

Sunspot Activity.

	Number of observations	Reduction-factor on Wolfs unit		Number of comparisons
		whole disc	central zone	
Catania	56	1.08	0.93	47
Greenwich	45	0.72	0.78	36
Kiew	30	0.91	0.83	27
Lyons	40	0.96	0.95	37
Madrid	71	0.53	0.54	60
Roma/Campidoglio	44	0.84	0.75	39
South Hadley	50	0.86	0.87	43
Stonyhurst	49	0.82	0.78	39
Tokyo	46	0.66	0.69	41
Zürich/Arosa	78	0.60	0.60	—

1937	Relative-numbers for the whole sun disc.			Relative-numbers for the central circle zone			Relative-numbers for the four quadrants divided from the North-Pole of the Sun											
	Jan.	Febr.	March	Jan.	Febr.	March	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
							January				February				March			
1	144	211 a	154 a	39	112	65	37 <sub>1</sub> *	60	14	33	67	29	81	34	52	18	61	23 <sub>3</sub>
2	156 a	224	154 b	82	82	55	28	61	18 <sub>1</sub> *	49 <sub>1</sub> *	55	41 <sub>1</sub> *	97 <sub>1</sub> *	31 <sub>1</sub> *	70 <sub>1</sub> *	6	58	20
3	109 a	E 181 ac	E 109 c	62	37	34	48	10	32	19	40 <sub>1</sub>	40 <sub>1</sub>	82	19	60	15 <sub>1</sub> *	34	0
4	M 107 c	152	E 65 cd	69	28	0	34	29 <sub>2</sub>	30	14	36	32	60	24	26	10	20	9 <sub>1</sub>
5	83 a	W 146 ac	76	43	35	0	†40	†11	†38	0	38	16	70 <sub>1</sub>	22	21	36	9	10
6	ME82 cc	128	71	40	27	0	33	8	22	19 <sub>2</sub>	†30	†12	†64	†22	14	46 <sub>1</sub>	0	11
7	94	98	W 105 c	37	18	32	38	7 <sub>1</sub> *	31	18 <sub>1</sub> *	15	17	35	31	11	75 <sub>1</sub> *	9 <sub>1</sub>	10
8	103	E 90 c	E 115 abcd	33	34	36	†32	†7	†40	†24 <sub>1</sub>	25 <sub>1</sub> *	22 <sub>1</sub>	16	27	17	77 <sub>2</sub>	10	11
9	97	E 75 c	107	22	31	44	23	0	56	18	†9	23 <sub>1</sub>	10	19	27	63	17	0
10	M 85 cd	85	99	28	51	8	14	10 <sub>1</sub>	46	15	†9	†43 <sub>1</sub> *	†22	†2*	31	48	20	0
11	97 d	70 a	98	21	53	25	19	0	49 <sub>1</sub> *	29	†29	†18	†12	†12	35	46 <sub>1</sub> *	17	0
12	W 91 c	M 77 acd	59	18	31	20	19 <sub>1</sub>	7	29 <sub>1</sub> *	36	27	23 <sub>1</sub>	19 <sub>1</sub> *	8	22	29 <sub>1</sub>	8	0
13	80	87	42 a	10	34	16	20	10	10	40	47	15 <sub>1</sub> *	25 <sub>1</sub> *	0	21	0	0	0
14	93	87	21	32	43	16	18	9	17 <sub>2</sub> *	49	25	50	13	0	8	13 <sub>2</sub>	5	11 <sub>1</sub>
15	M 87 c	90	20	41	11	0	†21 <sub>1</sub>	†17	†10	†40	50	20	9	11 <sub>1</sub>	20	0	0	0
16	104 a	101 d	E 23 c	44	17	8	20	19	9	56 <sub>1</sub>	39	31	24	7 <sub>1</sub> *	11	0	0	12 <sub>1</sub>
17	E 108 acd	92	22	38	28	11	12	25 <sub>1</sub>	38	33	27	42	23 <sub>1</sub> *	0	10	0	0	12
18	108	88 ad	E 37 ac	39	13	9	9	20	35	44	25	50	13	0	8	0	5	11 <sub>1</sub>
19	101	111 d	33	34	11	10	†3	†21	†27	†34	20	74	8	9	0	17	9	7
20	E 128 c	114 d	E 42 cd	35	13	0	10 <sub>1</sub>	20	42 <sub>1</sub> *	56 <sub>1</sub>	12	84	0	18	†8	†11	†8	†15 <sub>2</sub>
21	WEE127ccc	130 a	62 a	26	23	0	33 <sub>2</sub>	31 <sub>2</sub>	23	40	23	91	0	16	5	32 <sub>1</sub> *	7	18
22	163	190 add	M 74 c	56	69	22	44	42	16	61 <sub>1</sub> *	45	94	9 <sub>1</sub>	42 <sub>1</sub> *	16 <sub>1</sub>	18	16 <sub>1</sub>	24
23	155	155 a	E 107 cd	95	61	15	44	46	7 <sub>1</sub>	58	56	60	7	32	23	38 <sub>1</sub>	20	26
24	178 abdd	187 ad	94 d	88	63	27	60	33	34	51 <sub>1</sub>	51	97 <sub>1</sub>	0	39	†8	†46	†16	†22 <sub>1</sub> *
25	M 181 ac	162 aa	87	92	70	34	35	52	63 <sub>1</sub>	31 <sub>1</sub>	55	72	9	26	0	54	7	26
26	E 200 bcd	E 167 ac	80 a	78	68	46	50	51 <sub>1</sub> *	65	34	70	51	10	36 <sub>1</sub>	0	51	13	16
27	E 180 c	149	118 a	35	74	91	38	51	38	53 <sub>2</sub>	55	41 <sub>1</sub> *	22	31 <sub>1</sub> *	31	43	11	33 <sub>1</sub>
28	201	W 150 ac	131	30	72	71	43	50	37	71	75	17	35 <sub>1</sub>	14	44 <sub>1</sub>	52	20	15
29	M 200 cd		117 a	95	53		†35	†71 <sub>1</sub>	†9	†120					73	24	11	9
30	233 ab		E 135 ac	128	42		55	56	14 <sub>1</sub>	108 <sub>1</sub> *					71	30 <sub>2</sub>	10	24 <sub>1</sub> *
31	233 ab		143 a	116	47		68	49	63	53 <sub>1</sub>					60	53 <sub>1</sub> *	9	21
Mean	132.5	128.5	83.9	51.8	43.2	27.0	31.7	28.5	31.0	42.1	38.7	42.8	28.2	20.0	26.4	31.0	14.0	12.4
Mean for the half-hemispheres							60.2	73.1	62.7	70.6	81.5	48.2	66.9	62.8	57.4	26.4	40.4	43.4

a = Passage of an average sized group through the central meridian.  
 b = Passage of a large group or spot through the central meridian.  
 c = New formation of a group developing into a middle sized or large centre of activity: E, on the eastern part of the sun's disc; W, on the western part; M, in the central circle zone.  
 d = Entrance of a large or average sized centre of activity on the east limb.

The small numbers indicate the number of NEW FORMATIONS of groups; small numbers marked with an asterisk mean small one day-groups.  
 † Greenwich, Lyon, Madrid, Stonyhurst or Tokyo numbers.

Intensity of the ultra-violet Radiation (Mount Wilson).

The figures give the ratio ultra-violet (λ = 0.32 μ) to green (λ = 0.50 μ). Ratio for June 1924 = 1).

1937	Jan.	Febr.	March	1937	Jan.	Febr.	March	1937	Jan.	Febr.	March
1			0.97	12				23	1.23	1.11	
2			1.08	13				24			
3		1.16	1.09	14				25	1.17		
4			0.96	15	1.16			26	1.17		
5				16		1.14		27			1.38
6			0.98	17		1.14		28		0.99	1.39
7				18		1.11		29			1.25
8		1.25	1.07	19		1.28	1.10	30			
9		1.19	1.08	20		1.22		31			
10				21	1.31	1.12	1.17				
11	1.22			22		1.13		Mean	1.21	1.15	1.13

Zurich, June 15, 1937.  
 W. Brunner.

Sunspot Activity.

	Number of observations	Reduction-factor on Wolf's unit		Number of comparisons
		whole disc	central zone	
		Catania	60	
Greenwich	78	0.82	0.87	75
Kiew	37	0.93	0.90	35
Lyons	63	1.03	1.03	61
Madrid	74	0.65	0.69	74
Roma/Campidoglio	58	0.94	0.90	55
South Hadley	45	0.82	0.82	44
Stonyhurst	69	0.91	0.89	66
Tokyo	53	0.66	0.71	48
Tsinan	58	0.72	0.71	55
Zürich/Arosa	87	0.60	0.60	—

1937	Relative-numbers for the whole sun disc.			Relative-numbers for the central circle zone			Relative-numbers for the four quadrants divided from the North-Pole of the Sun															
	April	May	June	Apr.	May	June	April				May				June							
							NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE				
1	M 138 c	89	M 79 c	58	21	33	62 <sub>1</sub>	44 <sub>1</sub>	15 <sub>1</sub>	17	11	10	58 <sub>2</sub>	10	45 <sub>1</sub>	25	9	0				
2	128	91	89 <sup>d</sup>	47	10	19	60	44	24	0	0	18 <sub>1</sub>	64	9	42	39	8 <sub>1</sub>	0				
3	112 <sup>d</sup>	77	92	31	17	40	49	32	22 <sub>1</sub>	9 <sub>1</sub>	7	10	46	14 <sub>1</sub>	32	51 <sub>1</sub>	9	0				
4	E 137 c	56 <sup>ad</sup>	116 <sup>bd</sup>	55	23	46	66	20	18	33 <sub>1</sub>	0	25	15	16	28	62 <sub>1</sub> *	19 <sub>1</sub> *	7				
5	E 147 c	59	W 128 c	52	35	53	52	32 <sub>1</sub>	15	48 <sub>1</sub> *	16	13	11	19	68 <sub>1</sub>	34	18 <sub>1</sub>	8				
6	112	46	121	38	31	49	53	7	8 <sub>1</sub> *	44	14	12	10	10	42	39	31	9				
7	M 119 c	47	102	66	8	40	35	19 <sub>1</sub>	24 <sub>1</sub> *	41	13	20	14 <sub>1</sub>	0	28	35 <sub>1</sub> *	22	17 <sup>1*</sup>				
8	94	E 50 c	64 <sup>a</sup>	66	11	37	32	12	9	41	9	19	15	7 <sub>1</sub>	25	20	9	10				
9	85 <sup>ab</sup>	68 <sup>d</sup>	E 73 <sup>cd</sup>	48	28	31	32	0	35 <sub>1</sub>	18	8	42 <sub>2</sub>	8	10	39	16 <sub>1</sub>	8	10				
10	71	M 103 <sup>ac</sup>	98 <sup>add</sup>	40	39	43	25	8 <sub>1</sub>	38	0	22	53 <sub>1</sub>	7	21	31	37 <sub>1</sub> *	17 <sub>1</sub> *	13				
11	E 82 c	99 <sup>a</sup>	96	34	33	24	27 <sub>1</sub> *	11	36	8 <sub>1</sub>	32	47 <sub>1</sub>	12	8	24	43	10	19				
12	62	91	ME 134 <sup>acc</sup>	10	29	37	20	0	32	10	21	50	12	8	44 <sup>t</sup>	46	8	36 <sub>1</sub> *				
13	38	102	E 166 c	9	31	23	9	0	17	12	†26	†49 <sub>1</sub>	†21 <sub>1</sub>	†8	45	55	9	57 <sub>1</sub>				
14	28	E 123 <sup>cd</sup>	185	14	34	54	†0	†0	†15	†13	24	58 <sub>1</sub> *	10	31 <sub>2</sub>	41 <sub>1</sub>	67 <sub>2</sub>	7	70				
15	E 53 <sup>acd</sup>	140 <sup>ad</sup>	191 <sup>ad</sup>	18	46	98	†0 <sub>1</sub>	†9	†19	†25 <sub>2</sub>	25	60 <sub>1</sub>	15	40	31	84 <sub>1</sub> *	0	76				
16	64	W 183 c	M 174 <sup>abcd</sup>	28	58	130	7	13	17	27	49 <sub>1</sub> *	58	26 <sub>1</sub>	50	48	50 <sub>1</sub> *	27	49				
17	63 <sup>a</sup>	188	190 <sup>b</sup>	41	33	136	7	15	25	16	34	60 <sub>1</sub> *	22	72	50	48 <sub>1</sub>	64	28				
18	E 76 <sup>e</sup>	158 <sup>d</sup>	194 <sup>a</sup>	19	37	115	0	20 <sub>1</sub> *	30	26 <sub>1</sub>	21	57	23	57	43	49 <sub>2</sub>	82	20 <sub>1</sub> *				
19	E 94 <sup>c</sup>	158	185	11	72	79	7 <sub>1</sub>	37 <sub>2</sub>	24	26	12	59	22	65	50	43	76	16 <sub>1</sub>				
20	E 127 <sup>c</sup>	177 <sup>bd</sup>	183 <sup>a</sup>	52	82	40	7 <sub>1</sub>	59 <sub>1</sub> *	19	42 <sub>1</sub>	25 <sub>1</sub> *	46	52 <sub>1</sub> *	54 <sub>2</sub>	59	42	67	15				
21	127 <sup>a</sup>	154 <sup>aad</sup>	186 <sup>d</sup>	47	113	66	16	58 <sub>1</sub>	14	39	36	42	53	23	88	16	61 <sub>1</sub>	21				
22	M 146 <sup>bb</sup>	E 194 <sup>ac</sup>	199 <sup>ad</sup>	70	100	86	†10 <sub>1</sub>	†82	†12	†34	69 <sub>1</sub>	52 <sub>2</sub>	63	10	82	10	46	61 <sub>1</sub> *				
23	144 <sup>b</sup>	202	M 163 <sup>ac</sup>	116	74	36	61	46	29	8	69	57	66 <sub>1</sub>	10	73 <sub>1</sub>	0	41	49				
24	M 157 <sup>bc</sup>	213 <sup>a</sup>	133	109	49	32	71	35	34 <sub>1</sub>	17 <sub>1</sub>	82 <sub>1</sub>	59	62	10	61 <sub>1</sub> *	16 <sub>1</sub> *	15	41				
25	ME 190 <sup>acc</sup>	171	108	85	64	44	123 <sub>1</sub>	8 <sub>1</sub> *	52	7 <sub>1</sub>	84 <sub>1</sub> *	44	32	11	36	16 <sub>1</sub> *	9	47				
26	157	130 <sup>a</sup>	116	44	67	61	110	0	31	16	64	34	25	7 <sub>1</sub>	30	25 <sub>1</sub> *	8	53				
27	161	93 <sup>b</sup>	91 <sup>b</sup>	20	67	55	99 <sub>1</sub>	0	33	29	40	19	34 <sub>1</sub> *	0	16	22	35	18				
28	149	71	80 <sup>a</sup>	44	41	61	80	0	32	37	42	11	18	0	16	10	47	7 <sub>1</sub>				
29	123 <sup>bd</sup>	E 83 <sup>cd</sup>	E 80 <sup>c</sup>	39	31	38	63	8	31	21	46	21 <sub>1</sub>	16 <sub>1</sub>	0	0	19 <sub>1</sub>	53	8				
30	94 <sup>b</sup>	103	93	41	18	46	28	9	57 <sub>1</sub>	0	54	26	23	0	22 <sub>1</sub> *	24	40 <sub>1</sub>	7				
31		98			31						63	20	15	0								
Mean	109.3	116.7	130.3	45.1	43.0	55.1	40.4	20.9	25.6	22.1	32.8	37.1	28.1	18.7	41.3	34.8	28.5	25.7				
Mean for the half-hemispheres							61.3	47.7	65.9	43.1	70.0	46.8	60.9	55.8	76.1	54.2	69.8	60.5				

a = Passage of an average sized group through the central meridian.  
 b = Passage of a large group or spot through the central meridian.  
 c = New formation of a group developing into a middle sized or large centre of activity: E, on the eastern part of the sun's disc; W, on the western part; M, in the central circle zone.  
 d = Entrance of a large or average sized centre of activity on the east limb.

The small numbers indicate the number of NEW FORMATIONS of groups; small numbers marked with an asterisk mean small one day-groups.  
 † Greenwich, Lyon, Madrid, Stonyhurst or Tokyo numbers.

Intensity of the ultra-violet Radiation (Mount Wilson).

The figures give the ratio ultra-violet ( $\lambda = 0.32 \mu$ ) to green ( $\lambda = 0.50 \mu$ ). Ratio for June 1924 = 1).

1937	Apr.	May	June	1937	Apr.	May	June	1937	Apr.	May	June
1		1.16	1.11	12	1.17	1.22		23	1.20		1.04
2		1.17	1.02	13		1.04		24	1.25	1.14	1.08
3	1.45		1.17	14	1.08	1.01		25	1.08		1.11
4	1.23	1.06	1.01	15		1.09	1.09	26			1.03
5		1.13	1.07	16		1.12	1.17	27	1.23	1.14	0.91
6		1.19	1.14	17	1.13	1.03	1.08	28		0.99	
7		1.13	1.14	18		1.13	1.08	29	1.25	1.07	1.06
8	1.13	1.22	1.16	19	1.14	1.20	0.96	30	1.22	1.10	1.05
9			1.14	20	1.13	1.16		31		1.12	
10	1.08	1.31	1.13	21	1.11		1.26				
11	1.07		1.12	22	1.22		1.08	Mean	1.18	1.13	1.09

Zurich, September 15, 1937.

W. Brunner.

Sunspot Activity.

	Number of observations	Reduction-factor on Wolfs unit		Number of comparisons
		whole disc	central zone	
		Catania	60	
Greenwich	75	0.71	0.78	68
Kiew	82	0.84	0.82	75
Lyons	73	1.00	0.99	69
Madrid	74	0.68	0.67	70
Roma/Campidoglio	45	0.93	0.96	43
South Hadley	—	—	—	—
Stonyhurst	75	0.92	0.89	69
Tokyo	64	0.62	0.63	61
Tsinan	32	0.76	0.67	29
Zürich/Arosa	85	0.60	0.60	—

1937	Relative-numbers for the whole sun disc.			Relative-numbers for the central circle zone			Relative-numbers for the four quadrants divided from the North-Pole of the Sun															
	July	Aug.	Sept.	July	Aug.	Sept.	July				August				September							
							NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE				
1	69 a	176	108	33	60	31	8	32	29	0	+39	+71	+8	+63	18	71 <sub>1</sub>	11	8				
2	E 91 c	180 a	106 a	40	80	53	34	30 <sub>1</sub> *	19	8 <sub>1</sub>	42	75	25	38	18 <sub>1</sub>	61	19	8				
3	M 74 c	M 207 ac	124 d	38	94	55	31 <sub>1</sub> *	28	8	7	57 <sub>1</sub> *	82	23	45 <sub>1</sub>	43 <sub>1</sub> *	41	33 <sub>2</sub> *	7				
4	65 d	197 d	82	18	115	47	23	25	8	9 <sub>1</sub>	68	59	41	29	27	29	11	15 <sub>1</sub>				
5	91	205 ab	E 79 c	55	102	43	24 <sub>1</sub> *	37	0	30 <sub>1</sub> *	60	49	51	45 <sub>1</sub>	16	53 <sub>1</sub> *	10	0				
6	E 108 cd	176	M 85 acd	48	73	43	24	48 <sub>1</sub>	18 <sub>1</sub>	18	65	7	45	59	44 <sub>1</sub>	33	8	0				
7	143 add	135	E 101 c	60	34	35	32	52	27	32	41	0	58	36	53	41 <sub>1</sub>	7	0				
8	W 185 cd	154 dd	104	77	26	42	50 <sub>1</sub>	61 <sub>1</sub>	26 <sub>1</sub>	48	26	21	48	59 <sub>1</sub> *	34	63 <sub>1</sub>	7 <sub>1</sub> *	0				
9	181 bd	173	119 a	70	57	61	70	31	15	65	25	39 <sub>1</sub> *	47	62 <sub>1</sub>	48	71	0	0				
10	192	183 a	119 a	71	45	88	64	54 <sub>1</sub>	9	65	40 <sub>1</sub>	32	69 <sub>1</sub> *	42 <sub>1</sub>	+49	+53	+0	+16 <sub>1</sub>				
11	W 202 ac	140	110 a	60	38	104	48	71 <sub>1</sub> *	35 <sub>1</sub>	48	25	34	52	29	+66	+25	+4	+9				
12	223 ad	M 144 c	100 ad	110	43	58	65 <sub>1</sub> *	71	34 <sub>1</sub> *	53	23 <sub>1</sub> *	32	57 <sub>1</sub>	32	57	35	8	0				
13	188 a	114	110	96	34	39	60	55	44	29	4 <sub>1</sub> *	39	47	24	82	17	11	0				
14	215 aad	124 ab	101	104	74	16	58	50	62 <sub>1</sub>	45	40 <sub>1</sub>	29	37	18	69	18	7	7 <sub>1</sub>				
15	204 a	128	99	56	92	0	59	52	59	34	55	15	50	8 <sub>1</sub>	59	25	7	8				
16	180	119	76	53	41	10	+41	+41	+67	+22	45	13	61 <sub>1</sub> *	0	37	32	0	7				
17	152 d	75	58 d	47	16	23	22	64	35	31	+40	+0	+38	+0	12	39	0	7				
18	167 b	82 dd	M 82 ac	88	27	53	39 <sub>1</sub> *	62 <sub>1</sub> *	29	37	37	32 <sub>2</sub> *	13	0	11 <sub>1</sub> *	45 <sub>1</sub>	12 <sub>1</sub>	14				
19	155 a	E 88 c	M 88 c	82	7	65	60 <sub>1</sub> *	24	25	46 <sub>1</sub>	32 <sub>1</sub> *	27 <sub>1</sub> *	10	19 <sub>1</sub>	30 <sub>1</sub>	35	16	7				
20	E 149 c	E 96 c	88 a	80	0	53	60	16 <sub>1</sub>	30	43	20	30	10	36 <sub>1</sub>	40	25	16	7				
21	150	80	M 73 c	46	0	24	59	21	18	52 <sub>1</sub>	7	32	0	41	32	19 <sub>1</sub>	14 <sub>1</sub>	8				
22	145 d	W 103 c	102	55	24	32	46	33	29	37	11 <sub>1</sub>	42 <sub>1</sub>	0	50	+34	+28 <sub>1</sub>	+31 <sub>1</sub>	+9				
23	139 a	EM139 aacc	E 128 cd	47	44	20	46	32	35	26	22 <sub>1</sub>	59 <sub>1</sub>	8	50	+40	+47 <sub>1</sub>	+33	+9				
24	126	150	120 a	54	108	30	43	35	40	8	42 <sub>1</sub> *	52	33	23	32	47	33 <sub>1</sub>	8				
25	124	137 ab	EM 127 cc	44	103	23	26	55 <sub>1</sub>	43	0	43	44 <sub>1</sub> *	50	0	25	55 <sub>1</sub>	32 <sub>1</sub>	15 <sub>1</sub>				
26	115 d	E 144 c	104	21	69	30	15	62	38	0	57	26	51	10 <sub>1</sub>	34 <sub>1</sub> *	43	17	10				
27	143 d	143 d	80	47	25	49	34 <sub>1</sub> *	77	24 <sub>1</sub> *	8	59	36 <sub>1</sub>	41	7	17	52	11	0				
28	124 b	130	101 ad	65	25	31	41	58	14	11	65	27	30	8	40	31	7	23 <sub>1</sub>				
29	E 128 bc	110	126 aa	55	14	35	58	32	13	25 <sub>1</sub>	48	30	25	7	61	33	7	25				
30	E 139 cd	109 d	E 121 cd	10	18	28	67	30	7	35 <sub>1</sub>	34	50	20 <sub>1</sub> *	5	52	48 <sub>1</sub>	0	21				
31	E 131 c	128		25	47		48	46 <sub>1</sub>	0	37	26	70 <sub>1</sub> *	18 <sub>1</sub> *	14 <sub>1</sub> *								
Mean	145.1	137.7	100.7	56.6	49.5	40.7	43.7	44.7	27.1	29.3	38.6	37.2	34.4	27.7	39.3	40.5	12.4	8.3				
Mean for the half-hemispheres							N	S	W	E	N	S	W	E	N	S	W	E				
							88.4	56.4	70.8	74.0	75.9	62.1	73.0	64.9	79.8	20.7	51.7	48.8				

a Passage of an average sized group through the central meridian.  
 b - Passage of a large group or spot through the central meridian.  
 c New formation of a group developing into a middle sized or large centre of activity: E, on the eastern part of the sun's disc; W, on the western part; M, in the central circle zone.  
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The small numbers indicate the number of NEW FORMATIONS of groups; small numbers marked with an asterisk mean small one day-groups.  
 † Greenwich, Lyon, Madrid, Stonyhurst or Tokyo numbers.

Intensity of the ultra-violet Radiation (Mount Wilson).

The figures give the ratio ultra-violet (λ = 0.32 μ) to green (λ = 0.50 μ). Ratio for June 1924 = 1).

1937	July	Aug.	Sept.	1937	July	Aug.	Sept.	1937	July	Aug.	Sept.
1	1.05	1.20	1.08	12		0.97	0.82	23		1.14	
2	1.01	1.16	1.11	13	1.09	1.00		24	1.10	1.06	
3	1.00	1.07		14	1.07	1.04	1.05	25	1.10	1.04	
4	1.02	1.12	1.10	15	1.10	1.14	1.02	26		1.03	
5	1.10		1.10	16	1.14	1.00	1.03	27			
6	1.08		1.07	17	1.08	0.98		28		1.00	
7	1.14	1.10		18	1.14	0.99		29		1.03	1.14
8	1.14	0.99	1.00	19	1.04	0.93		30		1.07	1.16
9	1.11	1.02	0.96	20		1.25		31	1.14	1.11	
10	1.11	1.02	0.94	21	1.01						
11	1.13	0.99	0.88	22		0.97		Mean	1.09	1.05	1.03

Zurich, January 18, 1938.

W. Brunner.

Sunspot Activity.

	Number of observations	Reduction-factor on Wolfs unit		Number of comparisons
		whole disc	central zone	
		Catania	34	
Greenwich	58	0.77	0.85	45
Kiew	30	0.84	0.85	25
Lyons	39	0.93	0.86	31
Madrid	54	0.66	0.65	40
Roma/Campidoglio	58	0.98	0.95	50
South Hadley	42	0.89	0.78	33
Stonyhurst	49	0.92	0.90	36
Tokyo	59	0.61	0.67	44
Wellington	33	1.08	0.84	24
Zürich/Arosa	71	0.60	0.60	—

1937	Relative-numbers for the whole sun disc.			Relative-numbers for the central circle zone			Relative-numbers for the four quadrants divided from the North-Pole of the Sun											
	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	October				November				December			
							NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
							1	131	104	14	10	64	7	32	70	10 <sub>1</sub>	19	31
2	W 170 c	115	W 33 c	77	77	8	33 <sub>1</sub>	101	8	28 <sub>1</sub>	+30	+30	+37	+32	0	0	10 <sub>1</sub>	23 <sub>2</sub>
3	214 abd	105 aa	34	136	51	11	48	133 <sub>1</sub>	16	17	43	10	32	20 <sub>1</sub>	+0	+8	+5	+18
4	206 b	67	29	149	37	13	92	89 <sub>1</sub> *	25	0	26	0	34	7	+0	+0	+9	+9
5	175	W 68 c	54	128	34	9	+101	+48	+28	+0	23	0	37 <sub>1</sub>	8	6 <sub>1</sub> *	0	14 <sub>2</sub>	34
6	E 182 ac	49	50	88	10	22	116	57 <sub>1</sub>	9	0	14	0	25	10	+11	+9	+17	+20
7	173a	34 d	67	69	8	23	+115	+42	+7	+8	11	8	7	8	+12 <sub>1</sub>	+9	+29 <sub>1</sub>	+15 <sub>1</sub>
8	157	E 47 cd	49	77	10	16	+96 <sub>1</sub>	+44	+18 <sub>1</sub>	+0	8	19 <sub>1</sub>	10	10	+11	+11	+44	+0
9	EEW 153 accc	E 68 c	56 d	50	12	11	91 <sub>1</sub>	38 <sub>1</sub>	16	8 <sub>1</sub>	+10	+27 <sub>1</sub>	+12	+18	+10	+10	+33	+11
10	161 a	M 85 c	E 56 c	47	29	7	93	45	14	9	+0	+37	+22 <sub>1</sub>	+25	8	19 <sub>1</sub>	7	22
11	E 148 aedd	79	E 72 c	83	28	8	65	39	19	25 <sub>1</sub>	0	32	24	23	0	23	0	49 <sub>1</sub>
12	137 a	83	70	62	61	27	52	36	29	20	13	24	14	32	0	20	10 <sub>1</sub>	40
13	142	100 ab	M 107 c	32	59	73	66	19	26	31	14	23	18 <sub>1</sub>	45 <sub>2</sub>	10 <sub>1</sub>	40 <sub>1</sub> *	17	40
14	E 138 c	106	M 112 acd	40	59	83	50	30	24	34 <sub>1</sub>	26	14 <sub>2</sub>	50 <sub>1</sub> *	16	19	34	25 <sub>1</sub>	34 <sub>1</sub>
15	113 d	74	W 141 ac	29	55	95	34	9	19	51	19	16	29	10	57 <sub>1</sub>	22 <sub>1</sub>	33 <sub>1</sub>	29
16	127 a	69	E 155 c	64	16	85	30	10	19	68 <sub>2</sub> *	23	16	21 <sub>1</sub>	9 <sub>1</sub>	61	30 <sub>1</sub>	56	8
17	127 ab	E 93 c	115	55	16	36	30	0	49	48 <sub>1</sub> *	+32	+10	+32	+0	+44	+31	+29	+4
18	121	90 d	109	41	44	14	22	7 <sub>1</sub>	42 <sub>1</sub>	50 <sub>2</sub>	27 <sub>1</sub> *	8	20	35 <sub>1</sub>	31	43	27	8
19	114 a	74	124 a	23	27	33	13	8	41	52 <sub>1</sub>	+21	+9	+18	+26	32 <sub>1</sub>	55 <sub>1</sub> *	23	14
20	E 89 cd	82	107 b	12	27	28	10	14 <sub>1</sub> *	38	27	16	22 <sub>1</sub> *	26	18 <sub>1</sub>	55	31	14	7
21	72 a	62	86	10	21	46	7	14	37	14	0	20	19	23	58	0	10	18 <sub>1</sub>
22	58	62	E 90 cd	0	24	8	0	17	41	0	+18	+20	+26	+12	48	11 <sub>1</sub> *	0	31
23	W 63 c	59 a	E 107 c	0	32	14	12 <sub>1</sub>	23	28	0	9	36 <sub>2</sub> *	0	14	45 <sub>1</sub>	22 <sub>2</sub>	7 <sub>1</sub> *	33 <sub>1</sub>
24	E 75 cd	50	116	29	22	28	9 <sub>1</sub> *	33	17	16 <sub>1</sub> *	+10	+24	+14	+0	+44	+34	+0	+49
25	69	M 61 c	E 124 acd	25	40	38	0	37	15	17	+22 <sub>1</sub>	+20	+21	+11	+32	+38	+7	+46 <sub>1</sub>
26	59 b	M 70 c	114	22	50	81	14	20	9	16	26 <sub>2</sub>	31 <sub>1</sub> *	13	0	+38	+29	+0	+51
27	58	96	125 aa	24	38	105	24	21 <sub>1</sub>	0	13	64 <sub>2</sub> *	8	17 <sub>1</sub>	7 <sub>1</sub>	21	18 <sub>1</sub> *	23 <sub>1</sub> *	63 <sub>1</sub> *
28	E 104 c	64	103 a	45	17	54	27	48	0	29 <sub>1</sub>	37	0	17 <sub>1</sub>	10	33	18 <sub>1</sub>	51	0
29	90 ad	68	MM 111 cc	41	15	96	18	40	7	25	24	7 <sub>1</sub> *	22	15 <sub>2</sub>	28	23	60 <sub>1</sub> *	0
30	E 113 c	47	M 110 c	58	15	47	26	46 <sub>1</sub>	15	26 <sub>1</sub>	16	0	16	15	29	13	54 <sub>1</sub>	14 <sub>1</sub>
31	133 a		112 ad	64		43	42	43 <sub>1</sub> *	23	25					39	8	47	18
Mean	124.9	74.4	88.8	51.3	33.3	37.7	44.1	38.1	20.9	21.8	20.4	16.9	22.0	15.7	25.2	19.7	21.5	23.1
Mean for the half-hemispheres							N	S	W	E	N	S	W	E	N	S	W	E
							82.2	42.7	65.0	59.9	37.3	37.7	42.4	32.6	44.9	44.6	46.7	42.8

a = Passage of an average sized group through the central meridian.  
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The figures give the ratio ultra-violet ( $\lambda = 0.32 \mu$ ) to green ( $\lambda = 0.50 \mu$ ). Ratio for June 1924 = 1).

1937	Oct.	Nov.	Dec.	1937	Oct.	Nov.	Dec.	1937	Oct.	Nov.	Dec.
1	1.11	1.01		12	0.98	1.10		23	1.10		
2		1.05		13			1.14	24	1.08		1.20
3		1.11		14		1.08	1.07	25	1.00	1.03	1.11
4	1.22	1.06	1.08	15		1.10	1.06	26	0.99		
5	1.09	1.01	1.08	16	1.04		0.97	27	1.08	1.06	
6	1.11		0.96	17	0.98		1.00	28	0.90	1.05	1.07
7		1.04	0.98	18	0.93		1.07	29	0.93		
8	1.04	1.03		19	0.88	1.16	0.98	30			
9	1.01			20	1.03		1.16	31			
10	1.00			21	0.98	1.12	1.13				
11				22	1.04	1.08		Mean	1.02	1.07	1.07

Zurich, March 13, 1938.