)	(−7)		950	19		
16	10 25	7996	−69	76	−27	69	48	3	G	Mt. Wilson.
		7995	−64	81	−9	64	12	1		
		7994	−58	87	−20	58	339	16		
		7994	−54	91	−19	54	97	2		
		7991	−7	138	−37	31	48	7		
		7991	−4	141	−38	32	109	2		
		7986	+34	179	−27	37	73	1		
		(5)		(145)	(−7)		726	32		
17	12 28	7999	−78	52	−15	78	6	1	G	Do.
		7998	−69	61	−17	69	6	1		
		7996	−57	73	−29	58	24	10		
		7996	−54	76	−29	57	73	1		
		7995	−49	81	−10	49	12	4		
		7994	−44	86	−20	45	291	24		
		7994	−38	92	−19	39	194	13		
		7991	−10	120	−40	34	36	18		
		7997	−7	123	+23	31	24	12		
		7997	−3	127	+21	28	36	3		
		7991	+7	137	−37	32	48	11		
		7991	+11	141	−38	33	61	3		
		7986	+48	178	−27	50	54	1		
		(8)		(130)	(−7)		865	102		
18	11 25	7999	−65	53	−15	65	6	2	F	Do.
		7998	−56	62	−17	56	6	2		
		7996	−42	76	−29	45	121	12		
		7995	−35	83	−10	35	36	9		
		7994	−30	88	−19	32	291	28		
		7994	−24	94	−20	26	97	27		
		7991	+1	119	−41	34	97	17		
		7997	+4	122	+22	29	48	16		
		7997	+7	125	+20	28	48	10		
		7991	+7	125	−39	33	48	2		
		7991	+20	138	−38	37	121	17		
		7986	+60	178	−27	61	48	1		
		(8)		(118)	(−7)		967	143		
20	10 27	(*)	−80	12	−18	80	12	1	F	U. S. Naval.
		7999	−39	53	−15	39	24	9		
		7999	−36	56	−14	37	73	8		
		7996	−20	72	−29	28	48	10		
		7996	−15	77	−28	27	73	11		
		7996	−13	79	−27	24	36	5		
		7994	−8	84	−20	15	24	7		
		7994	−2	90	−19	12	12	2		
		7994	+3	95	−18	12	73	12		
		7991	+30	122	−39	42	61	5		
		8000	+40	132	−16	40	12	5		
		8000	+42	134	−15	42	97	8		
		8000	+44	136	−16	44	73	5		
		7991	+48	140	−37	53	48	2		
		(6)		(92)	(−7)		666	90		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MARCH 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*		°	°	°	°				
Mar. 21	10 23	8002	−80	359	+23	83	242	2	F	U. S. Naval
		8002	−72	7	+22	75	582	1		
		(*)	−66	13	−18	66	12	2		
		8001	−33	46	+19	41	24	6		
		7999	−28	51	−15	30	48	10		
		7999	−25	54	−14	27	24	8		
		7999	−22	57	−13	23	73	6		
		7996	−8	71	−28	24	73	5		
		7996	−5	74	−28	22	12	1		
		7996	−2	77	−27	21	97	7		
		(*)	+5	84	−20	13	12	6		
		7994	+15	94	−19	19	97	12		
		7994	+17	96	−18	21	48	3		
		7991	+44	123	−39	51	36	2		
		8000	+52	131	−16	52	339	20		
		8000	+56	135	−16	56	388	22		
		7991	+61	140	−37	63	48	3		
		(9)		(79)	(−7)		2,155	116		
22	11 7	8002	−70	355	+25	76	194	2	G	Do.
		8002	−63	2	+24	70	145	4		
		8002	−59	6	+22	64	582	1		
		(*)	−53	12	−18	53	12	1		
		8001	−20	45	+19	32	97	6		
		7999	−16	49	−16	17	97	6		
		7999	−9	56	−13	11	97	4		
		7998	−1	64	−18	11	48	3		
		7996	+8	73	−28	23	24	4		
		7996	+12	77	−28	25	73	5		
		(*)	+18	83	−19	21	24	4		
		7994	+29	94	−19	31	48	3		
		7994	+31	96	−18	33	24	1		
		8000	+65	130	−17	65	485	4		
		8000	+72	137	−18	72	388	3		
		7991	+74	139	−37	74	24	1		
		8000	+83	148	−17	83	12	1		
		(10)		(65)	(−7)		2,374	53		
23	10 12	8002	−60	353	+25	67	315	8	F	Do.
		8002	−52	1	+24	57	145	5		
		8002	−45	8	+22	53	630	2		
		8001	−10	43	+18	27	24	1		
		8001	−5	48	+18	27	12	2		
		7999	−3	50	−15	9	24	2		
		7999	+5	58	−14	8	48	7		
		7998	+8	61	−17	13	12	1		
		7998	+12	65	−19	17	24	2		
		(*)	+19	72	−23	23	24	5		
		7996	+25	78	−29	32	48	3		
		(*)	+29	82	−20	31	6	2		
		(*)	+45	98	−19	46	12	3		
		8000	+78	131	−17	79	485	4		
		8000	+86	139	−18	86	388	2		
		(8)		(53)	(−7)		2,197	49		
24	13 31	8002	−46	352	+25	55	291	24	G	Mt. Wilson.
		8002	−41	357	+27	53	73	14		
		8002	−39	359	+24	50	73	25		
		8002	−30	8	+21	41	630	1		
		8001	+4	42	+18	27	12	3		
		8001	+9	47	+18	27	12	8		
		7999	+12	50	−16	15	48	17		
		7999	+20	58	−15	22	12	3		
		7998	+29	67	−19	31	12	2		
		7996	+40	78	−30	43	24	1		
		7994	+44	82	−22	45	6	6		
		(6)		(38)	(−7)		1,193	104		
25	9 50	8002	−33	353	+24	45	291	14	F	U. S. Naval.
		8002	−31	355	+21	41	12	1		
		8002	−19	7	+21	33	582	2		
		7999	+25	51	−16	26	36	2		
		7999	+33	59	−15	34	12	2		
		7996	+51	77	−30	54	24	1		
		7994	+57	83	−21	57	6	1		
		(4)		(26)	(−7)		963	23		
26	11 1	8002	−20	353	+24	36	218	9	F	Do.
		8002	−5	8	+21	29	558	1		
		7999	+48	61	−15	49	48	1		
		7996	+62	75	−30	63	12	1		
		(3)		(13)	(−7)		836	12		
27	11 12	8003	−86	273	−27	86	145	1	G	Do.
		8002	−12	347	+25	35	12	2		
		8002	−7	352	+25	34	291	13		
		8002	−5	354	+25	32	12	1		
		8002	+8	7	+21	29	558	1		
		7999	+61	60	−15	61	12	1		
		(3)		(359)	(−7)		1,030	19		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MARCH 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*		°	°	°	°				
Mar. 28	10 55	8003	−83	263	−27	83	242	2	F	U. S. Naval
		(*)	−82	264	−18	82	97	1		
		8003	−75	271	−26	76	194	1		
		(*)	−70	276	−14	70	24	1		
		8002	+6	352	+25	33	267	9		
		8002	+22	8	+21	36	558	1		
		(4)		(346)	(−7)		1,392	15		
31	11 14	(*)	−60	246	−23	60	194	1	F	Do.
		(*)	−57	249	−27	58	24	3		
		(*)	−49	257	+32	60	170	7		
		8003	−47	259	−29	50	12	1		
		(*)	−44	262	+27	54	206	1		
		8003	−42	264	−27	45	194	4		
		(*)	−41	265	−18	42	61	1		
		(*)	−40	266	+27	52	145	9		
		(*)	−35	271	−26	38	145	1		
		8002	+46	352	+23	55	97	1		
		8002	+62	8	+21	68	485	1		
		(8)		(306)	(−7)		1,733	30		

Mean daily area for 28 days=1,762

Mean 10 g+s for 28 days=118.1

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

NOTE.—Mount Wilson charts not available for March 19, 20, 21, 22, 28, 29, 30, 31.

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR MARCH 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]

March 1946	Relative numbers	March 1946	Relative numbers	March 1946	Relative numbers
1	96	11	67	21	101
2	83	12	71	22	97
3	71	13	57	23	109
4	92	14	50	24	64
5	98	15	52	25	55
6	88	16	49	26	57
7	65	17	59	27	49
8	71	18	87	28	60
9	65	19	106	29	60
10	78	20	96	30	87
				31	94

Mean, 31 days=75.3