POSITIONS AND AREAS OF SUN SPOTS—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
1939	*h m*		°	°	°					
Sept. 19	13 36	6617	−75	25	+6	74	48	2	G	U. S. Naval.
		6614	−59	41	−7	60	485	17		
		6615	−52	48	+12	51	24	1		
		6612	−31	69	−21	42	776	39		
		6613	+15	115	+18	20	48	5		
		6613	+18	118	+16	21	73	2		
		6609	+21	121	+13	22	12	5		
		6608	+53	153	−21	57	12	3		
		6607	+60	160	−7	62	194	1		
				(100)	(+7)		1,672	75		
Sept. 20	10 59	6617	−60	29	+7	59	73	7	G	Mount Wilson.
		6614	−49	40	−7	51	48	26		
		6615	−40	49	+13	40	36	3		
		6612	−21	68	−20	34	291	30		
		6612	−13	76	−21	30	388	16		
		(*)	−12	77	+18	16	24	1		
		6613	+31	120	+17	33	48	3		
		6609	+36	125	+13	36	12	1		
		6607	+72	161	−7	74	194	4		
				(89)	(+7)		1,114	91		
Sept. 21	10 50	6618	−88	348	−13	85	970	4	G	U. S. Naval.
		6617	−50	26	+7	50	73	7		
		6617	−45	31	+7	44	97	2		
		6614	−37	39	−7	39	73	9		
		6614	−31	45	−7	34	291	16		
		6615	−26	50	+12	26	24	1		
		6612	−9	67	−22	29	242	27		
		6612	0	76	−21	27	339	12		
		(*)	0	76	+13	6	12	2		
		6613	+43	119	+17	42	97	5		
		6609	+46	122	+13	45	12	1		
		6607	+88	164	−7	86	194	3		
				(76)	(+7)		2,424	89		
Sept. 22	11 5	6618	−74	348	−13	75	1,357	20	G	Do.
		6619	−70	352	−8	71	73	7		
		6617	−38	24	+8	38	97	10		
		6617	−32	30	+7	32	48	10		
		6614	−22	40	−7	25	24	2		
		6614	−19	43	−7	24	436	42		
		6615	−12	50	+12	12	12	3		
		6612	+3	65	−22	29	97	14		
		6612	+12	74	−21	29	242	11		
		6613	+57	119	+17	57	73	1		
				(62)	(+7)		2,459	120		
Sept 23	10 50	6619	−60	349	−7	62	388	53	VG	Do.
		6618	−58	351	−13	60	1,939	30		
		6619	−49	0	−7	57	36	5		
		6617	−23	26	+7	22	97	15		
		6617	−20	29	+7	21	48	10		
		6614	−4	45	−7	13	485	35		
		6612	+17	66	−21	33	73	9		
		6612	+25	74	−21	36	218	15		
		6613	+70	119	+15	69	48	4		
				(49)	(+7)		3,332	176		
Sept. 24	11 44	6621	−86	309	+14	82	582	3	G	Do.
		6619	−45	350	−7	47	485	45		
		6618	−45	350	−13	49	1,600	18		
		(*)	−39	356	−18	46	61	1		
		6619	−36	359	−7	37	36	5		
		6617	−10	25	+7	10	36	6		
		6617	−5	30	+6	4	24	3		
		6614	+10	45	−7	16	485	25		
		6612	+31	66	−21	42	48	4		
		6612	+40	75	−21	48	218	13		
				(35)	(+7)		3,575	123		
Sept. 25	10 59	6621	−72	311	+14	71	630	4	VG	Do.
		(*)	−60	323	−13	63	6	1		
		6618	−31	352	−13	37	1,454	30		
		6619	−31	352	−7	34	485	45		
		(*)	−26	357	−18	35	61	8		
		6619	−23	0	−7	26	36	5		
		6617	+6	29	+8	6	48	4		
		6617	+8	31	+6	7	12	1		
		6614	+24	47	−8	27	436	19		
		6612	+53	76	−21	57	242	4		
				(23)	(+7)		3,410	121		
Sept. 26	10 57	6622	−77	293	+16	75	242	4	VG	Do.
		6621	−59	311	+14	57	727	16		
		6618	−18	352	−13	26	1,454	28		
		6619	−17	353	−7	22	436	42		
		(*)	−13	357	−17	25	48	2		
		(*)	+15	25	+22	20	24	1		
		6617	+21	31	+7	21	12	1		
		(*)	+30	40	−5	33	85	7		
		6614	+38	48	−7	41	242	10		
		6612	+68	78	−21	72	145	3		
				(10)	(+7)		3,415	114		

POSITIONS AND AREAS OF SUN SPOTS—Continued

Date	Eastern standard time	Mount Wilson group No. NNNN	Heliographic: Difference in longitude	Heliographic: Longitude NNN	Heliographic: Latitude	Heliographic: Distance from center of disk	Area of spot or group	Spot count NNN	Plate quality	Observatory
1939	*h m*		°	°	°					
Sept. 27	12 30	6623	−86	269	+19	83	194	2	F	Mount Wilson.
		6622	−62	293	+14	60	291	12		
		6621	−45	310	+14	43	533	8		
		6620	−27	328	+19	31	194	14		
		6618	−4	351	−13	20	1,406	30		
		6619	−3	352	−8	15	388	35		
		6617	+33	28	+8	32	48	4		
		6614	+41	36	−7	46	73	10		
		6614	+51	46	−7	55	121	6		
		6612	+83	78	−20	85	145	1		
				(355)	(+7)		3,393	122		
Sept. 28	13 12	6625	−80	262	−16	82	242	2	G	U. S. Naval.
		6623	−73	269	+19	71	388	6		
		6622	−49	293	+16	49	388	20		
		6621	−31	311	+15	32	509	20		
		6620	−13	329	+18	16	339	17		
		6624	−9	333	+12	10	12	4		
		6619	+9	351	−7	16	339	48		
		6618	+9	351	−13	21	1,357	30		
		6618	+17	359	−17	30	48	3		
		6617	+48	30	+7	48	61	12		
		6614	+66	48	−5	67	145	12		
				(342)	(+7)		3,828	174		
Sept. 29	13 37	6625	−72	256	−15	74	145	6	VG	Do.
		6625	−63	265	−13	64	194	10		
		6627	−62	266	+12	61	36	2		
		6623	−57	271	+20	59	533	20		
		6622	−33	295	+15	33	242	50		
		6621	−17	311	+15	17	412	14		
		6620	0	328	+17	10	97	13		
		6626	+1	329	−9	15	24	5		
		6624	+5	333	+13	9	824	1		
		6619	+21	349	−7	25	170	60		
		6618	+22	350	−14	30	1,067	65		
		*	+63	31	+6	62	36	4		
		6614	+77	45	−6	77	121	7		
				(328)	(+7)		3,901	257		
Sept. 30	12 7	*	−81	235	−13	82	145	3	VG	Do.
		6623	−62	254	+22	62	61	9		
		6625	−60	256	−15	63	73	6		
		6627	−51	265	+12	51	97	10		
		6625	−50	266	−13	54	218	6		
		6623	−46	270	+21	46	679	30		
		6622	−28	288	+16	27	145	15		
		6622	−20	296	+16	23	388	30		
		6621	−4	312	+14	8	485	6		
		6628	−3	313	−18	25	48	5		
		6620	+12	328	+18	17	109	15		
		6626	+15	331	−8	21	97	19		
		6624	+16	332	+13	16	121	28		
		6619	+32	348	−7	35	194	53		
		6618	+35	351	−15	40	970	50		
				(316)	(+7)		3,830	285		

Mean daily area for 29 days = 3,377.

*=not numbered. F=fair; G=good; VG=very good.

PROVISIONAL SUNSPOT RELATIVE NUMBERS FOR SEPTEMBER 1939

[Dependent alone on observations at Zurich]

[Data furnished through the courtesy of Prof. W. Brunner, Eidgen. Sternwarte, Zurich Switzerland]

September 1939	Relative numbers	September 1939	Relative numbers	September 1939	Relative numbers
1	*ab* 103	11	*Ec* 136	21	*ad* 89
2	*s* 116	12	*a* ---	22	88
3	124	13	127	23	*a* 88
4	*Ecd* 119	14	92	24	*d* 107
5	---	15	*a* ---	25	106
6	*d* 136	16	*d* ---	26	*d* 98
7	114	17	---	27	*Ecbd* 105
8	*Eac* 145	18	*d* 67	28	*d* 131
9	*abd* 159	19	88	29	*a* 131
10	*b* 168	20	70	30	*Mc* 137

Mean, 25 days 113.8.

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.