POSITIONS, AREAS, AND COUNTS OF SUN SPOTS FOR FEBRUARY 1942

[Communicated by Capt. J. F. Hellweg, U. S. Navy (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
1942	h m		°	°	°	°				
Feb. 1	11 29	7364	−65	129	−10	65	48	1	G	U. S. Naval.
		7362	−37	157	−5	37	48	3		
		7362	−32	162	−8	32	194	3		
		7365	−3	191	+8	14	48	5		
				(194)	(−6)		338	12		
Feb. 2	11 2	7364	−51	130	−10	51	48	1	G	Do.
		7366	−25	156	+12	31	48	9		
		7362	−19	162	−8	19	242	6		
		7365	+10	191	+8	17	12	2		
				(181)	(−6)		350	18		
Feb. 3	11 17	7364	−38	130	−10	38	36	2	G	Do.
		7366	−10	158	+11	20	145	18		
		7362	−5	163	−8	5	218	4		
		7365	+24	192	+8	28	97	12		
				(168)	(−6)		496	36		
Feb. 4	11 3	7364	−25	130	−10	25	48	1	G	Do.
		7366	+3	158	+11	18	194	2		
		7368	+6	161	−3	6	18	1		
		7362	+9	164	−8	9	242	9		
		7365	+46	201	+8	50	145	12		
				(155)	(−6)		647	25		
Feb. 5	13 46	7364	−10	130	−10	11	24	1	G	Mt. Wilson.
		7366	+18	158	+11	25	194	23		
		7368	+20	160	+1	21	61	5		
		7362	+23	163	−8	23	291	15		
		7365	+50	190	+7	53	242	18		
				(140)	(−6)		812	62		
Feb. 6	11 10	7364	+3	131	−10	4	24	1	F	U. S. Naval.
		7369	+22	150	−5	22	48	4		
		7366	+30	158	+11	36	291	20		
		7368	+34	162	+1	35	24	1		
		7362	+35	163	−8	35	291	12		
		7365	+63	191	+7	65	388	12		
				(128)	(−6)		1,066	50		
Feb. 7	11 17	7364	+15	130	−10	15	12	1	G	U. S. Naval
		7364	+18	133	−7	18	12	1		
		7369	+35	150	−5	35	97	6		
		7366	+43	158	+11	47	339	18		
		7362	+49	164	−8	49	388	16		
		7368	+49	164	0	50	24	3		
		7365	+77	192	+8	79	388	14		
				(115)	(−6)		1,260	59		
Feb. 8	11 24	7369	+50	152	−5	51	97	4	P	Do.
		7366	+57	159	+11	60	339	9		
		7362	+62	164	−8	62	388	13		
		7368	+65	167	0	66	12	2		
				(102)	(−6)		836	28		
Feb. 9	10 47	7370	−51	38	−11	51	48	7	F	Do.
		7369	+69	158	−5	69	194	6		
		7366	+70	159	+11	73	194	5		
		7362	+76	165	−8	76	242	4		
				(89)	(−7)		678	22		
Feb. 10	15 7	7371	−70	3	+12	73	145	1	P	Do.
		7370	−38	35	−12	38	24	1		
		7370	−36	37	−11	36	48	1		
				(73)	(−7)		217	3		

POSITIONS, AREAS, AND COUNTS OF SUN SPOTS FOR FEBRUARY 1942—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
1942	h m		°	°	°	°				
Feb. 11	10 24	7372	−86	337	+13	86	194	1	F	Do.
		7371	−59	4	+13	62	97	1		
		7370	−27	36	−12	27	24	2		
		7370	−24	39	−11	24	48	2		
				(63)	(−7)		363	6		
Feb. 12	10 55	7374	−73	336	+19	76	145	7	G	Do.
		7372	−73	336	+13	77	194	4		
		7371	−46	3	+13	50	97	6		
		7370	−12	37	−13	13	24	2		
		7373	+62	111	+17	66	24	3		
				(49)	(−7)		484	22		
Feb. 13	11 14	7374	−58	338	+19	62	388	9	G	Do.
		7372	−57	339	+13	60	242	3		
		7371	−32	4	+13	38	97	3		
		7370	+2	38	−13	7	97	14		
				(36)	(−7)		824	29		
Feb. 14	10 50	7374	−44	339	+19	50	485	14	F	do.
		7372	−43	340	+13	48	242	4		
		7371	−19	4	+13	27	73	1		
		7370	+16	39	−13	17	48	9		
				(23)	(−7)		848	28		
Feb. 15	11 4	7374	−31	339	+18	40	485	9	F	Mt. Wilson.
		7372	−29	341	+13	36	194	2		
		7371	−5	5	+13	21	61	1		
		7370	+35	45	−13	35	24	1		
				(10)	(−7)		764	13		
Feb. 16	10 59	7374	−18	339	+17	30	436	8	G	Do.
		7372	−16	341	+13	26	194	2		
		7371	+7	4	+12	21	61	2		
		7375	+7	4	+4	14	12	1		
				(357)	(−7)		703	13		
Feb. 17	16 5	7374	−2	339	+17	25	388	8	F	U. S. Naval.
		7372	+1	342	+13	22	194	1		
		7371	+24	5	+12	31	48	2		
				(341)	(−7)		630	11		
Feb. 18	10 59	7374	+9	339	+17	26	388	14	VG	Mt. Wilson.
		7376	+10	340	−13	12	48	16		
		7372	+11	341	+12	22	194	1		
		7371	+35	5	+12	40	24	3		
				(330)	(−7)		654	34		
Feb. 19	12 28	7377	−68	248	+7	70	48	6	G	U. S. Naval.
		7374	+21	337	+17	32	12	2		
		7376	+24	340	−13	24	145	16		
		7372	+25	341	+12	31	194	1		
		7374	+27	343	+17	37	242	1		
		7371	+49	6	+12	52	12	1		
				(316)	(−7)		653	27		
Feb. 20	10 52	7377	−53	251	+8	55	145	15	G	Do.
		7376	+37	341	−13	37	388	26		
		7372	+38	342	+12	42	194	1		
		7374	+39	343	+17	46	194	2		
		7371	+62	6	+12	65	12	1		
				(304)	(−7)		933	45		
Feb. 21	10 28	(*)	−71	220	−15	72	24	2	G	Do.
		7377	−39	252	+9	42	145	19		
		7376	+50	341	−13	50	339	19		
		7372	+51	342	+12	55	194	1		
		7374	+52	343	+17	57	194	1		
				(291)	(−7)		896	42		

See footnotes at end of table.

POSITIONS, AREAS, AND COUNTS OF SUN SPOTS FOR FEBRUARY 1942—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
1942	*h m*		°	°	°	°				
Feb. 22	11 6	7378	−82	196	+9	82	1,309	3	F	Do.
		7377	−27	251	+8	31	97	11		
		7377	−20	258	+10	27	48	4		
		7372	+65	343	+12	67	194	1		
		7374	+66	344	+17	70	194	1		
		7376	+67	345	−14	67	242	1		
				(278)	(−7)		2,084	21		
Feb. 23	10 33	7378	−69	196	+9	71	1,697	8	G	Do.
		7377	−13	252	+7	20	97	11		
		7377	−7	258	+10	18	24	1		
		(*)	+3	268	+15	23	12	1		
		7372	+78	343	+12	79	194	1		
		7374	+79	344	+17	80	194	1		
		7376	+82	347	−14	82	242	1		
				(265)	(−7)		2,460	24		
Feb. 24	12 27	7380	−70	181	−11	70	145	7	G	Do.
		7378	−55	196	+9	58	1,842	14		
		(*)	−51	200	−4	51	48	1		
		7379	−47	204	−9	47	48	2		
		7377	+1	252	+6	13	145	13		
		7377	+8	259	+9	18	24	1		
				(251)	(−7)		2,252	38		
Feb. 25	10 51	7381	−80	158	+8	80	48	1	F	Do.
		7380	−57	181	−12	57	97	4		
		7378	−42	196	+9	45	1,891	24		
		7379	−33	205	−10	33	97	10		
		7377	+16	254	+6	21	194	19		
		7377	+23	261	+9	28	24	1		
				(238)	(−7)		2,351	59		
Feb. 26	13 29	7381	−67	157	+8	69	48	1	G	Do.
		7380	−44	180	−12	44	97	3		
		7378	−28	196	+9	32	1,891	24		
		7379	−20	204	−10	20	145	8		
		7377	+30	254	+6	34	194	21		
				(224)	(−7)		2,375	57		
Feb. 27	10 46	7381	−53	159	+8	55	48	2	G	Do.
		7380	−29	183	−12	29	73	3		
		7378	−16	196	+9	23	1,745	25		
		7379	−7	205	−10	7	291	16		
		7377	+44	256	+6	46	194	21		
				(212)	(−7)		2,351	67		
Feb. 28	10 59	7381	−39	160	+8	42	48	1	VG	Do.
		7380	−16	183	−12	16	48	2		
		7378	−3	196	+9	17	1,745	45		
		7379	+6	205	−10	6	291	16		
		7377	+56	255	+6	58	194	20		
				(199)	(−7)		2,326	84		

Mean daily area for 28 days=1,095.

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

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR JANUARY 1942

[Based on observations at Zurich, or Locarno (bold-face type) as indicated. Data furnished through the courtesy of Prof. W. Brunner, Eidgenössiches Sternwarte, Zurich, Switzerland]

January 1942	Relative numbers	January 1942	Relative numbers	January 1942	Relative numbers
1	46	11	**69**	21	**23**
2	*d* 41	12	48	22	**20**
3	*Ec* **47**	13	*d* 56	23	*Mc* 31
4	*d* 39	14	**42**	24	**32**
5	----------	15	31	25	33
6	*Ecc* —	16	**20**	26	10
7	*a* —	17	**14**	27	8
8	75	18	*d* **21**	28	0
9	*a* 77	19	*a* **20**	29	*d* 11
10	*aa* **44?**	20	18	30	22
				31	20

Mean, 28 days=32.8

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 disk; 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.

PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR FEBRUARY 1942

[Based on observations at Zurich, or Locarno (bold-face type) as indicated. Data furnished through the courtesy of Prof. W. Brunner, Eidgenössiches Sternwarte, Zurich, Switzerland]

February 1942	Relative numbers	February 1942	Relative numbers	February 1942	Relative numbers
1	**19**	11	*d* 30	21	47
2	**22**	12	46	22	*d* 41
3	*Macc* 41	13	**54**	23	53
4	*a* **63**	14	44	24	*Mac* 65
5	**54**	15	52	25	**73**
6	*Mc* **94**	16	37	26	**61**
7	79	17	*aa* 38	27	*a* **50**
8	**64**	18	**39**	28	*b* **98**
9	**41**	19	*EMcc* 40		
10	*d* 34	20	**74**		

Mean, 28 days=51.9

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 disk; *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.