POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR FEBRUARY 1946

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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*		°	°	°	°				
Feb. 1	11 16	7947	−86	265	−21	86	194	1	G	U. S. Naval.
		7944	−59	292	−15	60	73	3		
		7944	−57	294	−16	58	73	1		
		7943	−55	296	+28	65	3,636	10		
		7943	−48	303	+27	59	97	2		
		7943	−39	312	+26	51	1,503	10		
		7942	−15	336	−17	18	24	5		
		7942	−8	343	−16	13	12	1		
		7946	+1	352	+22	28	6	1		
		7945	+13	4	−21	19	97	7		
		7945	+16	7	−19	21	145	6		
		7941	+33	24	+31	50	6	1		
		7939	+80	71	−14	80	194	1		
		(8)		(351)	(−6)		6,060	49		
2	11 7	7947	−80	258	−24	80	145	1	G	Do.
		7947	−73	265	−21	73	291	1		
		(*)	−64	274	−30	66	6	1		
		7944	−50	288	−15	50	48	2		
		7943	−50	288	+32	62	242	3		
		7944	−46	292	−15	47	48	2		
		7943	−44	294	+28	56	3,685	9		
		7944	−43	295	−17	45	48	1		
		7943	−27	311	+26	42	1,551	5		
		7942	−3	335	−18	13	12	3		
		7942	+5	343	−17	12	24	2		
		7945	+27	5	−21	31	364	10		
		7945	+31	9	−19	33	218	5		
		(6)		(338)	(−6)		6,682	45		
3	11 15	7947	−68	256	−24	69	145	1	G	Do.
		7947	−60	264	−21	62	388	1		
		(*)	−51	273	−30	54	48	1		
		7943	−39	285	+32	53	194	1		
		7944	−38	286	−15	39	48	2		
		7944	−33	291	−15	34	36	1		
		7943	−32	292	+28	47	3,491	7		
		7944	−30	294	−17	32	48	3		
		7943	−15	309	+26	36	1,454	3		
		7942	+19	343	−17	22	48	1		
		7945	+39	3	−21	41	339	4		
		7945	+43	7	−19	45	218	2		
		(6)		(324)	(−6)		6,457	27		
4	10 50	7948	−62	249	+17	68	12	1	G	Do.
		7948	−61	250	+16	66	12	2		
		7947	−55	256	−24	57	48	1		
		7947	−47	264	−21	48	339	2		
		(*)	−28	283	−29	34	6	1		
		7943	−27	284	+32	48	170	1		
		7943	−19	292	+28	40	3,151	12		
		7944	−18	293	−15	21	12	2		
		7944	−15	296	−17	18	36	1		
		7943	−11	300	+30	38	24	1		
		7943	−10	301	+25	34	242	10		
		7943	−1	310	+25	32	1,406	8		
		7945	+52	3	−21	53	388	7		
		7945	+58	9	−19	59	339	3		
		(6)		(311)	(−6)		6,185	52		
5	11 24	7950	−68	230	+26	69	24	2	VG	Mt. Wilson.
		7948	−49	249	+15	53	73	11		
		7947	−43	255	−24	47	73	7		
		7947	−36	262	−22	38	339	4		
		7943	−15	283	+32	41	97	10		
		7943	−6	292	+28	36	3,297	15		
		7944	−6	292	−17	12	12	3		
		7944	−3	295	−17	12	12	2		
		7943	+3	301	+25	31	194	30		
		7943	+10	308	+24	32	873	8		
		7943	+14	312	+24	34	533	9		
		7945	+65	3	−21	66	339	3		
		7945	+72	10	−19	73	291	1		
		(6)		(298)	(−6)		6,157	105		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR FEBRUARY 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*		°	°	°	°				
Feb. 6	11 15	7950	−58	227	+28	59	48	3	VG	Mt. Wilson.
		7950	−53	232	+26	64	24	8		
		7951	−47	238	−35	52	24	4		
		7948	−35	250	+16	42	97	19		
		7947	−29	256	−24	32	48	5		
		7947	−22	263	−22	27	291	3		
		7943	−2	283	+32	38	97	11		
		7943	+7	292	+28	36	3,685	20		
		7943	+16	301	+25	36	170	28		
		7943	+23	308	+25	39	873	9		
		7943	+28	313	+25	43	485	13		
		7945	+79	4	−22	79	291	3		
		7945	+85	10	−19	85	242	1		
		(6)		(285)	(−6)		6,375	127		
7	11 3	7953	−80	152	+20	84	194	1	G	U. S. Naval.
		7950	−42	230	+26	53	12	1		
		7949	−41	231	−16	42	24	10		
		7950	−38	234	+25	50	6	1		
		7951	−35	237	−36	44	12	1		
		7948	−19	253	+15	29	36	2		
		7947	−17	255	−26	26	24	3		
		7952	−10	262	+17	27	24	1		
		7947	−8	264	−22	18	242	5		
		7943	+11	283	+33	41	97	5		
		7943	+20	292	+28	40	3,685	10		
		7943	+30	302	+25	45	97	10		
		7943	+38	310	+25	50	970	14		
		(8)		(272)	(−6)		5,423	64		
8	11 23	(*)	−88	170	+23	89	48	1	VG	Do.
		7953	−66	192	+18	71	12	1		
		7953	−65	193	+20	71	291	1		
		7950	−29	229	+28	44	12	2		
		7949	−27	231	−17	29	48	5		
		7950	−25	233	+25	40	61	4		
		7949	−23	235	−17	25	36	6		
		7948	−10	248	+13	22	24	9		
		7948	−6	252	+15	21	24	4		
		7947	−1	257	−26	20	12	3		
		7947	+6	264	−22	17	242	1		
		7943	+25	283	+33	46	24	3		
		7943	+34	292	+28	49	3,878	10		
		7943	+42	300	+25	53	97	10		
		7943	+52	310	+26	61	873	14		
		(7)		(258)	(−6)		5,682	74		
9	11 27	7953	−52	193	+19	59	242	3	F	Mt. Wilson.
		7949	−15	230	−16	17	48	4		
		7950	−15	230	+27	37	12	1		
		7949	−9	236	−17	13	48	3		
		7950	−9	236	+24	32	121	20		
		7955	+4	249	+26	34	24	7		
		7948	+7	252	+16	25	24	4		
		7947	+19	264	−22	23	218	1		
		7954	+45	290	−17	46	12	1		
		7943	+47	292	+29	58	3,685	13		
		7943	+53	298	+24	60	48	2		
		7943	+65	310	+26	71	727	7		
		(8)		(245)	(−7)		5,209	66		
10	11 12	7953	−37	195	+20	46	339	5	F	Do.
		7949	−1	231	−16	9	36	3		
		7950	−1	231	+27	34	24	3		
		7950	+3	235	+25	32	145	14		
		7949	+7	239	−17	12	24	2		
		7955	+12	244	+26	35	73	3		
		7955	+17	249	+27	38	97	8		
		7948	+19	251	+17	31	24	2		
		7947	+31	263	−21	33	218	1		
		7943	+60	292	+28	68	3,685	7		
		7943	+75	307	+25	80	97	2		
		(7)		(232)	(−7)		4,762	50		
11	11 14	7958	−61	158	+23	68	24	2	F	U. S. Naval.
		7953	−24	195	+18	34	291	1		
		7953	−24	195	+21	36	24	7		
		7957	−10	209	+31	40	73	8		
		7950	+12	231	+26	35	61	6		
		7949	+13	232	−17	17	48	4		
		7950	+16	235	+14	35	12	4		
		7949	+17	236	−17	21	24	3		
		7955	+25	244	+26	41	61	5		
		7955	+29	248	+27	43	121	6		
		(*)	+30	249	+17	38	12	1		
		7947	+46	265	−23	48	218	1		
		7956	+61	280	−32	62	6	1		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR FEBRUARY 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*		°	°	°	°				
Feb. 11	11 14	7943	+69	288	+28	77	2,182	7	P	U. S. Naval
		7943	+80	299	+26	83	1,212	3		
		(10)		(219)	(−7)		4,369	59		
12	10 51	7958	−50	156	+26	60	12	1	G	Do.
		7953	−12	194	+22	31	12	3		
		7953	−11	195	+20	29	291	1		
		7957	0	206	+31	38	145	1		
		7957	+7	213	+32	40	48	1		
		7960	+11	217	+23	32	12	3		
		7950	+23	229	+27	41	24	2		
		7949	+25	231	−17	26	36	2		
		7950	+30	236	+24	43	61	3		
		7949	+32	238	−17	33	12	1		
		7955	+38	244	+26	50	109	3		
		7955	+42	248	+27	54	145	6		
		7959	+49	255	+15	55	24	1		
		7947	+57	263	−24	58	218	1		
		7943	+85	291	+28	87	1,018	3		
		(10)		(206)	(−7)		2,167	32		
13	10 10	7961	−71	122	+28	78	242	1	P	Do.
		7958	−41	152	+27	53	36	3		
		7958	−37	156	+25	48	12	1		
		7953	+2	195	+20	27	291	1		
		7957	+12	205	+31	40	158	1		
		7957	+22	215	+31	44	48	1		
		7960	+24	217	+23	39	12	1		
		7950	+37	230	+28	50	12	3		
		7950	+42	235	+24	52	48	1		
		7949	+45	238	−16	46	12	1		
		7955	+50	243	+26	59	61	1		
		7955	+57	250	+28	66	97	1		
		7959	+63	256	+15	67	12	1		
		7947	+69	262	−24	69	194	1		
		(10)		(193)	(−7)		1,235	18		
14	10 45	7961	−61	119	+28	69	48	7	F	Do.
		7961	−59	121	+27	65	267	2		
		7961	−59	121	+25	67	73	1		
		7958	−27	153	+28	43	6	1		
		7958	−24	156	+25	40	12	1		
		7953	+15	195	+20	31	291	1		
		7957	+24	204	+32	46	73	2		
		7957	+34	214	+31	51	48	1		
		7950	+59	239	+24	65	73	4		
		7955	+70	250	+29	79	97	3		
		7947	+84	264	−24	84	194	1		
		(7)		(180)	(−7)		1,182	24		
15	10 45	7962	−69	97	+21	72	97	1	F	Do.
		7961	−47	119	+28	57	73	2		
		7961	−42	124	+25	53	388	3		
		7958	−16	150	+26	38	6	1		
		7953	+28	194	+20	39	364	1		
		7957	+36	202	+31	50	97	2		
		7957	+46	212	+30	58	48	1		
		7949	+70	236	−18	70	12	2		
		7950	+71	237	+24	77	61	1		
		(7)		(166)	(−7)		1,146	14		
16	11 10	7963	−87	66	−13	87	97	1	F	Do.
		7962	−63	90	+21	69	24	1		
		7962	−60	93	+21	65	97	4		
		7962	−55	98	+21	60	48	2		
		7961	−29	124	+25	44	436	3		
		7953	+40	193	+20	48	194	1		
		7957	+47	200	+32	60	24	1		
		7949	+80	233	−18	80	36	1		
		(6)		(153)	(−7)		956	14		
17	10 44	7963	−74	66	−13	74	291	1	VG	Do.
		7962	−48	92	+21	56	194	11		
		7962	−42	98	+20	50	388	18		
		7961	−16	124	+25	35	291	13		
		7953	+54	194	+19	60	242	3		
		7957	+60	200	+31	69	24	2		
		(5)		(140)	(−7)		1,430	48		
18	10 41	7963	−59	68	−13	59	194	1	VG	Do.
		7962	−35	92	+21	45	170	10		
		7962	−32	95	+21	42	48	4		
		7962	−27	100	+20	37	339	18		
		7965	−16	111	+34	43	12	2		
		7961	−3	124	+25	34	242	14		
		7953	+68	195	+20	71	242	3		
		7964	+72	199	−15	73	12	2		
		(6)		(127)	(−7)		1,259	54		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR FEBRUARY 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*		°	°	°	°				
Feb. 19	14 13	7963	−45	67	−13	45	121	1	G	Mt. Wilson.
		7966	−31	81	−21	33	48	12		
		7962	−20	92	+22	35	121	13		
		7962	−12	100	+21	31	242	9		
		7965	−2	110	+32	39	12	3		
		7961	+12	124	+26	35	218	10		
		7953	+85	197	+20	87	194	1		
		(6)		(112)	(−7)		956	49		
20	10 51	7963	−33	68	−13	33	170	1	G	U. S. Naval.
		7966	−21	80	−21	25	12	2		
		7966	−18	83	−18	22	48	4		
		7962	−10	91	+21	30	24	5		
		7962	−1	100	+21	28	170	5		
		7961	+20	121	+27	40	24	4		
		7961	+23	124	+27	42	61	6		
		7961	+24	125	+25	40	194	8		
		7967	+32	133	−25	35	12	3		
		(5)		(101)	(−7)		715	38		
21	11 7	7968	−80	7	−20	80	194	1	G	Do.
		7963	−20	67	−13	22	145	1		
		7969	−10	77	−18	15	24	4		
		7966	−6	81	−21	16	24	3		
		7966	−1	86	−22	14	61	1		
		7962	+12	99	+21	31	194	2		
		7961	+33	120	+27	47	24	1		
		7961	+36	123	+27	49	73	3		
		7961	+37	124	+25	49	121	1		
		7967	+45	132	−25	47	12	2		
		(7)		(87)	(−7)		872	19		
22	10 22	7970	−80	355	+20	82	48	1	P	Do.
		7968	−66	9	−20	67	194	1		
		7963	−7	68	−13	10	145	1		
		7969	+3	78	−16	10	24	2		
		7966	+7	82	−20	15	24	1		
		7966	+11	86	−21	18	61	1		
		7962	+23	98	+21	37	194	4		
		7961	+48	123	+28	58	24	2		
		7961	+49	124	+27	59	97	1		
		(7)		(75)	(−7)		811	14		
23	10 48	7970	−67	354	+22	71	97	1	G	Do.
		7968	−52	9	−20	52	194	1		
		7972	+3	64	−24	18	12	5		
		7963	+6	67	−13	9	170	1		
		7969	+18	79	−14	19	6	1		
		7966	+23	84	−21	27	73	15		
		7966	+27	88	−22	31	170	2		
		7962	+37	98	+21	47	170	4		
		7961	+61	122	+27	69	12	2		
		7961	+63	124	+26	70	97	1		
		(8)		(61)	(−7)		1,001	33		
24	11 20	7973	−69	339	+25	74	48	2	G	Mt. Wilson.
		7970	−53	355	+24	60	61	1		
		7968	−38	10	−19	39	194	1		
		7972	+15	63	−19	19	16	1		
		7963	+20	68	−14	22	121	1		
		7966	+37	85	−19	38	145	18		
		7966	+41	89	−20	42	339	6		
		7962	+52	100	+21	58	145	4		
		7971	+56	104	−26	59	48	15		
		7974	+78	126	−10	78	12	1		
		7961	+80	128	+26	84	73	1		
		(10)		(48)	(−7)		1,202	51		
25	10 55	(*)	−66	329	−16	67	291	1	G	U. S. Naval.
		7973	−53	342	+22	60	24	2		
		7970	−38	357	+22	47	48	1		
		7968	−23	12	−20	26	206	1		
		7963	+33	68	−13	33	145	1		
		7966	+48	83	−21	49	194	7		
		7966	+49	84	−19	50	73	2		
		7966	+53	88	−21	53	485	2		
		7962	+63	98	+21	69	121	2		
		7971	+65	100	−27	66	24	1		
		7971	+70	105	−25	72	61	3		
		(8)		(35)	(−7)		1,672	23		
26	12 23	7977	−77	304	−21	78	97	1	F	Do.
		7975	−75	306	+25	80	48	1		
		7977	−69	312	−21	70	73	2		
		7975	−68	313	+22	74	48	1		
		7975	−63	318	+25	70	97	1		
		7976	−47	334	−19	48	24	3		
		7973	−39	342	+22	47	24	1		
		7970	−25	356	+22	38	61	1		

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR FEBRUARY 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*		°	°	°	°				
Feb. 26	12 23	7968	−9	12	+20	28	206	1	G	U.S. Naval
		7963	+47	68	−13	47	97	1		
		7966	+60	81	−21	60	436	1		
		7966	+63	84	−20	63	145	1		
		7966	+68	89	−21	68	485	1		
		7962	+79	100	+20	80	121	1		
		7971	+80	101	−25	80	48	3		
		(10)		(21)	(−7)		2,010	20		
27	11 7	7979	−78	290	+20	80	388	5	G	Do.
		7978	−71	297	+25	78	242	1		
		7978	−61	307	+25	66	12	1		
		7977	−61	307	−22	62	73	6		
		7977	−53	315	−23	54	109	8		
		7975	−50	318	+24	58	48	2		
		7976	−35	333	−20	38	24	5		
		7973	−28	340	+22	40	24	5		
		7970	−19	349	+24	35	48	8		
		7970	−13	355	+22	31	97	6		
		7968	+3	11	−20	13	194	1		
		7963	−59	67	−13	59	73	1		
		7966	+73	81	−20	74	436	1		
		7966	+80	88	−20	80	630	4		
		(10)		(8)	(−7)		2,398	54		
28	11 10	7980	−88	267	−20	88	194	1	P	Do.
		7978	−75	280	+27	80	1,745	6		
		7979	−64	291	+21	69	388	4		
		7978	−59	296	+25	66	97	1		
		7978	−59	296	+30	67	48	1		
		7977	−49	306	−21	50	73	4		
		7977	−41	314	−23	43	194	2		
		7975	−36	319	+24	47	48	2		
		7973	−13	342	+21	31	24	1		
		7970	−7	348	+24	32	48	1		
		7970	+1	356	+22	28	121	5		
		7968	+17	12	−20	21	194	1		
		7980	+49	44	+21	56	24	3		
		7963	+72	67	−13	72	97	1		
		7966	+87	102	−20	88	388	1		
		(11)		(355)	(−7)		3,683	34		

Mean daily area for 28 days=3,145

Mean 10 g+s for 28 days=120.2

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

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR FEBRUARY 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.]

February 1946	Relative numbers	February 1946	Relative numbers	February 1946	Relative numbers
1	94	11	115	21	65
2	103	12	103	22	70
3	104	13	96	23	67
4	109	14	79	24	87
5	110	15	64	25	70
6	114	16	53	26	90
7	102	17	58	27	86
8	91	18	54	28	90
9	77	19	60		
10	121	20	45		

Mean, 28 days=84.9