GREENWICH

SPECTROSCOPIC AND PHOTOGRAPHIC RESULTS.

1895.

	Pg	Line	Col			
Pg	16	21	7	−18.1	to	+18.1
	141	9	17	+12.6		−12.6

RESULTS

OF THE

SPECTROSCOPIC AND PHOTOGRAPHIC OBSERVATIONS

MADE AT THE

ROYAL OBSERVATORY, GREENWICH,

IN THE YEAR

1895:

UNDER THE DIRECTION OF

W. H. M. CHRISTIE, M.A., F.R.S.,
ASTRONOMER ROYAL.

(EXTRACTED FROM THE GREENWICH OBSERVATIONS, 1895.)

LONDON:
PRINTED FOR HER MAJESTY'S STATIONERY OFFICE,
BY DARLING & SON, LTD., 1-3, GREAT ST. THOMAS APOSTLE, E.C.
1897.

ERRATA.

SPECTROSCOPIC AND PHOTOGRAPHIC RESULTS, 1895.

Measures of Positions and Areas of Sun Spots and Faculæ, 1895.

Page.	Column.	Line.	
8	2	39	Area of Umbra, *for* 34, *read* 39.
			Area of Whole Spot, *for* 194, *read* 218.
16	2	16	Area of Umbra, *for* 7, *read* 1.
		22	Total Area of Umbræ, *for* 159, *read* 153.
		41	Distance from Centre, *for* 814, *read* 816.
23	Footnote.		Group 3934, *for* into regular spots, *read* into two regular spots.
31	1	7	Area of Whole Spot, *for* 26, *read* 6.
		27	Total Area of Whole Spot, *for* 776, *read* 756.
39	2	8	Area of Umbra, *for* 7, *read* 5.
		22	Total Area of Umbræ, *for* 342, *read* 340.
43	2	2	Area of Whole Spot, *for* 1, *read* 7.
		25	Total Area of Whole Spot, *for* 1464, *read* 1470.
68	1	7	Area of Umbra, *for* 3, *read* 33.
		13	Total Area of Umbræ, *for* 64, *read* 94.

SPECTROSCOPIC AND PHOTOGRAPHIC RESULTS, 1895—*cont.*

Page.	Column.	Line.	
71	1	18	Area of Umbra, *for* 21, *read* 27.
		43	Total Area of Umbræ, *for* 174, *read* 180.
73	2	3	Area of Whole Spot, *for* 454, *read* 45.
		11	Total Area of Whole Spot, *for* 695, *read* 286.
74	Footnote.		Group 4104, *for* July 23, *read* July 24.
76	1	24	Letter for Spot, *dele a.*
	2	5	Letter for Spot, *dele a.*
77	2	22	Letter for Spot, *dele a.*
		23	Letter for Spot, *dele b.*
		24	Letter for Spot, *dele c.*
80	2	11	Letter for Spot, *for* 4107, *read* 4107*b*.

Ledgers of Sun Spots, 1895.

Page.	Group.	Date.	
162	4058	June 16	Area for Whole Spot, *for* 127, *read* 129.
		Means	Area for Whole Spot, *for* 81, *read* 82.

GREENWICH SPECTROSCOPIC AND PHOTOGRAPHIC RESULTS, 1895.

INTRODUCTION.

§ 1. *Measures of Positions and Areas of Sun Spots and Faculæ on Photographs taken at the Royal Observatory, Greenwich, at Dehra Dûn in India, and at the Royal Alfred Observatory, Mauritius, in the year* 1895; *with the deduced Heliographic Longitudes and Latitudes.*

The photographs from which these measures were made were taken either at Greenwich; at Dehra Dûn, North-West Provinces, India; or at the Royal Alfred Observatory, Mauritius.

The photographs of the Greenwich series were taken with the Dallmeyer Photoheliograph returned from the Transit of Venus expedition to New Zealand, which, as now adapted, gives a solar image of 8 inches diameter on the photographic plate.

The photographs have been taken throughout the year on gelatine dry plates, "Lantern" plates supplied by R. W. Thomas and Co. being used, with hydroquinone development.

The Indian photographs, which have been forwarded by the Solar Physics Committee to fill the gaps in the Greenwich series, were taken under the superintendence of the Deputy Surveyor General, Trigonometrical Survey of India, with a Dallmeyer Photoheliograph giving an image of the Sun nearly 8 inches in diameter. In the process adopted at Dehra Dûn bromo-iodized collodion has been used in connexion with iron development.

The Mauritius photographs were taken under the superintendence of Dr. C. Meldrum, Director of the Royal Alfred Observatory, Mauritius, with a Dallmeyer Photoheliograph, giving an image of the Sun about 8 inches in diameter. At the Mauritius Observatory bromo-iodized gelatine dry plates have been used with alkaline development.

Photographs of the Sun were taken at Greenwich on 219 days, and Indian photographs on 122 days with Mauritius photographs on 23 days have been received from the Solar Physics Committee to complete the total of 364 days for which there are either Greenwich, Indian, or Mauritius photographs of the Sun available for measurement in 1895.

The *first* column on each page contains the Greenwich Civil Time at which each photograph was taken, expressed by the day of the year and decimals of a day, reckoning from Greenwich mean midnight January 1d. 0h., and also by the day of the month (civil reckoning), which latter is placed opposite the total area of Spots and Faculæ for the day. The photographs taken in India are distinguished by the letter I, and those taken in Mauritius by the letter M.

The *second* column contains the initials of the two persons measuring the photograph; the initial on the left being that of the person who measured the photograph on the left of the centre of the measuring instrument, and that on the right being that of the person who measured on the right of the centre.

The following are the signatures of those persons who measured the photographs for the year 1895 :—

E. W. Maunder	M	C. F. Turner	FT
Annie S. D. Russell	AR	A. J. Wilkin	AW
C. C. Lacey	CL	J. A. West	JW

The *third* column gives the No. of the group, and the letter for the spot. The groups are numbered in the order of their appearance.

The *next two* columns give the Distance from the Centre of the Sun in terms of the Sun's Radius, and the Position-Angle from the Sun's Axis, reckoned from the Sun's North Pole in the direction *n*, *f*, *s*, *p*, both results being corrected for the effects of astronomical refraction.

The measures of the photographs were made with a large position-micrometer specially constructed by Messrs. Troughton and Simms for the measurement of

photographs of the Sun up to 12 inches in diameter. In this micrometer the photograph is held with its film-side uppermost on three pillars fixed on a circular plate, which can be turned through a small angle, about a pivot in its circumference, by means of a screw and antagonistic spring acting at the opposite extremity of the diameter. The pivot of this plate is mounted on the circumference of another circular plate, which can be turned by screw-action about a pivot in its circumference, 90° distant from that of the upper plate, this pivot being mounted on a circular plate with position-circle which rotates about its centre. By this means small movements in two directions at right angles to each other can be readily given, and the photograph can be accurately centred with respect to the position-circle. When this has been done, a positive eye-piece, having at its focus a glass diaphragm ruled with cross-lines into squares, with sides of one-hundredth of an inch (for measurement of areas), is moved along a slide diametrically across the photograph, the diaphragm being nearly in contact with the photographic film, so that parallax is avoided. The distance of a spot or facula from the centre of the Sun is read off by means of a scale and vernier to 1-250th of an inch (corresponding to 0·001 of the Sun's radius for photographs having a solar diameter of 8 inches). The position-angle is read off on a large position-circle which rotates with the photographic plate. The photograph is illuminated by diffused light reflected from white paper placed at an angle of 45° between the photograph and the plate below.

The following is the process of measurement of a photograph :—By means of the screws attached to the circular plates carrying the pillars which hold the photograph, the image of the Sun is centred as accurately as possible by rotation. The position-circle is then set to the readings 0°, 90°, 180°, and 270° in succession, and the scale readings taken for the two limbs. The scale being so adjusted that its zero coincides with the centre of rotation of the position-circle, the mean of the eight readings for the limb gives the mean radius of the Sun directly.

At the principal focus of the photoheliograph are two cross-spider-lines which serve to determine the zero of position-angles on the photograph.

The zero of position-angles for the Dallmeyer Photoheliograph, employed at Greenwich, has been determined by the measurement of a plate which had been exposed to the Sun's rays twice, with an interval of about 100 seconds between the two exposures, the instrument being firmly clamped. Two images of the Sun, overlapping each other by about a fifth part of the Sun's diameter, were therefore produced upon the plate, and the exposures having been so given that the line joining the cusps passed approximately through the centre of the plate, the inclination of the wires of the photoheliograph to this line was measured with the position-micrometer, and a small correction for the inclination of the Sun's path was

then applied. The following table gives the correction for zero of position for the mean of the two wires as thus determined :—

Date, Greenwich Civil Time.		Correction for Zero.
	d h	° ′
1894 December	27. 13	+ 3. 2
1895 February	19. 12	+ 2. 36
March	22. 12	+ 2. 49
April	19. 11	+ 2. 43
May	1. 12	+ 2. 45
June	8. 11	+ 2. 46
July	3. 11	+ 2. 47
August	7. 15	+ 2. 53
September	3. 12	+ 2. 49
October	7. 13	+ 2. 46
December	2. 12	+ 3. 2
	13. 12	+ 3. 4
1896 February	10. 12	+ 3. 0

The Dallmeyer Photoheliograph has been mounted throughout the year on the terrace roof of the South wing of the new Physical Observatory.

In the use at Greenwich of the Dallmeyer Photoheliograph the position-circle has usually been set to some convenient reading near that for zero, so that the wires are respectively very nearly parallel and perpendicular to the circle of declination, and a correction for zero of position of the photoheliograph for the mean of the two wires has been applied to the zero of the position-circle of the micrometer. The position-circle was set to the reading 354°·0 throughout 1895.

The zero of the position-circle of the micrometer has been determined from the readings of the position-circle for the four extremities of the two wires. The resulting combined correction is applied to all position-circle readings for spots and faculæ, so as to give true position-angles.

In the use of the Photoheliographs at Dehra Dûn and in Mauritius the position-circle has always been set to the zero as determined by allowing the diurnal motion to carry a spot or the Sun's limb along the horizontal wire, and the accuracy of the adjustment has been tested at short intervals. No correction for zero of position of the wires has therefore been applied for the reduction of the photographs taken in India or in Mauritius.

The uncorrected distance from the Sun's centre for spots and faculæ is read off directly to 1-250th of an inch by means of a scale and vernier, the zero of the scale of the new micrometer being adjusted to coincide with the centre of the instrument.

Two sets of measures of the Sun's limb and of spots and faculæ on each photograph have been taken and the mean of the two sets adopted.

No correction has been applied to the photographs on account of distortion.

The correction for the effect of refraction has been thus found, the Sun's image being assumed to be sensibly an ellipse. The refraction being sensibly $c \tan z$ where $c = \sin 57''\cdot5 = \frac{1}{3600}$ nearly, and z is the apparent zenith distance, we shall have—

$$\frac{\text{Vertical Diameter}}{\text{Horizontal Diameter}} = \frac{1 - c \sec^2 z}{1 - c} = 1 - c \tan^2 z\,;$$

and thus the effect of refraction will be to diminish any vertical ordinate y by the quantity $c \tan^2 z$. Resolving this along and perpendicular to the radius vector r, and putting v for the position-angle of the vertex, we have for δr and $\delta \theta$, the corrections to radius vector and position-angle for the effect of refraction—

$$\delta r = + c \,.\, \tan^2 z \times r \,.\, \cos^2 (\theta - v) = + c \,.\, \tan^2 z \times r \times \frac{1 + \cos 2 (\theta - v)}{2},$$

$$\delta \theta = - c \,.\, \tan^2 z \,.\, \sin (\theta - v) \,.\, \cos (\theta - v) = - c \,.\, \tan^2 z \, \frac{\sin 2 (\theta - v)}{2}$$

The quantity δr thus found is the correction, on the supposition that a horizontal diameter of the Sun is taken as the scale. But, as the mean of two diameters at right angles has been used, the scale itself requires the correction $\delta \mathrm{R} = + c \,.\, \tan^2 z \times \mathrm{R} \times \frac{1}{2} \left\{ \frac{1 + \cos 2 (\theta_0 - v)}{2} + \frac{1 + \cos 2 (\theta_0 + 90^\circ - v)}{2} \right\} = + \frac{1}{2} c \,\mathrm{R} \,.\, \tan^2 z$, where R is the Sun's mean radius and θ_0, $\theta_0 + 90^\circ$ the position-angles of the two diameters measured. Thus the final correction to r becomes—

$$\delta r = + c \,.\, \tan^2 z \times r \times \frac{\cos 2 (\theta - v)}{2}.$$

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The quantities $c \tan^2 z$, $-\frac{\sin 2(\theta - v)}{2}$, and $\frac{\cos 2(\theta - v)}{2}$ have been tabulated for use as follows, $c \tan^2 z$ being expressed in circular measure and in arc for application to distances and position-angles respectively :—

$c \tan^2 z$.

°	In Circular Measure.	In Arc.	z.	In Circular Measure.	In Arc.	z.	In Circular Measure.	In Arc.
°		′	°		′	°		′
80	·0089	31	70	·0021	7	60	·0008	3
79	·0073	25	69	·0019	6½	58	·0007	2
78	·0061	21	68	·0017	6	56	·0006	2
77	·0052	18	67	·0015	5½	54	·0005	2
76	·0045	15	66	·0014	5	52	·0005	2
75	·0039	13	65	·0013	4½	50	·0004	1
74	·0034	11½	64	·0012	4	45	·0003	1
73	·0030	10	63	·0011	4	40	·0002	1
72	·0026	9	62	·0010	3	30	·0001	0
71	·0023	8	61	·0009	3			

Factors for Refraction.

$\theta - v$	$\theta - v$	$-\frac{\text{Sin } 2(\theta - v)}{2}$	$\frac{\text{Cos } 2(\theta - v)}{2}$	$\theta - v$	$\theta - v$	$-\frac{\text{Sin } 2(\theta - v)}{2}$	$\frac{\text{Cos } 2(\theta - v)}{2}$
°	°			°	°		
0	180	·00	+ ·50	95	275	+ ·09	− ·49
5	185	− ·09	+ ·49	100	280	+ ·17	− ·47
10	190	− ·17	+ ·47	105	285	+ ·25	− ·43
15	195	− ·25	+ ·43	110	290	+ ·32	− ·38
20	200	− ·32	+ ·38	115	295	+ ·38	− ·32
25	205	− ·38	+ ·32	120	300	+ ·43	− ·25
30	210	− ·43	+ ·25	125	305	+ ·47	− ·17
35	215	− ·47	+ ·17	130	310	+ ·49	− ·09
40	220	− ·49	+ ·09	135	315	+ ·50	·00
45	225	− ·50	·00	140	320	+ ·49	+ ·09
50	230	− ·49	− ·09	145	325	+ ·47	+ ·17
55	235	− ·47	− ·17	150	330	+ ·43	+ ·25
60	240	− ·43	− ·25	155	335	+ ·38	+ ·32
65	245	− ·38	− ·32	160	340	+ ·32	+ ·38
70	250	− ·32	− ·38	165	345	+ ·25	+ ·43
75	255	− ·25	− ·43	170	350	+ ·17	+ ·47
80	260	− ·17	− ·47	175	355	+ ·09	+ ·49
85	265	− ·09	− ·49	180	360	·00	+ ·50
90	270	·00	− ·50				

The position-angle of the Vertex v is readily taken from a globe.

The distance from centre in terms of the Sun's radius given in the *fourth* column is then readily found by dividing the measured distance r_0, as corrected for refraction, by the measured mean radius of the Sun, R; and the Position-Angle from the Sun's Axis given in the *fifth* column is obtained by applying to the Position-Angle (from the N. point) corrected for refraction the Position-Angle of the Sun's Axis derived from the "Auxiliary Tables for determining the Angle of Position of the Sun's Axis, and the Latitude and Longitude of the Earth referred to the Sun's Equator," by Warren De La Rue, F.R.S.

The *sixth* and *seventh* columns give the heliographic longitude and latitude of the spot, which are thus computed.* Let r be the measured distance of a spot from the centre of the Sun's apparent disk, R the measured radius of the Sun on the photograph, (R) the tabular semidiameter of the Sun in arc, and ρ, ρ' the angular distances of a spot from the centre of the apparent disk as viewed from the Sun's centre and from the Earth respectively. Then we have—

$$\rho' = \frac{r}{R}(R)\text{; and } \sin(\rho + \rho') = \frac{r}{R},$$

$$\text{whence } \rho = \sin^{-1}\frac{r}{R} - \rho'.$$

Log sin ρ and log cos ρ as computed from this formula are given in "Tables for the Reduction of Solar Observations No. 2," by Warren De La Rue, F.R.S. Then, if D, λ are the heliographic latitudes of the Earth and the Spot respectively, referred to the Sun's Equator, and L, l the heliographic longitudes reckoned from the ascending node of the Sun's Equator on the ecliptic, and χ the position-angle from the Sun's axis, we have by the ordinary equations of spherical trigonometry—

$$\sin\lambda = \cos\rho \sin D + \sin\rho \cos D \cos\chi$$
$$\sin(L - l) = \sin\chi \sin\rho \sec\lambda.$$

The quantities L and D are derived from Warren De La Rue's Auxiliary Tables before referred to, in the computation of which the following formulæ have been used—

$$\tan L = \cos I \tan(\odot - N)$$
$$\sin D = \sin I \sin(\odot - N)$$

where I is the inclination of the Sun's Equator to the ecliptic, N the longitude of the ascending node, and $\odot$ the longitude of the Sun.

* Researches on Solar Physics: Heliographical Positions and Areas of Sun Spots observed with the Kew Photoheliograph during the years 1862 and 1863, by W. De La Rue, B. Stewart, and B. Loewy. Phil. Trans. 1869.

The position-angle χ is given by the formula—

$$\chi = P + G + H$$

where P is the position-angle from the north point of the Sun, and G and H two auxiliary angles given by the formulæ—

$$\tan G = \tan \omega \cos \odot$$
$$\tan H = \tan I \cos (\odot - N)$$

where ω is the obliquity of the ecliptic.

It will be seen that G is the inclination of two planes through the line joining the centres of the Earth and Sun passing through the poles of the Earth and of the ecliptic respectively, and that H is the inclination of two planes through the same line and the poles of the Sun and of the ecliptic. The values assumed for I, N, ω in the computation of the Tables are 7° 15′, 74° 21′, and 23° 27′·5 respectively.

The Heliographic Longitude of the Spot is found from l, the Heliographic Longitude from Node, by subtracting the Reduction to the Prime Meridian, which is the Longitude of the Node at the epoch of the photograph, referred to the assumed Prime Meridian, the latter being the meridian which passed through the ascending node at mean noon, 1854, Jan. 1. The period of rotation assumed is 25·38 days.

The Heliographic Longitude and Latitude of the Centre of the Sun's Disk at the time of the exposure of each photograph are also given (in brackets) in the *sixth* and *seventh* columns respectively. The Longitude of the Centre of the Disk is found by subtracting the Reduction to the Prime Meridian from L, the Longitude of the Centre from the Node. The Latitude of the Centre is of course the same as D, the Heliographic Latitude of the Earth.

The measures of areas given in the *last three* columns were made with a glass diaphragm ruled into squares, with sides of one hundredth of an inch, and placed as nearly as possible in contact with the photographic film. The integral number of squares and parts of a square contained in the area of a spot or facula was estimated by the observer, two independent sets of measures being made by two observers. The mean of the two sets of measures has been taken for each photograph. The factor for converting the areas, as measured in ten-thousandths of a square inch, into millionths of the Sun's visible hemisphere, allowing for the effect of foreshortening, has been inferred by means of a table of double entry, giving the equivalent of one square for different values of the Sun's radius, and for different distances of the spot or facula from the Sun's centre, as measured by means of the position-micrometer.

The individual spots in a group have in some cases not been measured separately, but combined into a cluster of two or three small spots close together, the position of the centre of gravity and the aggregate area of the cluster being given. The actual number of individual spots is usually stated in the Notes.

§ 2. *Ledgers of Areas and Positions of Groups of Sun Spots deduced from the measurement of the Solar photographs for each day in the year* 1895.

In these Ledgers the daily results for each group are collected together from the measures of the individual spots and given in a condensed form. The first column gives for each day, on which the group was observed, the Greenwich civil time at which each photograph was taken, expressed by the day of the month (civil reckoning) and the decimals of a day reckoning from Greenwich mean midnight. The second and third columns give the sums, for each day, of the projected areas of all the umbræ and whole spots comprised in the group, the projected area being the area as it is measured upon the photograph, uncorrected for foreshortening, and expressed in millionths of the Sun's apparent disk. The fourth and fifth columns give the sums for each day of the areas of all the umbræ and whole spots comprised in the group, corrected for foreshortening, and expressed in millionths of the Sun's visible hemisphere. The sixth and seventh columns give the mean longitude and latitude of the group, found by multiplying the longitude and latitude of each separately measured component of the group by its area, and dividing the sum of the products by the sum of the areas. The last column gives the mean longitude of the group from the central meridian, and is found by subtracting the longitude of the centre of the disk from the mean longitude of the group. At the foot of these daily results for each group are given the mean areas of umbræ and whole spots and the mean longitude and latitude for the period of observation.

§ 3. *Total Projected Areas of Sun Spots and Faculæ, for each day, and Mean Areas and Mean Heliographic Latitude of Sun Spots and Faculæ, for each Rotation of the Sun, and for the Year* 1895.

This section requires no further explanation.

W. H. M. CHRISTIE.

Royal Observatory, Greenwich.
1897 *October* 6.

ROYAL OBSERVATORY, GREENWICH.

MEASURES OF POSITIONS AND AREAS

OF

SUN SPOTS AND FACULÆ

ON

PHOTOGRAPHS

TAKEN WITH THE

PHOTOHELIOGRAPHS

AT GREENWICH, IN INDIA, AND IN MAURITIUS,

WITH THE DEDUCED

HELIOGRAPHIC LONGITUDES AND LATITUDES.

1895.

MEASURES of POSITIONS and AREAS of SUN SPOTS and FACULÆ on PHOTOGRAPHS taken at the ROYAL OBSERVATORY, GREENWICH, at DEHRA DÛN in INDIA, and at the ROYAL ALFRED OBSERVATORY, MAURITIUS, in the Year 1895.

NOTE.—The Greenwich Civil Time at which the photograph was taken is expressed by the Day of the Year and decimals of a day, reckoning from Midnight, January 1d. 0h.

For convenience of reference the Month and Day of the Month (Civil Reckoning) are added.

The letter I. signifies that the photograph was taken in India; the letter M. that the photograph was taken in Mauritius; the time given is Greenwich Civil Time.

The position-angles are reckoned from the North Pole of the Sun's Axis in the direction N., E., S., W., N.

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
0d.194	CL, FT		0·955	296·8	88·1	+24·3			239
			0·907	280·3	83·1	+ 8·0			405
M.			0·912	289·2	82·5	+16·0			341
			0·887	305·8	74·5	+29·4			391
			0·836	248·9	74·5	−19·3			326
		3838*a*	0·783	289·2	68·1	+12·8	0	8	458*c*
		3843	0·670	294·0	57·8	+13·3	0	4	
		3843	0·664	296·5	56·8	+14·7	3	12	102*c*
		3843	0·644	296·8	55·2	+14·3	2	9	
		3836*a*	0·297	225·4	31·6	−15·1	0	6	
		3836	0·310	221·7	31·4	−16·5	0	1	
		3842*a*	0·636	57·9	344·8	+17·1	32	244	
		3845*a*	0·714	80·1	334·3	+ 4·8	0	9	190*f*
		3846*a*	0·916	75·0	314·3	+12·3	22	94	467*f*
		3847*a*	0·940	107·6	309·2	−17·6	66	507	735*f*
Jan. 1		Centre			(19·0)	(−3·2)	(125)	(894)	(3654)
1·187	AW, FT		0·968	301·8	76·8	+29·6			291
			0·928	247·7	73·4	−21·9			564
I.			0·906	282·3	69·5	+ 9·6			884
			0·807	259·5	59·5	−10·4			122
			0·843	234·6	59·1	−31·2			84
		3843	0·821	288·5	58·8	+13·0	0	7	
		3843	0·811	290·7	57·3	+14·5	0	16	258*c*
		3843	0·790	291·5	55·1	+14·6	0	11	
		3836*a*	0·472	243·5	31·7	−15·1	0	11	
		3842*a*	0·494	44·9	344·6	+17·2	39	267	154*c*
		3842	0·518	43·8	343·7	+18·7	0	8	
		3848	0·481	104·4	337·8	− 9·9	0	7	
		3845*a*	0·537	75·7	334·6	+ 4·7	1	8	
		3845	0·610	75·1	329·7	+ 6·5	0	5	
		3849	0·643	98·1	326·1	− 7·8	1	10	
		3846*a*	0·809	71·1	314·3	+13·0	30	171	
		3846	0·844	70·1	310·9	+14·7	4	23	240*c*
		3846	0·853	74·2	309·2	+11·6	0	14	
1895.				°	°	°			
1d.187	AW, FT	3847*a*	0·851	108·2	308·3	−17·2	85	508	912*f*
I.			0·917	83·8	300·0	+ 4·4			120
Jan. 2		Centre			(5·9)	(−3·4)	(160)	(1066)	(3629)
2·225	AW, FT		0·966	245·6	67·1	−24·5			263
			0·923	285·1	57·8	+12·5			767
I.			0·881	251·6	53·4	−17·8			167
			0·788	261·4	44·1	− 8·9			112
		3850	0·394	2·4	351·2	+19·6	0	7	
		3850	0·395	14·7	346·1	+18·9	0	9	
		3842*a*	0·379	20·8	344·1	+17·2	41	248	
		3845*a*	0·334	64·7	334·6	+ 4·8	0	8	
		3846*a*	0·658	65·7	314·4	+13·0	25	121	
		3846	0·697	65·1	311·6	+14·4	0	4	
		3846	0·687	69·2	311·4	+11·5	0	5	212*c*
		3846	0·714	69·6	309·2	+11·9	0	24	
		3846	0·722	71·3	308·2	+10·9	1	18	
		3847*a*	0·718	110·9	307·7	−17·4	88	484	
		3847	0·747	108·2	304·8	−15·8	3	21	984*f*
		3847	0·750	110·1	304·8	−17·3	0	14	
			0·922	114·5	285·9	−23·9			68
Jan. 3		Centre			(352·2)	(−3·5)	(158)	(963)	(2573)
3·208	AW, M		0·912	257·5	45·1	−12·9			298
			0·764	252·6	28·3	−15·6			99
M.		3851	0·543	269·3	12·1	− 3·5	0	8	
		3851	0·497	269·3	9·0	− 3·5	0	4	
		3842	0·398	343·5	346·1	+18·7	1	17	
		3842*b*	0·371	342·3	346·0	+17·1	7	43	
		3842*c*	0·361	346·6	344·3	+16·9	15	101	
		3846*a*	0·488	55·3	315·1	+12·8	11	70	
		3846	0·486	57·6	314·6	+11·8	2	6	
		3846	0·488	59·3	314·1	+11·1	0	4	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.

The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3836, 1894 December 25–1895 January 2. A somewhat ill-defined spot, *a*, with a very small companion on January 1.

Group 3838, 1894 December 26–1895 January 1. Three very small spots on December 26. The group increases rapidly up to December 28, when it forms an irregular stream of nebulous spots. The spots are unstable, with the exception of *a*, the leader on December 27, and tend to form in front of the group and disappear at the rear.

Group 3842, 1894 December 28–1895 January 8. A large spot, *a*, with double nucleus, sometimes attended by small companions. It has broken up by January 4, principally into two spots, *b* and *c*, which diminish on the succeeding days.

Group 3843, 1894 December 31–1895 January 2. A few very faint, small, and unstable spots, irregularly arranged.

Group 3845, 1894 December 31–1895 January 3. A small faint spot, *a*, with a very small companion on December 31 and January 2.

Group 3846, 1894 December 31–1895 January 11. A composite spot, *a*, which speedily becomes large, but diminishes after January 2. It is followed by a few small spots on January 2, but these greatly increase in number, and the group becomes a very complicated and irregular stream. *a* has disappeared by January 8, but a large spot, *b*, has appeared 4° south of its place, and has become the leader of the group, then a sparse stream, by January 9.

Group 3847, 1894 December 31–1895 January 12. A very large spot, *a*, with generally some small companions.

Group 3848, 1895 January 2. A very small faint spot. Group 3849, January 2. A small spot. Group 3850, January 3. A pair of very faint small spots.

Group 3851, January 4–6. A small group usually consisting of a pair of small unstable spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895.									
3d.208	AW, M	3846	0·485	62·6	313·5	+ 9·6	5	24	
		3846	0·501	62·0	312·7	+10·4	0	14	
M.		3846	0·511	61·3	312·2	+11·0	0	3	
		3846	0·530	63·2	310·6	+10·7	0	4	
		3846	0·532	64·9	310·1	+ 9·9	10	31	
		3846	0·526	67·2	310·1	+ 8·6	0	8	
		3846	0·544	62·9	309·9	+11·1	0	4	
		3846	0·555	64·3	308·8	+10·9	0	5	
		3847	0·527	114·3	309·5	−15·6	0	2	
		3847*a*	0·556	116·4	308·0	−17·4	58	397	
		3847	0·576	111·8	305·8	−15·3	1	8	
		3847	0·596	116·7	305·3	−18·5	0	4	
		3847	0·594	113·7	304·8	−16·8	0	17	
		3847	0·599	115·4	304·8	−17·8	0	7	
		3852*a*	0·786	116·2	289·7	−22·6	0	25	162*c*
		3852*b*	0·816	117·7	286·9	−24·5	0	7	
		3853	0·944	113·2	269·0	−23·1	0	12	
Jan. 4		Centre			(339·3)	(−3·6)	(110)	(825)	(559)
4·242	AW, FT		0·951	257·0	37·7	−13·5			254
			0·839	245·0	21·0	−22·8			322
I.			0·829	290·3	18·8	+14·5			561
		3854	0·976	279·2	42·2	+ 8·2	24	76	190*c*
		3854	0·953	280·5	36·8	+ 8·8	5	42	
		3851	0·749	268·8	14·0	− 3·4	0	21	78*c*
		3851	0·725	270·8	11·9	− 2·0	3	19	
		3842	0·515	317·5	347·1	+18·8	0	11	
		3842*b*	0·494	316·1	346·5	+17·4	14	64	
		3842	0·504	319·9	345·6	+19·1	0	1	
		3842*c*	0·468	318·2	344·5	+16·9	15	68	
		3842	0·455	321·1	342·9	+17·1	0	2	
		3846	0·293	38·2	315·1	+ 9·6	0	3	
		3846*a*	0·334	32·3	315·1	+12·7	26	107	
		3846	0·303	38·0	314·7	+10·1	6	17	
		3846	0·302	40·5	314·2	+ 9·6	2	3	
		3846	0·327	36·8	314·1	+11·5	0	2	
		3846	0·326	41·9	312·9	+10·4	9	34	
		3846	0·337	48·4	310·9	+ 9·3	0	9	
		3846	0·366	45·5	310·2	+11·3	0	13	
		3846	0·355	48·0	310·1	+10·2	1	3	
		3846	0·344	52·4	309·7	+ 8·5	0	6	
		3846	0·365	49·8	309·2	+10·0	5	10	
				°	°	°			
1895.									
4d.242	AW, FT	3846	0·391	50·6	307·8	+10·9	1	5	
		3847*a*	0·383	128·7	307·4	−17·4	58	334	
I.		3847	0·422	126·0	304·7	−17·8	5	26	
		3847	0·431	128·2	304·7	−18·9	0	12	
		3847	0·467	121·9	301·1	−17·6	0	4	
		3852*a*	0·641	121·9	289·6	−22·8	0	4	
		3852	0·650	121·4	288·8	−22·7	0	3	76*c*
		3852	0·661	120·4	287·7	−22·5	0	3	
		3852*b*	0·693	122·3	285·7	−24·5	1	14	
Jan. 5		Centre			(325·6)	(−3·7)	(175)	(916)	(1481)
5·253	AW, FT		0·895	247·6	15·0	−21·7			261
			0·899	289·4	13·8	+15·6			666
I.			0·871	238·8	10·3	−28·8			140
		3851	0·869	269·8	12·5	− 2·1	0	6	
		3851	0·828	267·8	8·1	− 4·0	0	9	
		3855	0·768	263·8	2·4	− 7·3	2	10	258*c*
		3855	0·748	263·7	0·7	− 7·3	0	17	
		3842	0·649	300·6	347·7	+16·2	1	4	
		3842	0·660	304·2	347·3	+18·6	1	7	
		3842*b*	0·644	302·6	346·7	+17·1	12	42	61*c*
		3842	0·644	306·4	345·5	+19·2	0	3	
		3842	0·633	304·8	345·3	+18·0	0	6	
		3842*c*	0·618	303·5	344·7	+16·7	11	31	
		3846*a*	0·288	349·7	315·3	+12·7	27	90	
		3846	0·239	351·6	314·3	+ 9·9	3	62	
		3846	0·278	353·4	314·2	+12·1	0	3	
		3846	0·264	353·0	314·2	+11·3	0	3	
		3846	0·243	356·5	313·2	+10·2	1	13	
		3846	0·239	0·6	312·1	+10·0	0	12	
		3846	0·260	1·4	311·9	+11·2	0	13	
		3846	0·248	8·0	310·3	+10·4	0	20	
		3846	0·223	11·1	309·8	+ 8·8	0	10	
		3846	0·272	10·1	309·5	+11·7	0	31	
		3846	0·250	14·7	308·6	+10·2	10	48	
		3847*a*	0·249	160·8	307·4	−17·4	55	295	
		3847	0·262	155·2	305·7	−17·5	0	8	
		3847	0·282	150·8	304·0	−18·0	0	3	
		3847	0·269	148·3	303·8	−16·9	0	8	
			0·901	69·3	250·9	+16·8			178
			0·919	180·3	246·6	+ 7·4			67
Jan. 6		Centre			(312·3)	(−3·8)	(123)	(754)	(1631)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.

The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3852, January 4–5. A pair of small spots, *a* and *b*, on January 4. Two very small spots are seen between *a* and *b* on January 5.
Group 3853, January 4. A small spot.
Group 3854, January 5. A regular spot followed by a close pair measured as a single spot.
Group 3855, January 6. Three small spots, the two following of which are measured together.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
7d·472	AW, AR		0·972	265·1	359·6	− 5·8			366
			0·855	261·5	341·9	− 9·4			227
M.		3842*b*	0·924	290·1	347·9	+16·8	4	31	513*c*
		3842	0·917	289·4	347·0	+15·9	0	19	
		3842*c*	0·898	290·5	344·1	+16·3	2	10	
		3846	0·615	292·9	318·1	+10·4	0	5	
		3846	0·600	295·1	316·6	+11·3	2	9	
		3846*b*	0·572	292·2	315·4	+ 9·0	26	116	
		3846	0·571	295·1	314·7	+10·5	1	8	
		3846	0·533	293·7	312·6	+ 8·8	2	13	
		3846	0·512	292·7	311·4	+ 7·7	0	6	
		3846	0·539	300·7	311·3	+12·3	0	2	
		3846	0·518	298·6	310·6	+10·7	0	12	
		3846	0·510	297·6	310·3	+10·0	0	3	
		3846	0·494	299·0	309·0	+10·2	0	40	
		3846	0·506	302·9	308·8	+12·2	0	10	
		3847*a*	0·460	239·4	307·5	−17·3	47	233	
		3847	0·463	234·7	306·6	−19·2	0	4	
		3856*a*	0·801	104·0	230·2	−13·7	14	82	293*c*
		3856	0·830	103·8	227·3	−13·7	0	2	
			0·862	66·8	227·1	+17·5			246
			0·947	84·4	212·5	+ 4·0			198
Jan. 8		Centre			(283·1)	(−4·1)	(98)	(605)	(1843)
8·220	AW, AR		0·957	289·3	343·8	+17·1			487
			0·915	262·2	339·5	− 8·9			152
M.			0·886	246·6	334·7	−22·6			131
			0·851	240·3	329·3	−27·3			122
		3846*b*	0·708	287·6	316·2	+ 9·3	24	75	
		3846	0·698	289·7	315·0	+10·4	0	7	
		3846	0·621	292·5	308·7	+10·3	7	32	
		3846	0·626	295·4	308·4	+12·1	0	4	
		3847*a*	0·588	245·8	307·2	−17·4	55	251	127*c*
		3857*a*	0·256	158·9	267·7	−17·9	6	25	
		3857	0·298	155·6	265·7	−19·9	0	4	
		3857	0·291	153·1	265·2	−19·2	0	5	
		3856*a*	0·678	106·5	231·3	−14·2	16	104	
		3856	0·716	104·0	227·9	−12·9	0	10	
		3856	0·732	105·7	226·7	−14·3	0	20	149*c*
		3856	0·742	105·4	225·8	−14·2	5	31	
		3856	0·743	104·2	225·7	−13·3	0	6	
			0·936	82·4	204·6	+ 5·6			396
			0·966	108·8	197·7	−19·2			196
Jan. 9		Centre			(273·2)	(−4·2)	(113)	(574)	(1760)
1895.					°	°			
9d·255	AW, FT		0·945	244·6	330·2	−25·4			274
			0·750	240·9	305·3	−24·4			97
I.		3846*b*	0·856	283·7	316·7	+ 9·4	10	76	
		3846	0·854	285·3	316·2	+10·7	1	34	
		3846	0·843	284·0	315·3	+ 9·3	0	5	
		3846	0·828	284·8	313·6	+ 9·7	0	4	306*c*
		3846	0·814	284·5	312·3	+ 9·2	0	3	
		3846	0·788	288·1	309·1	+11·4	5	36	
		3846	0·780	287·0	308·6	+10·4	0	20	
		3847*a*	0·751	250·2	307·2	−17·7	52	232	113*c*
		3858*a*	0·597	294·0	293·0	+10·4	3	33	
		3858	0·597	296·3	292·5	+11·7	1	13	
		3858	0·571	299·4	290·0	+12·6	0	5	
		3858	0·542	294·3	289·4	+ 9·2	0	6	
		3858	0·532	296·0	288·4	+ 9·7	0	14	
		3858	0·522	298·7	287·2	+10·7	5	16	
		3857*a*	0·266	211·8	267·9	−17·3	3	7	
		3856*a*	0·484	111·8	232·0	−14·2	24	116	
		3856	0·498	110·2	230·9	−13·7	0	3	
		3856	0·536	110·4	228·4	−14·4	0	2	
		3856	0·552	110·2	227·3	−14·6	0	3	
		3856	0·571	108·9	225·8	−14·3	0	2	
		3856*b*	0·576	107·7	225·3	−13·6	10	55	
			0·850	78·5	202·6	+ 7·4			211
			0·931	113·4	191·3	−23·3			334
			0·973	100·9	182·5	−11·6			170
Jan. 10		Centre			(259·5)	(−4·3)	(114)	(685)	(1505)
10·478	AW, FT		0·847	245·4	300·1	−23·1			278
M.		3846*b*	0·956	281·3	315·2	+ 9·5	3	46	
		3846	0·952	283·1	314·1	+11·0	0	10	
		3846	0·935	285·5	310·8	+12·8	0	6	815*c*
		3846	0·916	284·5	308·0	+11·4	0	10	
		3846	0·914	283·6	307·9	+10·6	0	6	
		3847*a*	0·889	252·1	306·0	−17·9	39	211	358*p*
		3858	0·835	288·8	297·5	+13·1	1	11	
		3858	0·827	287·8	296·9	+12·0	0	2	
		3858	0·811	289·1	295·1	+12·7	0	2	
		3858	0·806	288·3	294·8	+11·9	0	2	
		3858	0·800	289·1	294·0	+12·4	1	8	
		3858*a*	0·789	287·4	293·4	+10·9	11	73	
		3858	0·767	285·3	291·8	+ 8·8	2	6	
		3858	0·768	289·5	291·0	+11·9	4	19	240*c*

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3856, January 8–17. A regular spot, *a*, followed by a stream of small spots, of which *b*, the last spot on January 10, is the largest. *b* has divided into two portions by January 11 and still further by the succeeding day. The other members of the stream are also very unstable, and *a* alone remains by January 16.
Group 3857, January 9–12. A small spot, *a*. A close pair of very small spots is seen near *a* on January 9.
Group 3858, January 10–13. A number of spots, mostly small, irregularly arranged, appearing suddenly to the west of the central meridian. The group changes much from day to day, and becomes a long stream, of which *a*, the leader on January 10, is much the largest.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
10d·478	AW, FT	3858	0·758	290·3	290·0	+12·2	0	5	
		3858	0·750	287·6	289·9	+10·0	8	16	
M.		3858	0·740	286·6	289·2	+ 9·1	2	9	
		3858	0·747	291·1	288·9	+12·5	4	10	
		3858	0·732	287·2	288·5	+ 9·4	0	8	
		3858	0·728	290·6	287·4	+11·7	2	19	
		3858	0·712	289·2	286·5	+10·3	2	9	
		3858	0·713	290·3	286·3	+11·1	6	11	
		3857*a*	0·456	240·8	268·0	−16·8	3	7	
		3856*a*	0·246	135·1	233·2	−14·3	23	101	
		3856	0·289	128·8	230·1	−14·7	13	42	
		3856	0·298	124·5	228·9	−14·0	0	4	
		3856	0·314	128·6	228·8	−15·6	2	10	
		3856*b*	0·350	120·2	225·4	−14·3	6	37	
		3856*b*	0·363	118·2	224·3	−14·0	6	19	
		3859	0·925	103·6	175·7	−14·3	0	3	655*c*
			0·816	114·2	190·2	−22·2			176
			0·920	68·6	179·6	+17·7			150
Jan. 11		Centre			(243·5)	(−4·4)	(138)	(722)	(2672)
11·419	AW, FT		0·984	281·3	309·7	+10·3			364
			0·956	244·9	304·2	−25·3			306
			0·872	252·0	291·6	−17·9			95
			0·854	241·9	288·0	−26·2			226
		3847*a*	0·966	252·9	306·8	−17·7	24	233	174*s*
		3858*a*	0·903	284·2	294·0	+10·7	26	148	
		3858	0·895	282·6	293·2	+ 9·3	7	16	
		3858	0·882	285·8	291·1	+11·7	0	7	
		3858	0·873	286·2	289·9	+11·7	0	7	
		3858	0·858	283·4	288·7	+ 9·1	6	21	494*c*
		3858	0·860	286·9	288·3	+12·1	0	7	
		3858	0·855	284·4	288·2	+ 9·8	6	20	
		3858	0·843	286·2	286·6	+11·1	2	7	
		3858	0·838	285·4	286·2	+10·3	5	15	
		3857*a*	0·623	248·6	268·3	−16·8	2	8	
		3856*a*	0·175	195·4	233·9	−14·1	19	112	
		3856	0·179	186·5	232·4	−14·7	4	15	
		3856	0·183	175·4	230·3	−15·0	1	4	
		3856	0·180	172·9	229·9	−14·7	0	8	
		3856	0·195	170·6	229·3	−15·6	1	6	
		3856	0·201	166·0	228·3	−15·7	1	4	
		3856	0·183	157·1	227·0	−14·1	1	6	
		3856	0·196	152·0	225·8	−14·4	11	56	
1895.				°	°	°			
11d·419	AW, FT	3856	0·202	146·8	224·7	−14·2	0	22	
		3856	0·226	146·6	223·8	−15·3	0	5	
			0·756	106·5	182·7	−15·4			180
			0·882	103·7	169·3	−14·2			686
Jan. 12		Centre			(231·2)	(−4·5)	(116)	(727)	(2525)
12·355	M, FT		0·943	252·1	289·5	−18·4			122
			0·943	243·5	289·1	−26·5			536
M.		3858*a*	0·971	282·4	293·6	+10·9	8	110	
		3858	0·963	283·6	291·5	+11·7	0	26	
		3858	0·951	282·7	289·2	+10·6	0	10	425*c*
		3858	0·944	281·2	288·2	+ 9·0	0	11	
		3858	0·943	282·3	287·9	+10·0	0	15	
		3858	0·932	283·5	285·9	+10·9	0	6	
		3856*a*	0·307	236·2	234·0	−14·2	17	111	
		3856	0·298	232·9	233·0	−14·8	4	6	
		3856	0·210	219·9	226·7	−13·8	0	1	
		3856	0·206	212·2	225·3	−14·6	9	22	
		3856	0·194	209·8	224·5	−14·3	4	9	
		3860	0·952	114·1	146·6	−24·3	3	12	230*f*
			0·749	105·0	170·7	−14·3			293
			0·913	106·5	152·9	−16·9			413
Jan. 13		Centre			(218·8)	(−4·6)	(45)	(339)	(2019)
13·227	AW, M		0·995	252·3	292·4	−18·1			167
			0·974	281·4	282·9	+10·0			185
M.			0·966	243·4	282·8	−27·0			176
			0·868	251·9	267·3	−18·0			107
		3856*a*	0·466	248·3	233·7	−14·1	27	107	
		3856	0·460	246·5	233·1	−14·8	2	6	
		3856	0·419	243·5	230·1	−15·1	0	3	
		3856	0·345	239·8	225·2	−14·4	2	8	
		3860	0·886	114·2	145·7	−23·5	0	4	
		3861	0·933	116·1	138·8	−26·0	2	7	582*c*
		3861	0·955	117·7	134·5	−27·9	0	5	
			0·896	106·6	143·7	−17·0			406
			0·953	66·5	138·4	+20·7			84
			0·952	76·4	136·8	+11·4			86
Jan. 14		Centre			(207·3)	(−4·7)	(33)	(140)	(1793)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3859, January 11. A very small faint spot in the midst of bright faculæ.
Group 3860, January 13–19. One or two small unstable spots. No spot lasts longer than two days. The group is not seen on January 18. Three very small spots are seen further north on January 19.
Group 3861, January 14–24. A few small unstable spots irregularly arranged. The group is not seen on January 18 or 22.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
14d·248	FT, AR		0·930	254·8	262·4	−15·9			86
			0·906	293·6	255·0	+19·0			113
I.			0·762	190·5	207·1	−52·9			132
		3862	0·747	293·6	238·5	+14·0	2	8	
		3856*a*	0·654	253·5	233·9	−14·3	32	144	35*c*
		3856	0·536	250·7	225·1	−14·3	0	6	
		3863	0·361	114·5	174·2	−13·1	0	6	
		3860	0·796	116·7	142·9	−24·0	0	6	
		3864	0·856	61·0	140·3	+21·7	0	6	
		3861	0·830	118·5	139·6	−26·2	0	9	1039*c*
		3861	0·874	119·1	134·5	−27·6	2	7	
			0·900	161·5	155·5	−62·6			97
			0·826	127·7	142·5	−33·3			57
			0·821	109·3	139·2	−18·6			388
			0·905	66·6	132·7	+18·8			360
			0·898	99·6	129·7	−10·7			259
Jan. 15		Centre			(193·8)	(−4·8)	(36)	(192)	(2566)
15·187	AW, FT		0·824	288·4	234·4	+12·1			108
		3856*a*	0·791	255·2	233·5	−14·7	14	97	274*f*
I.		3863	0·230	138·8	172·5	−14·8	0	5	
		3860	0·620	122·7	146·9	−23·6	1	10	
		3860	0·642	121·8	145·1	−23·7	3	10	117*c*
		3860	0·663	121·5	143·4	−24·1	0	10	
		3861	0·723	123·1	138·9	−26·8	0	4	
		3861	0·780	122·3	133·4	−27·9	2	9	414*f*
			0·793	64·3	133·4	+16·9			322
			0·800	100·5	128·3	−11·4			336
			0·966	94·8	106·3	− 5·9			182
Jan. 16		Centre			(181·5)	(−4·9)	(20)	(145)	(1753)
16·612	M, FT		0·870	277·6	222·5	+ 4·1			105
		3856*a*	0·936	257·0	232·6	−13·9	6	39	209*f*
		3860	0·413	142·2	146·9	−23·8	0	17	
		3860	0·454	137·0	143·2	−24·0	0	4	
		3861	0·540	133·1	137·0	−26·0	2	7	
		3861	0·562	133·4	135·7	−27·1	0	6	
		3861	0·600	133·5	133·3	−28·7	0	3	
		3861	0·617	131·7	131·4	−28·4	0	5	
		3865*a*	0·913	75·6	98·9	+11·0	0	5	
1895.				°	°	°			
16d·612	M, FT	3865*b*	0·918	76·3	98·1	+10·4	0	10	285*c*
		3866	0·948	76·9	93·1	+10·7	0	15	
		3867	0·985	77·2	84·3	+11·7	58	250	
Jan. 17		Centre			(162·9)	(−5·0)	(66)	(361)	(599)
17·479	AW, CL		0·968	255·9	227·5	−15·0			338
		3868	0·736	301·7	192·7	+18·9	6	19	
		3869	0·705	304·6	189·3	+19·6	3	8	
		3869	0·696	303·3	189·1	+18·4	0	5	
		3870	0·166	84·4	141·9	− 4·2	0	5	
		3865*b*	0·818	73·4	98·7	+10·4	5	29	
		3866	0·880	73·7	92·0	+11·7	0	6	
		3866	0·886	74·9	91·0	+10·8	0	6	254*c*
		3866	0·887	74·2	91·0	+11·5	2	13	
		3867	0·900	73·3	89·5	+12·6	0	7	
		3867*a*	0·953	75·1	81·0	+12·6	47	433	
		3867	0·958	76·3	79·8	+11·6	0	13	513*c*
		3867	0·978	77·0	75·1	+11·6	0	20	
		3867	0·988	75·6	72·1	+13·4	19	74	
			0·880	67·3	93·4	+17·2			278
Jan. 18		Centre			(151·4)	(−5·1)	(82)	(638)	(1383)
18·209	AW, AR		0·942	253·9	212·5	−16·9			173
			0·910	279·2	206·1	+ 6·2			255
I.			0·810	249·3	195·1	−19·7			190
		3868	0·832	296·5	193·3	+18·6	4	15	167*c*
		3860	0·290	206·4	149·6	−20·2	0	4	
		3860	0·262	209·3	149·4	−18·4	0	2	
		3860	0·314	200·8	148·6	−22·2	0	4	
		3861	0·413	177·9	140·7	−29·5	0	5	
		3861	0·370	175·6	139·9	−26·8	1	8	
		3861	0·378	171·2	138·0	−27·0	2	17	
		3861	0·412	168·2	136·2	−28·9	0	8	
		3861	0·392	166·1	135·6	−27·4	0	5	
		3861	0·431	166·6	135·1	−29·9	0	4	
		3871	0·249	169·8	139·0	−19·3	0	3	
		3871	0·259	165·2	137·7	−19·7	0	3	
		3865*b*	0·707	69·2	99·6	+10·7	9	20	
		3866	0·768	69·8	94·4	+11·9	3	12	
		3866	0·767	71·6	94·1	+10·5	0	9	
		3866	0·779	70·4	93·3	+11·7	0	3	264*c*
		3866	0·792	70·0	92·3	+12·3	0	9	
		3866	0·800	71·4	91·1	+11·8	0	23	
		3866	0·832	73·5	87·7	+10·6	0	13	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3862, January 15. A small spot.
Group 3863, January 15–16. A very small spot.
Group 3864, January 15. A very small spot.
Group 3865, January 17–25. A pair of very small spots, *a* and *b*, on January 17. *a* has disappeared by January 18, and *b* by January 23. A small irregular stream of unstable spots has begun to form behind *b* by January 21, but diminishes again after January 23.
Group 3866, January 17–22. A few very small spots in an irregular cluster between Groups 3865 and 3867.
Group 3867, January 17–29. An irregular stream consisting of a very large spot, *a*, and a few much smaller spots following it. *a* has divided into two large spots, *b* and *c*, by January 21. These have become regular by January 25, and with one or two small companions compose the entire group.
Group 3868, January 18–19. A small spot.
Group 3869, January 18. A pair of very small spots.
Group 3870, January 18–21. A few very small faint unstable spots, not seen on January 19.
Group 3871, January 19. A pair of very small faint spots *n* of Group 3861.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895. 18d·209	AW, AR	3867a	0·883	73·0	82·1	+12·4	102	541	1148c
		3867	0·933	75·0	74·8	+12·0	0	44	
I.		3867	0·960	73·9	70·2	+13·8	41	143	
			0·930	147·4	82·5	−54·4			115
			0·934	80·8	73·7	+ 6·7			332
			0·938	119·0	72·3	−29·0			129
			0·939	108·4	71·4	−19·1			243
Jan. 19		Centre			(141·7)	(−5·2)	(162)	(895)	(3016)
19·397	M, FT		0·915	250·7	192·5	−19·8			131
			0·897	259·5	190·1	−11·7			144
I.			0·901	292·9	186·7	+18·0			244
			0·787	255·4	177·8	−14·7			288
		3870	0·296	272·2	143·3	− 4·4	3	12	
		3870	0·285	273·5	142·6	− 4·2	0	3	
		3870	0·261	273·1	141·2	− 4·3	0	11	
		3870	0·240	270·6	140·0	− 5·0	0	4	
		3861	0·424	208·2	139·0	−27·0	0	30	
		3861	0·414	199·1	134·9	−28·2	0	5	
		3865b	0·500	57·5	105·8	+10·7	6	20	
		3866	0·586	63·7	93·9	+10·5	0	11	
		3866	0·668	67·4	87·4	+10·7	0	3	
		3867a	0·742	67·4	81·7	+12·8	119	568	
		3867	0·767	70·7	78·7	+11·1	0	50	
		3867	0·801	69·0	76·1	+13·3	0	14	1305c
		3867	0·815	70·5	74·4	+12·5	0	37	
		3867	0·842	69·5	71·9	+14·1	17	73	
			0·905	32·0	82·2	+46·3			100
			0·900	116·9	62·6	−26·5			170
			0·936	101·4	56·3	−12·6			240
Jan. 20		Centre			(126·1)	(−5·3)	(145)	(841)	(2622)
20·225	AW, AR		0·961	291·2	186·1	+18·7			183
			0·929	253·6	183·9	−17·2			329
M.		3870	0·480	271·2	143·8	− 4·1	0	4	
		3870	0·431	270·5	140·7	− 4·6	1	3	
		3870	0·418	268·5	139·9	− 5·5	0	2	
		3861	0·528	223·8	139·4	−27·2	1	7	
		3861	0·495	215·9	134·4	−28·6	0	2	
		3865b	0·363	39·8	101·6	+11·0	3	8	
		3865	0·415	47·7	97·1	+11·1	0	2	
		3866	0·457	54·4	93·1	+10·5	0	1	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895. 20d·225	AW, AR	3866	0·525	59·5	87·9	+10·7	1	2	
		3867b	0·612	60·5	82·2	+13·1	45	216	
M.		3867c	0·624	63·8	80·5	+11·6	30	127	
		3867	0·648	60·4	79·8	+14·3	5	42	
		3867	0·641	62·5	79·7	+12·9	0	4	
		3867	0·637	66·0	79·0	+10·7	3	24	
		3867	0·649	66·1	78·2	+11·0	1	16	
		3867	0·685	64·2	76·1	+13·2	3	11	
		3867	0·679	66·7	75·8	+11·5	0	1	
		3867	0·693	65·7	75·1	+12·5	0	6	
		3867	0·691	66·7	74·9	+11·8	0	1	
		3867	0·713	64·0	74·0	+14·2	0	6	
		3867	0·725	65·0	72·8	+13·9	6	19	
		3872	0·903	99·5	50·4	−10·9	0	12	
		3872a	0·909	98·1	49·6	− 9·6	22	54	
		3872	0·917	100·2	48·4	−11·4	0	28	439c
		3872	0·933	100·2	45·9	−11·4	0	8	
		3872b	0·943	99·7	44·3	−10·9	21	141	
			0·906	48·0	60·8	+34·3			66
			0·853	69·1	59·9	+14·7			343
			0·869	119·3	56·3	−28·0			82
			0·956	77·8	43·8	+10·0			172
Jan. 21		Centre			(115·2)	(−5·3)	(142)	(747)	(1614)
21·248	AW, FT		0·965	240·6	177·0	−29·8			77
			0·909	254·7	167·3	−16·2			549
M.			0·924	304·1	162·2	+28·6			93
		3865b	0·282	357·7	102·4	+10·9	1	4	
		3865	0·305	0·7	101·5	+12·3	0	2	
		3865	0·278	3·9	100·6	+10·7	0	6	
		3865	0·301	6·5	99·7	+11·9	1	10	
		3865	0·280	7·9	99·5	+10·7	1	2	
		3865	0·265	8·3	99·5	+ 9·8	0	2	
		3865	0·293	13·6	97·7	+11·1	6	10	
		3865	0·282	14·3	97·7	+10·4	0	2	
		3866	0·344	34·1	90·4	+11·2	0	1	
		3866	0·358	40·2	88·2	+10·6	0	3	
		3867	0·476	43·5	82·0	+15·0	0	1	
		3867b	0·456	46·9	81·8	+13·0	51	241	
		3867	0·486	43·5	81·5	+15·6	0	2	
		3867	0·486	46·9	80·3	+14·3	0	1	
		3867	0·476	49·9	79·9	+12·8	0	6	
		3867c	0·461	51·8	80·1	+11·5	25	150	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.

The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3872, January 21–February 1. A number of spots in a fine stream. At first it consists of two large spots, *a* and *b*, with a number of small faint spots between them. These intermediate spots increase after January 25, and three large irregular spots, *c*, *d* and *e*, have formed by January 27. These five principal spots, by fresh divisions and combinations, continue to change until the west limb is reached.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
21d·248	AW,FT	3867	0·492	48·7	79·4	+13·9	0	5	
		3867	0·456	55·8	79·3	+ 9·8	0	7	
M.		3867	0·506	48·1	78·9	+14·7	0	2	
		3867	0·468	55·5	78·7	+10·4	1	9	
		3867	0·461	57·0	78·7	+ 9·5	0	1	
		3867	0·483	54·4	78·2	+11·3	4	20	
		3867	0·523	53·7	76·2	+13·1	0	5	
		3867	0·531	55·6	75·1	+12·6	0	3	
		3867	0·559	54·3	73·9	+14·3	0	1	
		3867	0·565	55·9	73·0	+13·7	0	1	
		3867	0·579	53·7	72·9	+15·3	0	1	
		3867	0·580	56·6	71·9	+13·9	0	1	
		3867	0·594	54·1	71·8	+15·7	0	7	
		3867	0·599	59·3	69·9	+13·1	1	4	
		3872*a*	0·767	98·5	51·5	−10·0	29	145	
		3872	0·781	99·1	50·2	−10·5	1	7	
		3872	0·789	100·6	49·5	−11·7	2	8	
		3872	0·795	99·2	48·9	−10·6	0	5	
		3872	0·808	100·1	47·7	−11·4	0	10	443*c*
		3872	0·815	101·5	47·0	−12·5	0	4	
		3872	0·826	98·7	45·9	−10·2	2	19	
		3872*b*	0·844	99·4	43·9	−10·9	50	244	
			0·760	64·9	56·4	+15·0			228
			0·912	75·8	37·8	+10·6			336
			0·973	115·0	24·3	−25·5			164
			0·977	95·9	23·7	− 6·9			118
Jan. 22		Centre			(101·7)	(−5·4)	(175)	(952)	(2008)
22·489	AW,FT		0·897	252·1	149·2	−18·5			475
			0·834	267·8	141·8	− 4·9			138
			0·830	298·4	136·0	+19·8			97
			0·758	262·7	134·7	− 9·2			105
		3861	0·793	238·6	135·2	−28·0	3	13	227*c*
		3865	0·376	314·1	101·1	+ 9·8	0	4	
		3865	0·378	316·8	100·5	+10·6	0	13	
		3865	0·391	321·4	99·7	+12·4	2	13	
		3865	0·358	318·6	99·2	+10·2	0	2	
		3865	0·366	324·3	97·9	+11·9	8	23	
		3867*b*	0·330	11·6	81·4	+13·3	39	226	
		3867*c*	0·310	18·6	79·5	+11·6	29	152	
		3867	0·376	15·3	79·4	+15·7	0	5	
		3867	0·363	16·5	79·2	+14·9	0	4	
		3867	0·334	18·6	79·1	+13·0	1	6	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
22d·489	AW,FT	3867	0·326	21·9	78·2	+12·1	3	24	
		3867	0·319	25·1	77·4	+11·3	0	3	
		3867	0·362	26·5	75·8	+13·4	0	5	
		3873	0·438	26·3	73·6	+17·7	0	6	
		3873	0·428	32·4	71·6	+15·7	2	14	
		3872	0·501	96·1	55·3	− 7·8	0	5	
		3872	0·512	97·4	54·5	− 8·5	0	6	
		3872*a*	0·531	98·7	53·3	− 9·3	30	146	
		3872	0·552	100·2	51·9	−10·2	0	15	
		3872	0·562	99·4	51·2	− 9·8	0	2	
		3872	0·564	101·3	51·2	−10·9	0	9	
		3872	0·570	100·0	50·7	−10·2	0	7	
		3872	0·576	101·4	50·3	−11·1	0	4	
		3872	0·578	99·1	50·1	− 9·8	0	8	
		3872	0·586	101·8	49·6	−11·4	4	30	
		3872	0·601	101·3	48·5	−11·2	0	4	
		3872	0·602	98·6	48·3	− 9·6	0	11	
		3872	0·635	101·7	46·0	−11·7	0	5	
		3872	0·641	105·1	45·9	−13·9	0	6	
		3872	0·637	99·1	45·8	−10·0	0	8	
		3872	0·663	103·4	44·0	−13·0	0	9	
		3872	0·668	102·2	43·5	−12·3	0	4	
		3872*b*	0·672	100·0	43·1	−10·8	62	257	
		3874*a*	0·934	101·5	15·8	−12·7	2	19	127*c*
		3874*b*	0·949	102·0	13·2	−13·1	4	19	
			0·930	69·2	20·1	+17·0			272
			0·906	94·9	20·1	− 6·8			191
			0·913	116·2	19·7	−26·1			216
Jan. 23		Centre			(85·3)	(−5·5)	(189)	(1087)	(1848)
23·599	CL,AR		0·948	266·4	142·3	− 5·2			84
			0·931	252·7	139·7	−18·1			154
			0·885	260·8	133·3	−10·8			68
			0·847	235·5	125·8	−31·9			69
		3861	0·920	244·4	137·5	−25·7	0	5	230*c*
		3861	0·902	241·0	134·3	−28·5	0	7	
		3865	0·556	299·6	100·1	+11·0	2	10	
		3865	0·544	303·1	98·4	+12·3	1	4	
		3865	0·538	301·8	98·4	+11·5	0	2	
		3867*b*	0·369	330·0	81·6	+13·1	~~34~~ 3	~~194~~ 218	
		3867	0·354	332·5	80·3	+12·7	3	11	
		3867*c*	0·336	332·5	79·8	+11·7	28	149	
		3867	0·353	336·5	79·0	+13·3	0	2	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3873, January 23. Two small faint spots *nf* Group 3867.
Group 3874, January 23–February 2. A pair of small spots, *a* and *b*, until January 26. Both spots have broken up by this date and the group has increased in size. It has become an irregular stream by January 27, of which *c*, the largest spot, is the leader. *c* appears to represent part of *a*, and *d* part of *b*. The group diminishes after passing the central meridian on January 28.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
23d·599	CL, AB	3867	0·405	341·6	78·3	+17·0	0	2	
		3872	0·287	114·8	55·3	−12·3	0	5	
		3872*a*	0·272	103·6	55·2	− 9·1	15	94	
		3872	0·293	103·8	54·0	− 9·3	1	7	
		3872	0·313	106·0	53·0	−10·3	0	10	
		3872	0·346	106·7	51·1	−11·0	0	18	
		3872	0·390	108·7	48·6	−12·4	0	6	
		3872	0·434	104·0	45·4	−11·1	0	15	
		3872	0·446	101·9	44·5	−10·3	0	9	
		3872*b*	0·475	103·1	42·7	−11·1	39	291	
		3874*a*	0·799	100·9	17·6	−12·1	7	26	} 64*c*
		3874*b*	0·833	101·5	14·1	−12·7	4	15	
		3875	0·980	105·0	351·4	−15·8	4	39	372*c*
			0·783	91·9	19·1	− 5·0			63
			0·958	95·4	357·1	− 6·8			85
Jan. 24		Centre			(70·7)	(−5·6)	(143)	(945)	(1189)
24·198	AW, FT		0·965	251·6	138·4	−19·2			220
			0·930	241·1	131·0	−28·9			775
I.			0·925	260·6	130·9	−10·9			229
			0·910	293·2	124·3	+18·3			140
		3865	0·663	293·2	101·0	+10·6	2	10	} 157*c*
		3865	0·649	296·5	99·1	+12·2	0	6	
		3867*b*	0·452	314·5	82·0	+13·0	49	228	
		3867	0·427	312·1	81·6	+11·2	0	5	
		3867*c*	0·413	315·4	79·9	+11·6	46	203	
		3872*a*	0·126	116·3	56·3	− 8·8	18	92	
		3872	0·163	119·3	54·5	−10·2	0	3	
		3872	0·173	117·2	53·8	−10·2	0	3	
		3872	0·169	111·5	53·7	− 9·2	0	2	
		3872	0·208	115·4	51·8	−10·4	0	9	
		3872	0·216	118·0	51·6	−11·4	0	2	
		3872	0·204	107·2	51·5	− 8·8	0	2	
		3872	0·226	114·3	50·7	−10·9	1	7	
		3872	0·291	115·0	47·2	−12·6	3	10	
		3872	0·319	108·2	44·9	−11·1	1	5	
		3872	0·324	104·9	44·3	−10·2	2	8	
		3872	0·356	112·5	43·1	−13·2	0	18	
		3872	0·366	114·1	42·8	−13·9	0	2	
		3872*b*	0·352	105·7	42·7	−10·8	54	224	
		3872	0·381	110·9	41·5	−13·1	0	3	
		3874*a*	0·699	101·2	18·5	−11·9	6	22	} 195*c*
		3874*b*	0·756	101·1	13·7	−12·1	4	26	
1895.				°	°	°			
24d·198	AW, FT	3875	0·947	104·8	351·0	−15·8	8	69	} 440*c*
		3875	0·982	105·1	342·9	−15·9	0	105	
I.			0·793	68·8	13·6	+13·0			131
			0·952	68·9	353·9	+18·1			155
			0·953	95·3	350·2	− 6·8			261
			0·705	57·2	343·0	+18·0			120
Jan. 25		Centre			(62·8)	(−5·7)	(194)	(1064)	(2823)
25·298	AW, FT		0·965	237·9	123·6	−32·4			400
			0·835	288·7	102·2	+12·2			483
I.			0·822	297·7	98·5	+18·8			112
		3867*b*	0·624	298·4	82·5	+12·5	42	221	
		3867	0·597	299·7	80·3	+12·3	3	14	
		3867*c*	0·588	297·8	80·3	+11·1	36	146	
		3867	0·594	301·1	79·7	+12·9	0	4	
		3872*a*	0·170	252·2	57·8	− 8·6	16	82	
		3872	0·159	240·8	56·5	−10·1	3	36	
		3872	0·119	229·4	53·6	−10·2	3	10	
		3872	0·109	221·4	52·6	−10·4	5	25	
		3872	0·095	230·5	52·6	− 9·2	0	2	
		3872	0·088	208·2	50·8	−10·2	0	4	
		3872	0·101	202·0	50·6	−11·1	0	4	
		3872	0·091	182·7	48·7	−10·9	7	17	
		3872	0·111	171·8	47·5	−12·0	0	4	
		3872	0·106	163·3	46·6	−11·6	0	5	
		3872	0·116	136·1	43·7	−10·5	3	39	
		3872	0·105	129·4	43·7	− 9·5	0	2	
		3872	0·156	144·0	43·0	−12·9	0	3	
		3872*b*	0·141	135·9	42·7	−11·4	32	148	
		3876	0·491	15·9	40·1	+22·4	0	10	
		3877	0·468	41·3	29·8	+15·1	3	16	
		3877	0·471	45·5	28·3	+13·8	0	5	
		3877	0·514	44·0	26·7	+16·3	0	8	
		3874	0·482	104·5	20·0	−12·0	5	17	
		3874	0·508	103·6	18·2	−11·8	7	36	
		3874	0·525	103·2	17·1	−11·8	0	4	
		3874	0·538	105·8	16·4	−13·3	0	3	
		3874	0·565	105·1	14·5	−13·2	3	11	
		3874	0·579	106·2	13·6	−14·0	0	7	
		3874	0·580	103·7	13·3	−12·6	6	35	
		3878	0·815	93·4	353·7	− 6·7	0	4	} 175*c*
		3878	0·855	94·2	349·5	− 6·6	0	10	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3875, January 24–February 5. A faint spot on January 24. Three spots, of which the first two are measured together, on January 25. The group has greatly increased by January 26 and consists of a large irregular spot, *a*, followed by a number of smaller spots irregularly arranged. Of these the two last, *b* and *c*, are the largest. The group diminishes after January 28, *a* becoming regular, and the smaller spots disappearing, so that after February 1 only *a* and one small companion, *d*, remain, and *d* has disappeared by February 4. *a* has divided into two parts but is still measured as one on February 4.
Group 3876, January 26. A small faint spot.
Group 3877, January 26–27. Three small faint spots on January 26. A different three on January 27.
Group 3878, January 26–27. Two small faint spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
25d·298	AW, FT	3875*a*	0·834	106·3	351·9	−16·7	31	169	
		3875	0·852	104·4	349·8	−15·2	2	16	
I.		3875	0·876	105·3	347·0	−16·2	0	6	
		3875	0·881	106·8	346·5	−17·4	0	6	589*c*
		3875*b*	0·891	107·7	345·3	−18·3	23	68	
		3875*c*	0·900	105·4	343·9	−16·3	11	69	
			0·885	67·2	350·0	+17·1			285
			0·994	77·3	326·4	+11·9			234
Jan. 26		Centre			(48·4)	(−5·7)	(241)	(1266)	(2278)
26·534	CL, M		0·947	258·9	104·0	−12·4			123
			0·950	284·5	102·0	+11·8			337
			0·892	292·5	91·5	+17·1			207
			0·876	302·9	86·3	+25·0			95
		3867*b*	0·805	290·4	82·7	+12·6	51	211	
		3867	0·787	288·5	81·4	+10·7	3	12	
		3867*c*	0·774	289·7	80·0	+11·3	40	140	536*c*
		3867	0·778	291·9	79·8	+13·0	2	6	
		3872*a*	0·440	262·8	58·3	− 8·4	21	101	
		3872	0·428	259·0	57·3	− 9·9	2	6	
		3872	0·398	261·0	55·5	− 8·9	0	6	
		3872*c*	0·358	257·8	52·9	− 9·8	26	142	
		3872	0·330	257·9	51·2	− 9·5	1	4	
		3872	0·317	251·8	50·0	−11·2	0	25	
		3872*d*	0·288	251·2	48·2	−10·9	23	121	
		3872	0·288	247·2	47·9	−12·0	0	9	
		3872	0·262	247·0	46·4	−11·6	2	13	
		3872	0·222	250·7	44·4	− 9·9	3	8	
		3872	0·212	255·2	44·1	− 8·8	0	1	
		3872	0·236	235·0	43·6	−13·4	4	13	
		3872	0·207	249·7	43·5	− 9·8	0	2	
		3872*b*	0·201	242·7	42·6	−11·0	29	135	
		3872	0·216	234·7	42·6	−12·9	1	3	
		3872	0·223	231·1	42·4	−13·8	2	11	
		3872	0·192	225·4	40·2	−13·5	0	2	
		3877	0·325	1·3	31·8	+13·1	0	4	
		3877	0·352	2·7	31·2	+14·7	0	2	
		3877	0·334	5·4	30·4	+13·6	0	2	
		3874*c*	0·220	119·3	20·9	−11·9	10	45	
		3874	0·228	113·9	20·0	−10·9	0	1	
		3874	0·246	120·2	19·7	−12·8	1	4	
		3874	0·245	116·0	19·3	−11·8	5	13	
		3874	0·250	112·1	18·6	−11·0	0	2	
1895.				°	°	°			
26d·534	CL, M	3874	0·276	118·4	17·8	−13·1	1	6	
		3874	0·297	116·4	16·4	−13·2	1	4	
		3874*d*	0·310	112·6	15·2	−12·4	4	11	
		3874	0·330	115·0	14·4	−13·6	1	6	
		3874	0·332	112·5	13·9	−12·8	1	7	
		3874	0·350	114·2	13·1	−13·7	1	2	
		3879	0·399	85·9	8·8	− 3·7	1	5	
		3879	0·423	85·2	7·3	− 3·3	0	5	
		3879	0·437	86·2	6·4	− 3·6	0	2	
		3879	0·463	86·5	4·7	− 3·6	0	4	
		3878	0·617	93·5	354·0	− 6·7	0	4	
		3878	0·672	93·3	349·9	− 6·5	0	3	
		3875*a*	0·656	109·8	352·1	−17·2	32	217	
		3875	0·675	110·2	350·7	−17·8	1	5	
		3875	0·700	110·8	348·7	−18·6	6	35	
		3875	0·710	110·3	347·8	−18·4	1	6	479*c*
		3875*b*	0·747	110·0	344·6	−18·7	15	54	
		3875*c*	0·750	107·1	344·0	−16·6	5	27	
		3880	0·873	107·7	331·3	−18·3	2	9	908
			0·950	75·8	322·4	+11·6			463
			0·960	105·6	317·7	−16·6			111
Jan. 27		Centre			(32·2)	(−5·8)	(298)	(1456)	(2441)
27·350	AR, FT		0·952	289·2	90·6	+16·2			430
			0·943	299·5	86·3	+25·2			246
I.			0·847	273·8	78·9	+ 0·1			160
			0·822	293·4	72·7	+15·4			496
			0·849	322·0	62·5	+37·5			191
			0·709	296·7	62·0	+14·1			181
		3867*b*	0·900	286·7	83·1	+12·3	49	216	
		3867*c*	0·879	285·7	80·7	+10·8	38	171	352*c*
		3881	0·797	284·8	72·3	+ 8·1	0	7	
		3881	0·770	284·6	69·9	+ 7·3	0	8	
		3872*a*	0·611	263·0	59·1	− 8·9	16	119	
		3872	0·592	262·0	57·7	− 9·5	2	18	
		3872*c*	0·539	260·9	54·0	− 9·9	45	264	
		3872*e*	0·510	258·1	51·8	−11·1	15	42	
		3872	0·491	257·3	50·5	−11·4	0	24	
		3872*d*	0·449	256·8	47·7	−11·2	23	100	
		3872	0·428	255·2	46·3	−11·6	0	12	
		3872	0·409	251·8	44·8	−12·8	4	21	
		3872	0·395	250·7	43·8	−13·0	0	5	
		3872	0·387	248·4	43·0	−13·6	0	27	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3879, January 27. A few very small faint spots irregularly arranged.
Group 3880, January 27–February 3. A number of spots, mostly small, in a compact cluster. By January 30 they have nearly coalesced to form a single large spot, an equilateral triangle in shape, but the condensation is not completed, and the group has broken up by the succeeding day and rapidly diminishes.
Group 3881, January 28–29. A pair of small faint spots following Group 3867.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895. 27d·350	AB,FT	3872b	0·371	254·1	42·6	−11·4	28	108	
		3872	0·344	246·9	40·3	−13·4	0	1	
I.		3874c	0·109	183·3	21·8	−12·1	13	46	
		3874	0·091	171·8	20·6	−11·0	0	4	
		3874	0·127	171·3	20·3	−13·1	0	10	
		3874	0·109	168·3	20·1	−12·6	0	15	
		3874	0·107	157·3	19·0	−11·6	0	10	
		3874	0·128	159·9	18·8	−12·8	1	7	
		3874	0·130	152·2	17·9	−12·5	0	17	
		3874	0·151	147·0	16·6	−13·1	0	2	
		3874d	0·160	136·9	15·0	−12·6	5	35	
		3874	0·178	134·7	14·0	−13·0	0	3	
		3875a	0·512	114·9	352·4	−17·6	35	231	
		3875	0·551	114·7	349·7	−18·3	10	86	
		3875	0·587	113·4	347·0	−18·3	0	5	257c
		3875	0·618	109·5	344·1	−16·6	0	8	
		3875b	0·627	113·7	344·1	−19·3	10	47	
		3880	0·758	108·0	332·5	−17·4	1	15	
		3880	0·763	110·4	332·3	−19·3	2	9	149c
		3880	0·773	108·9	331·2	−18·3	0	20	
		3882a	0·849	71·2	326·2	+12·5	0	6	362c
		3883a	0·981	108·4	301·4	−19·2	0	97	380c
		3884a	0·987	75·2	302·6	+13·6	0	129	881p
		3884b	0·993	76·1	300·1	+13·0	0	39	
			0·894	106·0	317·7	−16·9			401
Jan. 28		Centre			(21·4)	(−5·9)	(297)	(1984)	(4486)
28·313	AW,FT		0·877	250·5	70·1	−20·0			348
			0·916	310·5	65·0	+33·3			179
I.		3867b	0·973	284·3	83·3	+12·4	61	229	842n
		3867c	0·962	283·1	81·0	+10·8	37	171	
		3881	0·914	279·8	73·5	+ 6·4	0	16	285c
		3881	0·887	282·0	69·6	+ 7·7	0	17	
		3872a	0·773	263·3	59·5	− 9·0	19	108	
		3872	0·745	261·7	57·0	−10·2	10	67	
		3872	0·738	265·2	56·4	− 7·6	0	2	
		3872	0·732	260·1	55·8	−11·3	2	16	
		3872c	0·718	262·1	54·7	− 9·9	28	141	
		3872	0·718	259·9	54·7	−11·4	0	12	
		3872	0·704	262·8	53·6	− 9·3	5	38	
		3872	0·695	261·7	52·8	−10·0	1	12	
		3872e	0·686	260·3	52·1	−11·0	37	194	629c
		3872d	0·626	259·8	47·4	−11·1	21	132	
1895. 28d·313	AW,FT	3872	0·625	257·6	47·2	−12·4	0	10	
		3872	0·601	259·4	45·6	−11·2	0	3	
I.		3872	0·602	257·9	45·5	−12·1	5	17	
		3872	0·584	257·5	44·1	−12·1	0	1	
		3872	0·576	254·8	43·4	−13·7	0	7	
		3872	0·571	257·9	43·3	−11·9	0	7	
		3872b	0·559	259·0	42·6	−11·1	19	65	
		3885	0·507	314·7	30·4	+14·1	0	5	
		3874c	0·264	245·6	22·9	−12·1	17	53	
		3874	0·249	244·3	21·9	−12·0	1	7	
		3874	0·247	238·8	21·2	−13·2	0	6	
		3874	0·233	245·0	21·1	−11·6	3	13	
		3874	0·201	243·0	19·2	−11·1	2	7	
		3874d	0·157	223·8	15·1	−12·4	3	16	
		3874	0·170	209·7	13·7	−14·4	0	5	
		3874	0·157	205·5	12·7	−14·1	0	3	
		3874	0·147	207·1	12·6	−13·5	0	3	
		3875a	0·334	128·1	352·8	−17·7	55	254	
		3875	0·370	126·1	350·4	−18·3	7	39	
		3875	0·444	123·4	345·6	−19·7	0	15	
		3875b	0·467	120·7	343·6	−19·2	3	24	
		3880	0·596	111·1	333·2	−17·3	10	38	
		3880	0·606	112·4	332·7	−18·2	0	10	
		3880	0·612	113·4	332·4	−18·9	1	7	102c
		3880	0·627	114·3	331·5	−19·8	0	18	
		3880	0·631	111·9	330·8	−18·3	7	37	
		3886	0·690	56·5	331·7	+17·5	2	9	
		3882a	0·716	66·5	326·7	+12·1	2	8	135c
		3887	0·777	63·0	322·6	+16·5	0	7	
		3887	0·804	62·0	320·5	+18·2	0	9	
		3883a	0·923	107·9	300·8	−18·9	17	55	602s
		3884a	0·933	72·2	302·5	+14·2	78	244	
		3884b	0·946	73·8	300·0	+13·2	3	59	896c
		3884c	0·971	73·4	294·9	+14·6	0	138	
			0·793	103·9	316·2	−14·7			113
			0·826	72·6	315·5	+11·0			439
Jan. 29		Centre			(8·7)	(−6·0)	(456)	(2354)	(4570)
29·429	CL,FT		0·958	285·6	65·0	+13·0			322
			0·834	291·1	47·0	+13·8			89
		3872	0·930	265·2	62·6	− 6·7	5	15	
		3872a	0·916	262·6	60·6	− 9·2	12	77	
		3872	0·901	262·1	57·6	− 9·8	0	20	

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3882, January 28–February 5. A small spot, *a*, preceding Group 3884. A very small companion is seen near *a* on January 30. The group is not seen on February 4, but a pair of small faint spots are seen near its place on February 5.

Group 3883, January 28–February 5. A regular spot, *a*, which slowly and steadily diminishes day by day. Some small spots have formed near it by January 31. These increase in number and area up to February 2. They diminish on the succeeding days, and *a* alone remains by February 5.

Group 3884, January 28–February 9. A large regular spot, *a*, followed by two smaller spots, *b* and *c*. Other spots have appeared by January 30, the entire group now forming an irregular stream. of which *a* and *c*. the first and last spots, are the largest. The spots other than *a* diminish rapidly after February 4, and only *a* and *c* remain by February 7. whilst *c* has disappeared by February 9.

Group 3885, January 29. A very small spot.

Group 3886, January 29. A small spot.

Group 3887. January 29–30. A pair of small faint spots on January 29. A single small spot on January 30.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
29d·429	CL,FT	3872*c*	0·882	262·2	56·2	− 9·8	19	175	636*c*
		3872*e*	0·864	261·3	54·0	−10·6	7	162	
		3872	0·863	263·7	53·8	− 8·5	0	45	
		3872*f*	0·840	260·9	51·3	−11·0	36	182	
		3872*d*	0·796	261·2	46·9	−10·7	25	234	
		3872*b*	0·744	260·3	42·1	−11·3	0	29	
		3874*c*	0·502	255·5	23·6	−12·6	13	48	
		3874	0·484	256·0	22·5	−12·1	0	10	
		3874	0·485	253·7	22·3	−13·2	0	3	
		3874	0·463	257·5	21·2	−11·1	0	15	
		3874	0·362	245·8	13·7	−14·2	3	15	
		3874	0·337	243·5	12·0	−14·4	0	4	
		3875*a*	0·206	178·1	353·5	−18·0	45	225	
		3875*d*	0·220	168·0	351·1	−18·5	4	15	
		3875	0·219	165·8	350·7	−18·3	0	2	
		3875	0·176	157·2	349·9	−15·4	0	1	
		3875	0·285	151·1	345·5	−20·4	0	22	
		3875	0·276	148·6	345·2	−19·6	0	21	
		3875*b*	0·290	146·5	344·1	−20·0	0	5	
		3880	0·385	122·2	334·0	−17·5	7	48	
		3880	0·405	124·0	333·2	−18·7	0	8	
		3880	0·404	120·7	332·6	−17·5	3	16	
		3880	0·420	122·8	332·1	−18·8	28	140	
		3882*a*	0·516	53·5	328·9	+12·3	6	18	
		3882	0·518	54·7	328·4	+11·9	0	6	
		3887	0·636	56·3	320·7	+15·6	1	6	
		3883*a*	0·798	109·3	301·3	−19·0	8	50	80*f*
		3884*a*	0·810	67·5	303·6	+14·1	67	251	
		3884	0·830	68·4	301·4	+14·1	0	7	
		3884	0·838	66·4	301·1	+16·0	0	15	
		3884*b*	0·833	69·8	300·7	+13·1	9	45	478*c*
		3884	0·840	68·6	300·3	+14·3	0	9	
		3884	0·871	68·8	296·9	+15·1	0	8	
		3884*c*	0·875	70·7	295·9	+13·6	10	188	
			0·813	118·9	301·2	−26·9			269
Jan. 30		Centre			(353·9)	(−6·1)	(308)	(2140)	(1874)
30·532	AW,FT		0·905	254·0	44·8	−17·1			98
			0·913	282·8	43·7	+ 9·1			96
			0·879	299·1	35·2	+21·9			62
			0·803	296·7	27·9	+17·1			82
		3872*a*	0·990	262·4	61·9	− 8·4	0	183	
1895.				°	°	°			
30d·532	AW,FT	3872*c*	0·977	261·4	57·8	− 9·7	0	48	867*c*
		3872*e*	0·970	262·3	56·0	− 9·0	26	120	
		3872*e*	0·959	260·0	53·2	−10·7	10	110	
		3872*f*	0·951	261·3	52·0	−10·2	35	211	
		3872	0·938	257·1	49·8	−14·2	0	10	
		3872	0·924	260·2	47·5	−11·4	0	6	
		3872*d*	0·916	261·0	46·3	−10·7	27	232	
		3874*c*	0·703	258·6	24·2	−12·4	5	39	
		3874	0·682	259·6	22·5	−11·6	0	6	
		3874	0·579	254·8	14·4	−13·7	2	6	
		3888	0·569	274·8	13·9	− 2·4	1	7	
		3888	0·565	276·0	13·6	− 1·7	0	4	
		3888	0·559	274·1	12·3	− 2·8	0	7	
		3888	0·532	274·9	11·4	− 2·7	0	10	
		3875*a*	0·320	229·2	354·2	−18·0	46	222	
		3875*d*	0·296	224·7	352·1	−18·1	3	8	
		3875	0·280	220·5	350·5	−18·3	0	4	
		3875	0·271	219·7	349·9	−18·0	0	5	
		3875	0·272	215·6	349·1	−18·7	0	4	
		3875	0·287	210·7	348·4	−20·3	0	3	
		3875	0·278	203·2	346·2	−20·8	0	10	
		3875	0·274	201·5	345·6	−20·7	3	9	
		3875	0·257	202·0	345·3	−19·8	0	13	
		3875	0·236	199·7	344·3	−18·9	0	4	
		3875*b*	0·257	197·9	344·3	−20·2	0	3	
		3889	0·092	237·8	344·0	− 8·9	0	4	
		3880	0·239	158·8	334·3	−19·0	0	13	
		3880	0·221	155·6	334·0	−17·7	13	54	
		3880	0·255	155·8	333·2	−19·5	5	21	
		3880	0·270	152·4	331·9	−19·8	0	2	
		3880	0·235	146·1	331·7	−17·2	0	5	
		3880	0·255	148·1	331·4	−18·5	0	8	
		3882*a*	0·355	25·6	330·5	+12·6	5	12	
		3883	0·599	113·1	304·1	−18·6	0	10	
		3883	0·618	111·0	302·4	−17·7	1	4	
		3883*a*	0·638	112·7	301·2	−19·0	5	37	
		3884*a*	0·645	59·6	304·7	+14·0	62	274	
		3884	0·667	359·3	303·2	+15·0	0	4	
		3884	0·666	60·8	302·8	+14·1	0	4	
		3884	0·681	60·7	301·8	+14·6	5	10	
		3884*b*	0·680	63·2	301·1	+13·0	6	52	
		3884	0·692	61·7	300·7	+14·4	0	5	
		3884	0·696	64·5	299·6	+12·7	0	8	
		3884	0·723	65·6	297·2	+12·8	0	6	

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Group 3888, January 31–February 3. A few spots, mostly very small, in two clusters on January 31. The group increases on the succeeding days, and the preceding spots have united to form a large regular spot, *a*, by February 2.
Group 3889, January 31. A very small spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
30d·532	AW,FT	3884c	0·742	65·7	295·6	+13·4	28	162	
		3884	0·754	64·3	295·0	+14·7	0	3	
Jan. 31		Centre			(339·5)	(−6·1)	(288)	(1982)	(1205)
31·223	AW,AR		0·960	283·0	42·2	+10·6			146
			0·956	297·1	38·4	+23·6			192
M.			0·871	293·2	26·9	+16·7			246
		3872e	0·986	259·1	51·6	−11·7	0	272	
		3872f	0·984	260·9	50·8	−10·1	34	346	1238c
		3872	0·975	261·4	48·2	− 9·8	0	14	
		3872d	0·964	260·7	45·6	−10·6	27	243	
		3874c	0·806	259·4	24·3	−12·2	7	13	
		3874	0·795	259·5	23·3	−12·1	2	9	205c
		3874	0·791	260·1	22·9	−11·6	0	4	
		3874	0·755	258·4	19·5	−12·8	0	2	
		3874	0·700	256·7	14·7	−13·7	1	2	
		3888	0·704	272·6	15·0	− 2·6	1	15	
		3888	0·703	271·6	14·9	− 3·3	2	7	
		3888	0·671	274·9	12·2	− 1·3	1	4	
		3888	0·661	272·4	11·6	− 3·1	2	5	71c
		3888	0·653	273·4	11·0	− 2·5	5	17	
		3888	0·637	272·6	9·8	− 3·1	0	2	
		3875a	0·440	241·1	354·2	−18·0	45	235	
		3875d	0·412	239·0	352·1	−18·0	3	13	
		3875	0·393	236·9	350·6	−18·1	0	1	
		3875	0·356	224·0	345·7	−20·8	0	6	
		3875	0·329	222·4	344·0	−20·1	0	2	
		3880	0·217	201·9	335·2	−17·7	1	3	
		3880	0·206	199·2	334·5	−17·4	4	27	
		3880	0·227	195·2	334·0	−18·8	0	5	
		3880	0·228	191·6	333·2	−19·0	1	10	
		3880	0·204	192·9	333·1	−17·7	0	3	
		3880	0·214	184·0	331·3	−18·5	0	4	
		3882a	0·328	356·8	331·5	+12·8	2	5	
		3883	0·480	117·6	303·9	−18·4	0	1	
		3883	0·494	115·6	302·6	−17·8	3	13	
		3883	0·507	115·2	301·7	−17·9	1	5	
		3883a	0·519	117·1	301·3	−19·0	4	21	
		3883	0·518	112·6	300·5	−16·9	1	14	
		3883	0·528	112·5	299·9	−17·0	0	2	
		3884a	0·539	50·6	305·0	+14·4	62	285	
		3884	0·560	50·8	303·8	+15·1	0	5	
		3884	0·561	52·9	303·0	+14·2	4	19	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
31d·223	AW,AR	3884	0·580	53·0	301·9	+15·0	1	15	
		3884b	0·573	55·5	301·5	+13·5	6	46	
M.		3884	0·590	54·5	300·8	+14·6	1	4	132c
		3884	0·597	58·6	299·0	+12·8	8	32	
		3884	0·614	58·6	297·9	+13·4	0	6	
		3884c	0·640	60·2	295·7	+13·4	27	135	
		3884	0·662	60·7	294·1	+13·9	0	11	
		3884	0·671	59·3	293·9	+15·0	0	3	
			0·974	67·1	256·9	+20·6			113
Feb. 1		Centre			(330·4)	(−6·2)	(256)	(1886)	(2343)
32·205	AW,AR		0·946	268·1	28·6	− 3·8			244
			0·920	292·3	20·6	+17·7			446
I.			0·907	243·9	17·7	−20·5			151
		3874	0·923	259·6	25·3	−12·0	3	10	573c
		3874	0·887	258·7	20·4	−12·8	0	6	
		3888a	0·863	269·4	17·1	− 3·7	8	99	
		3888	0·858	271·0	16·4	− 2·4	0	7	
		3888	0·850	269·6	15·7	− 3·6	0	11	
		3888	0·834	272·4	13·7	− 1·5	0	6	432c
		3888	0·806	269·4	11·2	− 4·1	3	30	
		3888	0·805	272·5	10·9	− 1·7	0	36	
		3888	0·798	271·1	10·3	− 2·9	8	53	
		3875a	0·617	248·6	354·5	−18·0	55	246	122c
		3875d	0·595	247·9	352·8	−18·0	2	9	
		3880	0·352	235·9	335·2	−17·2	4	16	
		3880	0·351	232·6	334·5	−18·2	0	13	
		3880	0·364	223·7	333·1	−21·2	0	10	
		3880	0·337	225·9	332·3	−19·5	0	3	
		3880	0·317	227·5	331·7	−18·3	0	3	
		3882a	0·413	320·5	333·0	+12·6	2	8	
		3883	0·315	129·3	302·8	−17·5	5	32	
		3883	0·338	129·6	301·6	−18·4	0	3	
		3883a	0·352	130·1	301·0	−19·0	7	26	
		3883	0·344	122·1	299·9	−16·5	1	14	
		3883	0·367	125·2	299·2	−18·1	0	5	
		3883	0·384	127·2	298·7	−19·3	0	3	
		3883	0·380	122·9	298·0	−17·7	0	3	
		3884a	0·412	29·8	305·3	+14·9	64	264	
		3884	0·425	34·0	303·3	+14·6	2	20	
		3884	0·451	35·1	301·9	+15·6	0	5	
		3884b	0·433	37·7	301·7	+14·0	8	39	
		3884	0·461	37·6	300·6	+15·4	6	27	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
32d·205	AW,AR	3884	0·480	36·5	300·2	+16·7	0	2	
I.		3884	0·463	43·2	298·5	+13·8	2	23	
		3884	0·485	41·2	298·2	+15·4	0	4	
		3884	0·483	43·5	297·5	+14·6	0	12	
		3884	0·476	45·0	297·3	+13·8	3	5	
		3884c	0·486	47·4	296·0	+13·4	27	116	
		3884	0·514	45·7	295·2	+15·3	0	4	
		3884	0·506	48·0	294·8	+14·0	0	7	
		3884	0·527	45·1	294·7	+16·0	0	9	
		3884	0·518	47·3	294·4	+14·8	1	8	
		3884	0·514	48·9	294·1	+14·0	0	7	
			0·930	63·6	254·0	+21·7			252
Feb. 2		Centre			(317·5)	(−6·2)	(211)	(1204)	(2220)
33·182	AW,FT		0·959	237·2	18·8	−33·2			428
I.			0·938	244·4	14·7	−26·1			168
			0·955	290·4	14·1	+17·4			241
			0·809	269·0	358·6	− 4·6			136
			0·779	299·1	350·1	+17·9			238
		3888a	0·962	267·8	18·8	− 3·9	27	179	
		3888	0·947	266·8	16·0	− 5·1	0	7	
		3888	0·944	268·8	15·3	− 3·1	3	13	427c
		3888	0·922	267·9	11·9	− 4·4	1	11	
		3888	0·917	269·4	11·0	− 3·1	0	27	
		3875a	0·771	251·3	354·7	−18·4	57	225	135c
		3875d	0·753	250·9	353·0	−18·4	0	10	
		3880	0·541	246·8	335·9	−17·7	0	6	
		3880	0·536	245·0	335·3	−18·5	2	14	
		3880	0·522	246·1	334·5	−17·7	0	3	
		3882a	0·571	302·4	334·0	+12·3	5	11	
		3890	0·513	318·2	325·4	+16·6	0	9	
		3883	0·191	173·5	303·3	−17·2	3	10	
		3883	0·203	170·7	302·6	−17·8	0	3	
		3883a	0·241	165·2	300·9	−19·8	4	15	
		3883	0·193	156·2	300·0	−16·5	0	4	
		3884a	0·358	357·4	305·6	+14·6	66	263	
		3884	0·359	3·7	303·2	+14·7	3	18	
		3884	0·342	5·8	302·6	+13·6	1	4	
		3884b	0·346	7·8	301·8	+13·7	6	29	
		3884	0·368	8·1	301·5	+15·0	9	53	
		3884	0·390	18·0	297·4	+15·4	0	8	
		3884	0·380	19·2	297·2	+14·7	0	18	
		3884	0·362	21·8	296·7	+13·4	0	7	
1895.				°	°	°			
33d·182	AW,FT	3884c	0·362	24·3	295·8	+13·0	28	109	
I.		3884	0·391	24·0	295·2	+14·7	0	20	
		3891	0·473	95·6	276·3	− 8·2	0	5	
		3892	0·958	74·3	233·6	+13·0	193	598	611c
		3892	0·971	78·0	230·2	+10·0	20	61	
			0·935	123·7	235·7	−33·7			59
			0·932	101·7	235·2	−13·2			161
			0·981	94·4	225·5	− 5·6			188
Feb. 3		Centre			(304·6)	(−6·3)	(428)	(1740)	(2792)
34·275	AW,M		0·946	267·7	1·1	− 4·3			236
			0·915	292·5	352·3	+17·6			381
I.		3875a	0·900	252·8	354·6	−18·3	40	243	724f
		3883	0·292	230·2	303·5	−17·0	1	4	
		3883	0·278	229·1	302·6	−16·7	0	4	
		3883	0·281	225·4	302·1	−17·6	0	5	
		3883a	0·286	217·0	300·5	−19·5	2	13	
		3884a	0·445	324·1	305·6	+14·9	66	289	
		3884	0·418	328·5	303·0	+14·6	1	4	
		3884	0·401	328·4	302·4	+13·7	0	6	
		3884	0·419	331·0	302·1	+15·2	0	6	
		3884b	0·399	330·5	301·6	+14·0	6	35	
		3884	0·406	332·8	301·0	+14·8	6	36	
		3884	0·383	338·1	298·4	+14·4	0	12	
		3884	0·444	344·8	297·0	+18·9	0	12	
		3884	0·369	341·2	297·0	+14·0	1	6	
		3884	0·383	343·3	296·5	+15·1	5	48	
		3884c	0·351	343·6	295·8	+13·3	28	108	
		3884	0·381	346·6	295·2	+15·3	0	3	
		3884	0·428	350·8	294·1	+18·5	0	1	
		3893	0·344	24·6	281·6	+11·9	1	12	
		3893	0·341	26·8	281·0	+11·3	0	6	
		3893	0·360	29·3	279·7	+12·0	0	7	
		3893a	0·365	32·4	278·6	+11·6	6	41	
		3893	0·392	37·8	275·9	+11·8	4	22	
		3893	0·415	35·6	275·7	+13·4	0	9	
		3892	0·862	70·4	233·6	+13·3	155	597	603c
		3892	0·881	74·9	230·5	+10·1	9	52	
		3894a	0·892	64·2	231·8	+19·5	0	12	114c
			0·873	104·9	228·8	−16·2			228
			0·909	93·1	224·5	− 5·5			235
Feb. 4		Centre			(290·0)	(−6·4)	(331)	(1593)	(2521)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3890, February 3. A small faint spot.
Group 3891, February 3. A very small faint spot.
Group 3892, February 3–14. A very large irregular spot on February 3 with its major axis inclined at a great angle to the equator. The northern portion of the spot is much more strongly marked than the southern, and has become a separate regular spot, *a*, by February 5. The group on this and the succeeding days is an irregular stream, of which *a* is the leader, nearly perpendicular to the equator. The minor spots of the group undergo frequent changes, and *a* remains alone by February 13.
Group 3893. February 4–10. An irregular group forming suddenly near the central meridian. At first it is an irregular stream of spots, mostly small, *a*, the leader, being the largest. By February 8 the leading spots have coalesced to form a large triangular composite spot which has become a triple spot by the succeeding day.
Group 3894. February 4–14. A small spot, *a*, on February 4; a pair of small spots on February 5. The group increases on the succeeding days, and has become a long straight stream by February 8; *a*, the leader, being at the intersection of the axis of the group with the prolongation of that of Group 3892, the two axes being inclined to each other at an angle of 40°. The spots begin to coalesce and the stream to become irregular after February 10.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895. 35d·445	AW, AR		0·906	347·5	295·3	+56·0			81
		3875a	0·981	253·4	354·8	−17·5	12	120	520f
		3882	0·871	289·7	332·2	+13·7	0	7	107c
		3882	0·831	289·8	327·8	+12·6	0	9	
		3895	0·702	242·1	317·4	−23·9	0	4	
		3895	0·690	241·6	316·3	−24·0	3	11	
		3883a	0·480	240·4	301·0	−19·5	0	8	
		3884a	0·611	304·6	306·0	+14·9	59	214	
		3884	0·600	307·3	304·4	+15·7	0	7	
		3884b	0·562	306·3	302·5	+13·7	2	17	
		3884	0·526	311·3	298·8	+14·4	0	4	
		3884	0·524	312·7	298·2	+14·9	0	3	
		3884	0·516	314·0	297·3	+15·0	0	4	
		3884c	0·492	312·7	296·5	+13·5	20	84	
		3893a	0·319	345·2	279·5	+11·5	23	86	
		3893	0·309	358·8	278·6	+11·6	0	9	
		3893	0·328	358·6	275·3	+12·7	9	24	
		3892a	0·704	62·4	234·9	+14·1	66	413	
		3892	0·714	68·1	232·6	+10·7	15	88	
		3892	0·725	66·5	232·1	+12·1	0	21	140c
		3892	0·729	67·7	231·5	+11·4	0	4	
		3892	0·722	69·7	231·5	+ 9·9	8	42	
		3894a	0·741	55·9	234·3	+19·7	3	10	77c
		3894	0·780	60·1	229·5	+18·4	2	9	
			0·766	92·6	224·7	− 6·1			85
			0·869	112·1	214·5	−22·4			119
			0·902	77·4	212·2	+ 8·4			62
Feb. 5		Centre			(274·8)	(−6·4)	(222)	(1198)	(1191)
36·533	CL, AR		0·950	252·4	333·3	−18·7			156
			0·895	288·0	321·2	+12·9			144
			0·835	253·5	317·4	−17·4			76
			0·818	242·9	314·3	−25·7			129
		3884a	0·764	295·8	305·8	+14·9	42	239	123c
		3884	0·685	300·6	298·1	+15·2	0	11	114c
		3884c	0·663	299·4	296·9	+13·7	15	46	
		3893a	0·445	312·2	280·2	+11·2	18	85	
		3893	0·436	314·9	278·9	+11·7	6	21	
		3893	0·442	321·5	277·0	+13·9	5	13	
		3893	0·433	323·1	276·1	+14·0	0	7	
		3893	0·400	320·3	275·7	+11·6	0	7	
		3893	0·405	323·0	275·0	+12·5	2	13	
1895. 36d·533	CL, AR	3892a	0·543	50·1	235·2	+14·5	67	381	159c
		3892	0·543	59·4	232·4	+10·3	20	125	
		3894a	0·586	42·7	235·8	+19·5	0	5	
		3894	0·608	44·3	233·9	+20·0	0	4	
		3894	0·622	47·4	231·7	+19·2	0	6	
		3894	0·635	50·4	229·7	+18·3	2	9	
			0·948	108·4	188·2	−19·5			146
Feb. 6		Centre			(260·6)	(−6·5)	(177)	(972)	(1047)
37·449	AW, FT		0·913	243·7	314·5	−26·6			133
			0·925	285·4	313·8	+11·6			168
			0·800	251·2	301·5	−18·9			120
			0·780	238·0	297·3	−28·8			103
		3884a	0·880	291·1	306·5	+15·0	44	244	426c
		3884c	0·799	293·0	297·6	+13·9	8	29	
		3893a	0·602	298·6	281·0	+11·1	30	139	57c
		3893	0·591	300·9	279·6	+12·0	2	8	
		3893	0·579	306·3	277·2	+14·2	0	4	
		3893	0·571	307·3	276·3	+14·4	0	2	
		3893	0·541	305·5	275·2	+12·4	0	4	
		3896	0·172	101·2	238·7	− 8·4	2	6	
		3896	0·212	96·3	236·3	− 7·8	0	2	
		3896	0·214	92·7	236·1	− 7·0	0	1	
		3896	0·221	96·7	235·8	− 8·0	0	4	
		3892a	0·416	30·9	235·8	+14·4	67	312	
		3892	0·446	32·3	234·2	+15·7	0	10	
		3892	0·385	42·1	233·4	+10·2	8	36	
		3892	0·396	41·2	233·2	+10·9	1	5	
		3892	0·408	41·1	232·7	+11·5	0	3	
		3892	0·392	43·9	232·5	+10·0	3	15	
		3892	0·406	43·0	232·2	+10·9	0	1	
		3894a	0·483	23·6	236·7	+19·7	0	5	
		3894	0·489	25·3	235·7	+19·7	5	14	
		3894	0·487	26·7	235·2	+19·2	0	5	
		3894	0·504	32·9	231·8	+18·7	6	14	
		3894	0·509	34·2	231·0	+18·6	0	4	
		3894	0·510	35·8	230·3	+18·1	2	18	
		3894	0·530	39·6	227·8	+17·8	2	12	
		3894	0·564	38·7	226·5	+20·0	0	4	
			0·917	105·6	181·3	−16·9			333
Feb. 7		Centre			(248·5)	(−6·6)	(180)	(901)	(1340)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3895, February 5. Two small faint spots.
Group 3896, February 7–8. A few very small unstable spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
38d·446	CL,FT		0·955	245·3	309·0	−25·5			107
			0·897	251·6	299·5	−19·4			195
			0·911	293·8	296·6	+18·5			203
			0·874	238·8	295·1	−30·3			197
		3884*a*	0·960	288·1	306·2	+15·3	23	231	278*c*
		3884*c*	0·909	288·9	297·6	+14·1	0	20	
		3893*a*	0·770	291·0	282·3	+11·5	9	44	109*c*
		3893	0·750	291·2	280·6	+11·1	27	110	
		3896	0·083	246·7	239·7	− 8·5	0	3	
		3896	0·063	244·6	238·6	− 8·2	0	3	
		3892*a*	0·364	357·7	236·2	+14·7	65	343	
		3892	0·292	1·2	234·9	+10·3	0	1	
		3892	0·301	4·3	234·0	+10·8	0	2	
		3892	0·289	6·0	233·6	+10·0	4	19	
		3892	0·331	7·1	232·9	+12·5	0	6	
		3892	0·283	8·4	232·9	+ 9·6	1	4	
		3892	0·306	8·2	232·8	+11·0	0	5	
		3892	0·292	8·9	232·7	+10·1	0	9	
		3894*a*	0·447	355·7	237·3	+19·8	4	11	
		3894	0·423	7·8	231·9	+18·1	9	69	
		3894	0·423	10·2	230·8	+18·0	0	8	
		3894	0·417	11·5	230·3	+17·4	0	3	
		3894	0·429	17·2	227·7	+17·5	1	7	
		3894	0·443	17·5	227·3	+18·4	3	8	
		3894	0·440	18·8	226·8	+18·0	3	11	
			0·811	101·5	180·8	−13·2			199
			0·941	105·0	164·3	−16·3			109
Feb. 8		Centre			(235·3)	(−6·6)	(149)	(917)	(1397)
39·265	AW, AR		0·952	245·7	297·7	−25·2			466
I.		3884*a*	0·996	285·9	307·1	+15·1	0	250	1715*f*
		3893	0·871	287·1	282·4	+11·3	4	71	147*c*
		3893	0·854	287·1	280·5	+10·9	10	73	
		3892*a*	0·414	330·8	236·5	+14·6	79	342	118*c*
		3892	0·413	337·4	233·9	+15·7	0	9	
		3892	0·352	334·4	233·4	+11·9	0	4	
		3892	0·381	341·4	231·7	+14·4	0	6	
		3892	0·335	342·7	230·3	+11·9	0	6	
		3892	0·394	347·3	229·6	+15·9	0	4	
		3894*a*	0·497	333·2	238·2	+19·8	1	13	
		3894	0·443	343·1	232·3	+18·3	5	49	
		3894	0·428	346·0	230·7	+17·8	0	5	
		3894	0·411	353·4	227·3	+17·4	0	4	
1895.				°	°	°			
39d·265	AW, AR	3894	0·418	355·3	226·6	+17·8	0	12	
I.		3897*a*	0·507	113·4	195·4	−17·5	3	12	
		3898*a*	0·987	98·4	142·9	− 9·3	32	271	
			0·868	69·3	167·8	+14·3			150
			0·852	102·6	165·7	−14·2			122
			0·951	111·8	151·5	−22·8			154
Feb. 9		Centre			(224·5)	(−6·7)	(134)	(1131)	(2872)
40·218	AW, M	3893	0·949	283·8	281·6	+10·9	20	127	493*n*
I.		3892	0·550	304·3	239·6	+12·1	0	3	
		3892*a*	0·537	310·2	236·9	+14·1	77	338	
		3892	0·476	306·7	234·7	+10·3	0	4	
		3892	0·458	304·0	234·5	+ 8·6	0	2	
		3894	0·536	322·1	232·2	+18·6	11	67	
		3894	0·517	321·4	231·7	+17·5	3	18	
		3894	0·477	326·3	228·0	+16·8	4	9	
		3897*a*	0·314	126·2	196·7	−17·1	1	5	
		3897	0·361	123·8	193·7	−18·0	0	6	
		3899	0·739	64·7	168·7	+13·6	0	5	80*c*
		3900	0·878	65·7	155·1	+17·6	0	13	166*c*
		3898*a*	0·927	97·6	143·5	− 9·6	37	226	352*f*
			0·938	115·6	141·6	−26·3			328
Feb. 10		Centre			(212·0)	(−6·7)	(159)	(823)	(1419)
							453		
41·481	AW, M		0·937	284·7	262·6	+11·3			169
		3892	0·746	292·9	239·8	+12·1	0	9	
		3892	0·715	293·0	237·3	+11·3	0	4	
		3892*a*	0·723	297·1	236·7	+14·2	72	317	
		3894	0·754	301·0	237·9	+17·9	0	12	
		3894	0·731	302·7	235·5	+18·1	0	7	181*c*
		3894	0·723	304·6	234·1	+19·0	0	9	
		3894	0·730	306·5	233·9	+20·5	0	6	
		3894	0·700	305·4	232·2	+18·6	7	62	
		3894	0·663	307·1	228·9	+17·9	0	9	
		3897*b*	0·190	191·8	197·6	−17·4	0	6	
		3897*c*	0·178	189·7	197·1	−16·8	6	20	
		3897	0·169	173·6	194·2	−16·3	0	3	
		3897	0·227	173·5	193·7	−19·7	0	6	
		3897	0·216	170·2	193·1	−18·9	3	9	
		3898*a*	0·776	97·0	144·1	− 9·7	35	212	241*c*
		3901*a*	0·869	107·7	134·6	−18·7	4	24	131*c*
		3901	0·873	105·0	134·1	−16·3	0	5	
			0·814	105·7	140·7	−16·6			77

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3897, February 9–14. A small spot, *a*, on February 9. A second has appeared by February 10. Other spots, small and unstable, have formed by February 11, and *a* is represented by two spots close together, *b* and *c*, of which *c* has disappeared by February 13.
Group 3898. February 9–21. A large regular spot, *a*, with one or two small companions on February 14, 16 and 17.
Group 3899, February 10. A very small faint spot.
Group 3900, February 10. A small faint spot.
Group 3901, February 11–19. A small spot, *a*, with a very small companion on February 11. The group has increased by February 12, and *a* is well defined and regular, and at the head of a short stream, almost perpendicular to the equator. *a* moves forward in longitude, bringing the axis of the group more nearly parallel to the equator.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
41d.481	AW,M		0·887	117·8	133·1	−27·7			319
			0·941	65·9	129·5	+20·0			110
Feb. 11		Centre			(195·3)	(−6·7)	(127)	(720)	(1228)
42·311	AR,FT		0·774	274·3	234·7	− 1·1			126
		3892	0·867	288·4	241·5	+12·3	2	16	
I.		3892	0·828	287·6	237·6	+10·4	0	10	950c
		3892a	0·836	292·3	237·2	+14·4	71	355	
		3894	0·822	298·4	233·9	+18·6	13	77	
		3894	0·815	296·5	233·9	+16·9	0	7	
		3894	0·805	298·3	232·4	+17·9	0	8	
		3894	0·803	299·4	231·8	+18·6	3	39	
		3894	0·787	297·0	231·2	+16·3	0	12	597c
		3894	0·790	299·6	230·6	+18·3	0	7	
		3894	0·767	298·2	229·1	+16·5	1	23	
		3894	0·771	299·9	228·8	+17·8	8	42	
		3897b	0·299	230·4	198·3	−17·5	0	6	
		3897e	0·289	230·7	197·9	−17·1	15	56	
		3897	0·262	211·9	192·8	−19·5	1	10	
		3898a	0·646	96·4	144·0	− 9·3	34	220	189f
		3901a	0·759	108·3	135·2	−18·3	10	52	
		3901	0·763	105·5	134·6	−16·2	1	6	
		3901	0·768	105·3	134·2	−16·1	0	2	123c
		3901	0·769	107·1	134·2	−17·5	0	6	
		3901	0·772	106·0	133·8	−16·7	0	8	
			0·767	120·1	136·3	−27·2			332
			0·876	64·0	128·3	+18·8			176
			0·896	119·2	121·1	−29·1			376
			0·982	76·3	107·3	+12·0			332
Feb. 12		Centre			(184·4)	(−6·8)	(159)	(962)	(3201)
43·278	M,FT		0·915	260·4	238·4	−11·5			151
			0·840	267·4	228·3	− 5·9			201
I.		3892a	0·934	288·0	237·7	+14·1	80	373	642c
		3894	0·933	293·7	236·2	+19·2	0	49	
		3894	0·928	295·2	235·0	+20·3	0	30	
		3894	0·909	294·4	232·4	+18·8	13	91	712c
		3894	0·877	292·7	228·8	+16·2	0	4	
		3894	0·875	294·5	228·0	+17·5	0	13	
		3897b	0·475	245·2	198·4	−17·5	1	11	
1895.				°	°	°			
43d.278	M,FT	3897	0·407	235·7	192·4	−19·6	0	6	
		3898a	0·458	97·5	144·3	− 9·5	32	169	
I.		3901a	0·597	112·1	136·1	−18·5	17	73	
		3901	0·613	109·1	134·5	−17·1	0	14	
			0·637	126·6	136·4	−27·9			145
			0·773	122·2	123·4	−28·9			277
			0·916	58·2	112·2	+25·5			245
			0·873	102·6	110·3	−14·3			250
			0·931	71·1	106·2	+14·8			567
Feb. 13		Centre			(171·6)	(−6·8)	(143)	(833)	(3190)
44·175	AW,AR		0·972	258·8	237·3	−12·5			89
			0·938	267·8	229·7	− 4·5			153
I.		3892a	0·988	285·9	238·7	+14·5	54	249	1416c
		3894	0·989	292·2	238·0	+20·7	0	182	
		3897b	0·637	250·5	198·8	−17·7	0	8	
		3902	0·399	355·7	161·7	+16·5	0	4	
		3898a	0·269	101·6	144·5	− 9·8	34	158	
		3898	0·291	102·0	143·2	−10·1	0	3	
		3901a	0·428	120·1	137·0	−18·7	23	65	
		3901	0·432	117·8	136·3	−18·0	0	4	
		3901	0·448	114·6	134·8	−17·0	0	5	
			0·710	127·3	119·0	−30·7			211
			0·874	66·6	103·3	+16·6			338
			0·924	52·9	101·4	+30·4			110
			0·987	81·6	80·4	+ 7·1			258
Feb. 14		Centre			(159·9)	(−6·9)	(111)	(678)	(2575)
45·194	AW,M		0·767	253·2	196·5	−17·3			178
		3902	0·461	331·5	159·7	+17·1	0	18	
I.		3898a	0·066	149·8	144·5	−10·2	32	163	
		3901a	0·257	146·8	137·9	−19·2	22	67	
		3901	0·278	137·1	134·9	−18·4	0	4	
		3903a	0·967	97·4	70·5	− 8·9	55	232	324c
		3903b	0·980	98·4	67·2	− 9·6	0	95	
			0·876	62·4	90·8	+20·1			211
			0·877	105·1	84·6	−16·5			199
			0·921	79·6	80·8	+ 6·8			598
			0·949	69·1	78·4	+17·4			275
Feb. 15		Centre			(146·4)	(−6·9)	(109)	(579)	(1785)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north. south. preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3902, February 14–16. One or two small unstable spots.
Group 3903, February 15–25. A large regular spot, *a*, closely followed by a smaller spot, *b*, and with a few other very small companions. A considerable development of small spots has taken place all round *a* by February 19 and 20, but diminishes again later. *a* lengthens out and its nucleus has become divided by February 21, and by February 22 *a* has completely separated into two spots, *c* and *d*. *b* has disappeared by February 20 and *d* by February 25. The smaller spots are very unstable.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
46d·457	AW, AR		0·888	255·5	193·1	−16·0			301
		3902	0·661	307·2	163·3	+17·8	4	24	90c
		3902	0·611	311·3	158·6	+17·7	0	7	
		3898	0·280	253·3	145·7	−11·3	0	3	
		3898a	0·252	256·0	144·2	−10·2	27	132	
		3898	0·227	249·6	142·4	−11·3	0	3	
		3901a	0·251	214·3	138·5	−18·7	12	65	
		3901	0·202	201·0	134·2	−17·7	0	4	
		3904	0·736	76·8	84·1	+ 4·8	1	22	
		3904	0·739	75·8	84·0	+ 5·6	4	11	
		3904	0·753	78·2	82·4	+ 4·2	0	4	
		3904	0·771	77·3	81·0	+ 5·2	0	3	287c
		3904	0·793	76·7	79·2	+ 6·2	0	9	
		3904	0·797	80·1	78·2	+ 3·6	0	3	
		3904	0·804	79·1	77·7	+ 4·6	6	39	
		3903	0·825	98·2	74·0	−10·6	0	4	
		3903	0·831	99·0	73·3	−11·3	0	5	
		3903a	0·844	96·7	71·9	− 9·4	47	232	847c
		3903b	0·872	97·7	68·7	−10·1	5	47	
		3903	0·907	99·0	64·2	−11·1	1	12	
			0·828	155·0	93·2	−54·2			114
			0·889	66·3	71·6	+17·4			529
Feb. 16		Centre			(129·9)	(−6·9)	(107)	(629)	(2168)
47·194	AW, FT		0·918	254·4	187·5	−17·1			1018
			0·843	238·5	176·1	−30·1			149
I.			0·742	301·4	161·5	+17·5			223
		3898a	0·424	260·6	145·1	−10·3	29	131	
		3898	0·396	258·1	143·3	−11·1	0	9	
		3898	0·395	254·4	142·9	−12·6	0	5	
		3901a	0·381	235·8	139·5	−19·0	13	60	
		3901	0·373	232·3	138·3	−19·8	0	2	
		3901	0·311	232·5	135·0	−17·7	1	5	
		3904	0·598	69·8	85·9	+ 6·1	11	34	
		3904	0·595	71·3	85·8	+ 5·2	6	16	
		3904	0·591	73·3	85·7	+ 4·0	0	3	
		3904	0·614	72·6	84·2	+ 5·0	1	7	245c
		3904	0·620	71·4	84·1	+ 5·8	0	11	
		3904	0·651	72·9	81·6	+ 5·5	0	15	
		3904	0·686	76·7	78·3	+ 3·9	0	9	
		3904	0·701	75·6	77·3	+ 5·0	4	19	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
47d·194	AW, FT	3903	0·724	98·6	73·5	−11·0	0	2	
		3903a	0·734	96·1	72·6	− 9·2	45	206	
I.		3903b	0·771	97·0	69·3	− 9·9	8	41	555f
		3903	0·786	99·1	67·9	−11·5	0	3	
		3903	0·816	98·4	65·0	−10·9	0	4	
			0·731	61·9	78·4	+15·0			265
			0·901	65·8	60·4	+18·3			380
			0·929	101·6	51·1	−13·4			1730
Feb. 17		Centre			(120·1)	(−7·0)	(118)	(582)	(4565)
48·194	AW, AR		0·944	252·1	178·2	−18·7			240
			0·933	285·0	173·5	+11·3			216
I.			0·827	251·7	162·8	−19·0			95
			0·863	295·7	161·6	+18·0			168
		3898a	0·618	262·5	145·2	−10·2	25	136	54c
		3901a	0·567	246·7	140·2	−18·9	8	43	
		3901	0·547	246·8	138·8	−18·4	0	6	
		3901	0·531	248·8	138·0	−17·1	2	11	
		3904	0·403	57·1	87·1	+ 6·0	12	74	
		3904	0·390	60·9	87·0	+ 4·4	0	4	
		3904	0·420	59·1	85·8	+ 5·9	0	35	
		3904	0·443	63·5	83·4	+ 7·9	0	8	
		3904	0·471	64·1	81·8	+ 5·5	4	21	
		3904	0·532	67·9	77·3	+ 5·5	0	6	
		3903a	0·559	96·7	72·8	− 9·5	43	214	
		3903b	0·601	97·5	69·8	−10·2	7	20	
		3905	0·858	100·7	47·3	−12·8	0	24	2020c
		3906a	0·988	93·0	25·7	− 4·0	20	101	
			0·788	64·1	59·7	+15·4			103
			0·943	69·1	40·0	+17·0			286
Feb. 18		Centre			(106·9)	(−7·0)	(121)	(703)	(3182)
49·479	CL, AR	3898a	0·821	262·8	145·6	−10·0	23	122	184c
		3901a	0·768	251·8	140·1	−18·6	0	28	
		3904a	0·235	8·2	86·2	+ 6·3	17	77	
		3904	0·258	32·6	82·0	+ 5·5	0	5	
		3904	0·290	44·9	78·2	+ 4·9	0	3	
		3904	0·319	46·6	76·6	+ 5·8	0	2	
		3903	0·245	104·3	76·1	−10·4	3	28	
		3903	0·271	94·9	74·2	− 8·2	0	12	
		3903a	0·291	101·1	73·2	−10·0	35	213	
		3903	0·328	106·0	71·3	−11·9	0	5	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3904, February 16–24. A number of small spots in a straggling stream on February 16. The group increases on the succeeding days, and a considerable regular spot, *a*, has formed at the head of the stream by February 19. The group, especially the following part, diminishes after that date, and *a* alone remains by February 22.

Group 3905, February 18–28. A small faint spot on February 18 and 19. Others appear on the succeeding days, and the group is an irregular cluster of faint nebulous spots on February 22. The spots have become better defined, but are smaller and more separated by the succeeding day. A sudden increase has taken place by February 24, and the group is now a winding stream of spots, of which the largest, *a*, is a composite spot, usually the last in the group. *a* is seen in two parts on February 27.

Group 3906. February 18–March 1. A large regular spot, *a*, which diminishes steadily from day to day. Two very small companions are seen closely following *a* on February 24, and a single one on February 28.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
49d.479	CL, AR	3903*b*	0·341	101·8	70·3	−10·4	5	22	
		3907	0·576	102·1	54·9	−12·7	0	6	
		3905	0·679	101·7	47·1	−13·1	3	27	113*c*
		3906*a*	0·893	91·4	26·7	− 4·5	22	92	161*f*
Feb. 19		Centre			(90·0)	(−7·1)	(108)	(642)	(458)
50·284	AW, FT		0·858	253·5	138·9	−17·8			293
			0·857	244·2	138·0	−25·7			135
I.			0·742	233·1	123·4	−31·6			105
		3898*a*	0·917	262·0	146·5	−10·2	23	120	135*f*
		3904*a*	0·285	325·2	88·8	+ 6·5	16	59	
		3904	0·272	325·8	88·2	+ 5·9	2	15	
		3904	0·257	331·5	86·5	+ 5·9	0	2	
		3903	0·044	163·5	78·7	− 9·6	1	8	
		3903	0·068	146·0	77·2	−10·3	1	6	
		3903	0·090	100·6	74·3	− 8·0	2	15	
		3903*a*	0·113	118·4	73·6	−10·2	51	222	
		3903	0·104	101·1	73·5	− 8·2	0	2	
		3903	0·162	115·0	70·8	−11·0	3	9	
		3903	0·182	115·9	69·8	−11·6	0	11	
		3903	0·205	119·5	68·9	−12·8	0	9	
		3903	0·204	115·4	68·6	−12·0	0	6	
		3903	0·205	112·3	68·3	−11·4	0	14	
		3903	0·203	105·6	68·0	−10·9	0	6	
		3908	0·427	100·1	54·2	−10·7	0	5	
		3908	0·442	99·1	53·2	−10·4	0	3	
		3905	0·505	103·8	49·3	−13·1	0	3	
		3905	0·532	102·8	47·4	−12·8	3	21	
		3906*a*	0·792	89·7	27·0	− 4·2	23	95	71*c*
			0·803	100·0	25·6	−12·3			162
			0·895	89·1	16·0	− 2·4			114
Feb. 20		Centre			(79·4)	(−7·1)	(125)	(631)	(1015)
51·216	CL, AR		0·940	252·9	138·2	−18·5			219
			0·932	243·5	136·5	−27·2			118
I.			0·833	237·0	121·6	−31·2			194
			0·760	295·6	111·9	+14·1			154
		3898*a*	0·985	261·0	148·0	−10·1	37	122	144*f*
		3904*a*	0·436	301·0	89·1	+ 6·4	18	71	} 36*c*
		3904	0·411	302·4	87·4	+ 6·0	0	5	
		3903	0·191	252·4	77·7	−10·3	1	6	
		3903	0·142	258·9	75·2	− 8·6	1	7	
1895.				°	°	°			
51d.216	CL, AR	3903*a*	0·133	243·2	74·0	−10·5	45	201	
		3903	0·101	224·1	71·2	−11·3	1	3	
I.		3908	0·211	105·0	55·2	−10·1	0	7	
		3905	0·304	112·4	50·4	−13·5	2	10	
		3905	0·300	108·5	50·3	−12·3	0	5	
		3905	0·330	107·5	48·4	−12·4	5	23	
		3905	0·342	111·7	48·1	−14·0	3	18	
		3905	0·360	113·5	47·2	−14·9	0	8	
		3909	0·387	119·2	46·5	−17·4	0	4	
		3906*a*	0·638	87·8	27·5	− 4·1	24	95	99*c*
		3910*a*	0·963	78·4	354·5	+ 9·1	14	55	196*c*
			0·852	61·3	14·6	+19·9			164
			0·805	88·0	13·7	− 2·7			308
Feb. 21		Centre			(67·1)	(−7·1)	(151)	(640)	(1632)
52·182	CL, M		0·906	257·3	120·1	−14·5			114
			0·890	239·8	116·9	−30·0			195
I.			0·842	292·0	107·9	+14·2			179
		3904*a*	0·606	290·1	89·2	+ 6·2	11	52	
		3903*c*	0·363	258·7	75·5	−10·7	24	66	} 152*c*
		3903*d*	0·332	258·8	73·7	−10·4	35	128	
		3908	0·069	199·2	55·7	−10·8	1	7	
		3905	0·116	158·8	51·9	−13·3	3	27	
		3905	0·125	146·4	50·3	−13·1	0	3	
		3905	0·128	133·7	49·0	−12·1	0	28	
		3905	0·150	139·8	48·7	−13·6	0	7	
		3905	0·160	132·9	47·5	−13·3	2	19	
		3909	0·251	140·8	44·8	−18·2	0	5	
		3906*a*	0·450	85·1	27·8	− 4·2	28	87	115*c*
		3910*a*	0·882	75·3	354·7	+ 9·4	23	89	} 291*c*
		3910	0·914	75·8	350·5	+ 9·9	0	9	
			0·922	107·9	346·4	−19·2			316
Feb. 22		Centre			(54·4)	(−7·1)	(127)	(527)	(1362)
53·203	AW, FT		0·967	239·6	117·6	−31·1			156
			0·927	280·1	107·4	+ 6·5			114
I.			0·928	290·4	105·4	+15·9			306
			0·702	299·5	79·9	+14·6			264
		3904*a*	0·771	283·9	89·5	+ 5·9	4	30	296*c*
		3903	0·603	260·8	78·1	−11·3	0	14	
		3903*c*	0·577	261·4	76·3	−10·9	13	51	
		3903*d*	0·564	257·0	75·1	−13·3	0	15	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3907, February 19. A very small faint spot preceding Group 3905.
Group 3908, February 20–22. A pair of very small, faint nebulous spots, north of the place of Group 3907 and preceding Group 3905. Only one remains by February 21.
Group 3909, February 21–22. A very small faint spot, *sf* Group 3905.
Group 3910, February 21 28. A regular spot, *a*, with occasionally a very small companion. *a* has divided into two parts by February 23, and re-united again by February 25.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
53d.203	AW, FT	3903	0·541	261·9	73·7	−10·4	6	50	
I.		3903	0·523	256·8	72·3	−13·0	0	6	
		3905	0·230	243·7	53·1	−12·9	2	19	
		3905	0·216	243·6	52·3	−12·6	0	2	
		3905	0·211	239·4	51·6	−13·3	2	7	
		3905	0·178	242·4	50·1	−11·8	0	4	
		3905	0·167	240·2	49·4	−11·9	1	6	
		3905	0·173	235·7	49·3	−12·7	2	15	
		3905	0·162	226·2	47·8	−13·6	4	20	
		3906*a*	0·225	78·5	28·2	− 4·5	13	64	
		3910*a*	0·745	70·6	355·7	+ 9·3	13	60	
		3910*a*	0·758	71·4	354·4	+ 9·1	4	26	378*f*
		3910	0·786	72·1	351·8	+ 9·3	0	5	
		3911*a*	0·933	72·2	335·0	+13·7	4	48	
		3912	0·970	74·3	327·5	+13·3	0	46	530*c*
			0·847	112·1	343·0	−22·5			263
			0·966	106·6	324·6	−17·9			328
Feb. 23		Centre			(40·9)	(−7·2)	(68)	(488)	(2635)
54·540	AW, FT		0·875	289·8	80·9	+13·4			209
		3904*a*	0·923	279·7	89·2	+ 6·0	0	9	294*c*
		3903	0·802	261·1	77·0	−11·4	2	9	
		3903*c*	0·798	262·2	76·6	−10·6	7	23	135*c*
		3903*d*	0·767	262·7	73·7	−10·2	3	19	
		3905	0·521	257·7	54·6	−12·6	0	2	
		3905	0·505	258·0	53·5	−12·3	7	39	
		3905	0·494	258·4	52·8	−12·0	0	3	
		3905	0·478	256·6	51·6	−12·7	5	23	
		3905	0·449	258·6	49·9	−11·6	0	2	
		3905	0·446	255·5	49·5	−12·8	8	29	
		3905	0·423	253·0	47·8	−13·7	10	59	
		3913*a*	0·485	265·4	52·4	− 8·5	12	63	
		3913	0·472	261·7	51·5	−10·3	6	25	
		3913	0·456	264·5	50·5	− 8·9	0	2	
		3913	0·441	261·0	49·5	−10·4	6	32	
		3913	0·401	260·2	46·9	−10·5	0	6	
		3906*a*	0·104	297·6	28·6	− 4·4	6	35	
		3906	0·093	300·1	27·9	− 4·6	0	2	
		3906	0·084	297·3	27·6	− 5·0	0	2	
		3914	0·436	129·1	1·9	−22·7	0	7	
		3910*a*	0·528	58·8	356·2	+ 9·4	13	61	
		3910*a*	0·535	60·4	355·3	+ 8·9	5	24	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
54d.540	AW, FT	3911*a*	0·789	66·7	335·3	+13·4	15	45	156*c*
		3912	0·856	71·0	327·6	+12·2	4	16	
		3915	0·822	111·7	328·1	−21·9	0	6	
		3915	0·850	110·0	324·9	−20·7	3	10	187*c*
		3915	0·852	107·8	324·5	−18·9	0	10	
		3916*a*	0·977	74·1	308·1	+13·8	23	179	218*f*
Feb. 24		Centre			(23·3)	(−7·2)	(135)	(742)	(1199)
55·191	CL, FT		0·943	278·5	84·1	+ 5·5			457
I.			0·923	288·7	79·0	+14·1			298
			0·827	297·7	65·0	+18·1			139
			0·827	305·3	62·1	+23·7			125
		3903	0·893	261·4	78·6	−10·9	2	10	998*f*
		3903*c*	0·885	261·7	77·6	−10·7	5	14	
		3905	0·645	259·1	55·1	−12·6	4	12	
		3905	0·629	259·3	53·9	−12·3	1	14	
		3905	0·613	258·7	52·7	−12·6	3	27	
		3905	0·596	258·2	51·4	−12·8	0	6	
		3905	0·570	258·2	49·5	−12·6	2	8	
		3905*a*	0·552	256·0	49·0	−13·7	22	103	
		3913*a*	0·617	264·9	53·1	− 8·8	21	123	287*c*
		3913	0·597	262·2	51·6	−10·4	5	24	
		3913	0·591	264·9	51·2	− 8·8	4	11	
		3913	0·573	263·1	49·9	− 9·9	3	22	
		3913	0·569	261·5	49·6	−10·7	10	38	
		3913	0·554	261·7	48·5	−10·6	0	3	
		3917	0·558	251·0	48·1	−16·5	0	4	
		3906*a*	0·250	280·6	29·0	− 4·4	10	26	
		3910*a*	0·420	48·1	356·4	+ 9·4	12	70	
		3910	0·438	50·7	354·8	+ 9·3	1	3	
		3918	0·583	48·8	347·7	+16·2	0	7	
		3911*a*	0·695	62·0	335·8	+13·5	12	41	116*c*
		3911	0·751	64·6	330·7	+13·7	1	7	
		3912	0·776	67·6	327·7	+12·4	6	24	125*c*
		3915	0·765	110·9	325·2	−20·6	0	12	231*c*
		3915	0·768	108·6	324·7	−18·9	2	8	
		3915	0·778	108·0	323·7	−18·5	2	7	
		3916*a*	0·940	72·1	307·8	+14·1	36	208	329*c*
		3919	0·940	94·2	304·5	− 6·4	0	19	317*np*
			0·863	71·4	318·2	+12·1			80
Feb. 25		Centre			(14·8)	(−7·2)	(164)	(851)	(3502)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3911, February 23–March 6. A double spot, *a*, which has become by February 26 the leader of an irregular stream. The group has greatly increased in size by February 27, and then forms a short broad stream, the most considerable part of which consists of *b* and *c*, two large irregular composite spots. A third, *d*, has formed to the north of them by March 1. *d* has disappeared by March 4.
Group 3912, February 23–26. A nebulous spot, following Group 3911, which diminishes from day to day.
Group 3913, February 24–28. A number of spots in a short winding stream. The group appears suddenly just north of Group 3905, and close to it. The leader, *a*, is a regular spot, large after February 24. The following spots are smaller and diminish after February 25. *a* alone remains by February 28.
Group 3914, February 24. A very small faint spot.
Group 3915, February 24–28. A few small unstable spots irregularly arranged.
Group 3916, February 24–March 7. A large regular spot, *a*, with occasionally a very small companion.
Group 3917, February 25. A very small faint spot. Groups 3905, 3907, 3908, 3909, 3913 and 3917 are all closely connected.
Group 3918, February 25. A very small spot.
Group 3919, February 25–27. One or two small faint spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
56d·189	AW, AR		0·916	259·4	68·8	−12·6			844
			0·897	297·3	59·9	+20·6			292
I.		3905	0·810	259·8	56·2	−12·5	4	20	
		3905	0·779	259·8	53·3	−12·5	0	26	
		3905*a*	0·723	257·8	48·2	−13·8	20	146	
		3913*a*	0·784	264·5	53·7	− 8·8	40	149	752*c*
		3913	0·773	262·6	52·7	−10·3	0	7	
		3913	0·752	262·9	50·8	−10·1	3	28	
		3913	0·741	261·6	49·8	−11·0	6	39	
		3906*a*	0·465	274·6	29·3	− 4·3	10	24	
		3910	0·303	19·3	355·9	+ 9·4	0	2	
		3910*a*	0·299	15·8	357·0	+ 9·5	10	47	
		3920*a*	0·366	138·2	346·4	−22·8	6	18	
		3920	0·374	134·5	345·1	−22·0	0	4	
		3920	0·396	134·3	343·9	−22·8	0	6	
		3911*a*	0·541	50·9	336·2	+13·4	10	29	
		3911	0·550	53·0	335·0	+12·8	0	20	
		3911	0·580	53·5	333·1	+13·8	0	4	
		3911	0·578	55·3	332·6	+12·9	5	16	236*c*
		3911	0·592	54·4	332·1	+13·9	4	14	
		3911	0·593	56·1	331·5	+13·1	0	1	
		3912	0·623	59·5	328·5	+12·4	0	3	
		3921	0·580	93·5	326·1	− 7·9	0	6	
		3915	0·599	115·4	326·5	−20·8	0	3	
		3915	0·621	112·1	324·3	−19·2	0	3	
		3915	0·643	111·6	322·6	−19·3	0	1	
		3915	0·629	108·6	323·2	−17·2	0	2	
		3915	0·633	110·7	323·2	−18·6	4	28	
		3916*a*	0·842	68·5	308·2	+13·7	50	227	409*nf*
		3919	0·812	92·0	307·2	− 5·9	0	3	217*c*
		3919	0·838	93·2	304·6	− 6·6	3	11	
		3922	0·939	112·4	290·8	−23·5	0	19	357*s*
		3922	0·942	113·1	290·2	−24·2	0	10	
		3923	0·981	95·0	282·5	− 6·3	8	125	177*sf*
			0·864	121·7	303·0	−30·9			138
			0·917	106·3	294·4	−17·8			161
			0·936	84·5	293·1	+ 2·5			303
Feb. 26		Centre			(1·7)	(−7·2)	(183)	(1041)	(3886)
57·424	AW, FT		0·940	295·8	50·4	+21·2			173
			0·880	253·9	47·6	−17·5			458
		3905	0·908	259·3	51·3	−12·7	0	18	
		3905*a*	0·894	259·4	49·4	−12·7	6	54	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
57d·424	AW, FT	3905*a*	0·880	258·8	47·7	−13·2	7	85	617*c*
		3913*a*	0·923	263·8	53·2	− 8·5	26	99	
		3913	0·912	263·0	51·7	− 9·3	1	14	
		3906*a*	0·693	271·7	29·2	− 4·1	6	18	
		3910	0·363	319·7	359·1	+ 9·0	0	5	
		3910*a*	0·348	325·5	356·9	+ 9·5	8	25	
		3920*a*	0·257	187·9	347·6	−21·7	9	25	
		3920	0·253	186·1	347·0	−21·7	1	5	
		3920	0·271	172·7	343·2	−22·7	1	6	
		3920	0·295	172·0	342·8	−24·1	0	2	
		3911	0·381	24·0	336·3	+13·2	3	17	
		3911*b*	0·388	27·4	334·9	+13·0	19	130	
		3911	0·395	32·5	332·9	+12·4	0	3	
		3911	0·436	28·7	332·9	+15·4	0	2	
		3911	0·417	31·3	332·6	+13·8	3	14	
		3911*c*	0·408	35·2	331·5	+13·0	24	80	
		3915	0·354	124·4	327·6	−18·4	0	2	
		3915	0·366	126·3	327·3	−19·3	0	2	
		3915	0·379	125·3	326·3	−19·4	0	1	
		3915	0·396	121·6	324·6	−18·7	0	2	
		3915	0·391	119·4	324·5	−17·8	0	4	
		3915	0·412	121·8	323·7	−19·2	3	7	
		3915	0·435	121·3	322·3	−19·6	1	5	
		3916	0·654	58·6	310·4	+14·0	0	3	
		3916*a*	0·672	61·4	308·3	+13·0	39	210	
		3919	0·586	90·0	309·5	− 5·8	0	2	101*c*
		3919	0·633	90·2	306·1	− 5·7	0	3	
		3919	0·646	92·8	305·0	− 7·4	3	9	
		3922*a*	0·795	114·4	293·4	−23·7	2	12	130*s*
		3922	0·811	114·5	291·7	−24·0	0	6	
		3923*a*	0·866	93·2	285·2	− 6·4	36	254	244*c*
		3923	0·907	96·1	279·8	− 8·6	0	3	
		3923*b*	0·919	95·4	278·2	− 7·8	10	66	
			0·820	62·0	296·0	−18·0			199
			0·786	106·8	293·4	−17·6			84
			0·816	85·9	291·1	+ 0·9			171
			0·881	70·1	287·1	+13·7			199
Feb. 27		Centre			(345·4)	(−7·2)	(208)	(1193)	(2376)
58·323	CL, M		0·960	251·3	48·6	−20·0			391
I.		3905	0·964	258·4	49·0	−13·1	14	120	1193*c*
		3913*a*	0·985	262·6	54·2	− 8·4	25	104	
		3906*a*	0·830	269·9	29·6	− 4·2	4	20	170*sp*
		3906	0·827	270·4	29·3	− 3·8	0	2	

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3920, February 26–March 1. A small regular spot, *a*, followed by a few very small spots in a short stream. *a* alone remains by February 28.
Group 3921, February 26. A very small faint spot.
Group 3922, February 26–March 1. A few small unstable spots. The leader on February 27, *a*, is the most stable.
Group 3923, February 26–March 9. A large regular spot, *a*, followed by a number of smaller spots in a slightly wavy stream. The last spot of the stream, *b*, diminishes rapidly, and has disappeared by March 3. *a* alone remains by March 6.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
58d·323	CL, M	3910*a*	0·486	305·0	357·2	+ 9·5	3	22	
		3920*a*	0·352	223·4	348·5	−21·9	4	19	
I.		3911*b*	0·350	353·4	335·9	+13·0	38	212	
		3911	0·319	353·9	335·5	+11·1	0	9	
		3911	0·331	359·1	333·8	+12·0	0	10	
		3911*c*	0·338	6·3	331·3	+12·3	46	227	
		3915	0·225	147·7	326·3	−18·2	4	14	
		3915	0·265	142·5	323·7	−19·3	3	20	
		3915	0·256	139·0	323·4	−18·3	2	16	
		3916	0·515	46·9	310·8	+13·8	0	15	
		3916*a*	0·533	50·9	308·5	+13·0	37	204	
		3922*a*	0·663	117·0	293·7	−23·2	4	14	
		3922	0·678	117·2	292·5	−23·6	0	10	
		3922	0·708	117·4	290·1	−24·3	0	13	
		3923*a*	0·741	91·1	285·6	− 5·8	54	296	571*c*
		3923*b*	0·814	94·2	278·7	− 7·7	8	85	
Feb. 28		Centre			(333·5)	(−7·3)	(246)	(1432)	(2325)
59·615	CL, AR	3906*a*	0·958	268·2	30·0	− 3·9	0	14	
		3924	0·924	269·3	24·0	− 3·5	14	61	395*c*
		3924	0·906	268·4	21·6	− 4·6	2	19	
		3925	0·816	267·1	11·4	− 6·6	1	6	
		3926*a*	0·628	252·8	355·1	−16·5	0	5	
		3920*a*	0·570	242·8	349·3	−21·2	2	10	
		3911	0·453	313·0	336·1	+11·1	0	3	
		3911*b*	0·468	316·1	335·9	+12·8	62	307	
		3911	0·494	321·7	335·0	+15·8	0	6	
		3911	0·440	317·9	334·0	+12·1	2	8	
		3911*d*	0·466	321·7	333·8	+14·4	16	114	
		3911	0·421	320·1	332·4	+11·8	0	4	
		3911*c*	0·413	324·0	330·8	+12·3	31	183	
		3911	0·415	327·5	329·7	+13·3	1	7	
		3927	0·052	86·4	313·5	− 7·1	0	2	
		3927	0·083	65·5	312·2	− 5·3	0	6	
		3916*a*	0·367	21·2	308·7	+12·7	35	206	
		3916	0·413	27·1	305·4	+14·3	0	7	
		3922*a*	0·448	129·0	294·3	−23·2	3	10	
		3923*a*	0·497	88·9	286·7	− 5·8	43	268	
		3923	0·532	88·4	284·4	− 5·4	4	22	
		3923	0·565	89·9	282·0	− 6·0	5	27	97*c*
		3923	0·584	93·5	280·6	− 7·9	0	6	
		3923	0·593	92·6	280·0	− 7·5	9	26	
		3923*b*	0·609	93·5	278·8	− 7·9	3	27	
1895.				°	°	°			
59d·615	CL, AR	3928*a*	0·975	68·3	243·1	+19·2	9	53	547*c*
		3928*b*	0·983	69·2	240·6	+18·8	11	116	
			0·932	97·9	247·1	−10·0			156
			0·979	75·3	240·6	+12·7			168
Mar. 1		Centre			(316·5)	(−7·3)	(253)	(1523)	(1363)
60·451	M, FT		0·913	266·6	11·7	− 6·1			128
			0·825	289·6	357·8	+11·7			159
		3924	0·983	267·7	25·0	− 3·6	9	30	256*c*
		3924	0·967	268·0	20·8	− 3·8	7	24	
		3926*a*	0·766	254·5	355·6	−16·5	5	14	
		3926	0·749	253·1	354·0	−17·4	0	3	
		3926	0·740	252·1	353·1	−18·1	4	13	
		3911	0·606	300·8	337·5	+11·9	0	8	
		3911*b*	0·593	303·3	335·9	+12·7	44	289	
		3911	0·604	307·6	335·1	+15·2	0	6	
		3911	0·568	303·2	334·4	+11·7	0	4	
		3911	0·565	304·1	334·0	+12·0	0	2	
		3911*d*	0·573	308·0	333·1	+14·2	7	84	
		3911	0·557	308·9	331·9	+13·9	0	2	
		3911*c*	0·532	307·6	331·0	+12·3	25	186	
		3916*a*	0·350	349·9	309·1	+12·8	30	175	
		3923*a*	0·319	86·1	286·9	− 5·7	49	250	
		3923	0·359	84·9	284·6	− 5·0	4	15	
		3923	0·391	87·7	282·5	− 5·9	7	33	
		3923	0·430	91·5	279·9	− 7·3	3	10	
		3923*b*	0·443	92·1	279·1	− 7·5	0	2	
		3928*a*	0·928	65·3	242·2	+19·6	8	32	1459*c*
		3928*b*	0·942	66·5	239·5	+19·2	15	135	
			0·880	94·8	243·2	− 7·7			219
Mar. 2		Centre			(305·5)	(−7·3)	(217)	(1317)	(2221)
61·495	AW, CL		0·922	286·3	356·0	+11·9			416
		3926*a*	0·901	255·7	356·8	−16·0	5	16	
		3926	0·879	255·0	353·9	−16·6	0	2	439*c*
		3926	0·875	253·1	353·4	−18·3	5	13	
		3926	0·872	253·9	353·1	−17·6	0	2	
		3911*b*	0·748	294·5	335·9	+12·8	43	279	
		3911*d*	0·727	297·5	333·3	+14·1	7	52	371*c*
		3911	0·712	295·3	332·8	+12·2	0	4	
		3911*c*	0·695	296·6	331·2	+12·5	23	117	
		3916*a*	0·449	318·9	309·3	+12·7	27	176	
		3923*a*	0·087	68·3	287·2	− 5·5	46	274	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3924, March 1–2. A pair of ill-defined spots closely following Group 3906.
Group 3925, March 1. A very small faint spot.
Group 3926, March 1–4. A very small faint spot, *a*, on March 1. Other small unstable spots are seen near *a* on March 2 and 3. Only one remains on March 4.
Group 3927, March 1. Two very small faint spots.
Group 3928, March 1–8. Two spots, *a* and *b*, close together, each with eccentrically placed umbra. They rapidly diminish after March 3. A few small companions are seen near them on March 3 and the succeeding days. *b* alone remains on March 8.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
61d·495	AW, CL	3923	0·129	81·6	284·5	− 6·2	2	4	
		3923	0·132	75·3	284·5	− 5·4	1	12	
		3923	0·161	81·2	282·6	− 5·8	1	6	
		3923	0·181	88·0	281·3	− 6·9	0	5	
		3923	0·205	69·4	280·8	− 3·1	0	5	
		3928*a*	0·828	59·9	242·4	+19·8	8	28	
		3928	0·849	60·0	240·2	+20·6	1	5	1307*c*
		3928*b*	0·845	61·5	240·1	+19·3	9	123	
		3928	0·844	62·9	239·7	+18·2	0	9	
Mar. 3		Centre			(291·8)	(−7·3)	(178)	(1132)	(2533)
62·508	CL, M		0·946	282·3	347·6	+ 9·1			243
		3926	0·954	253·8	352·2	−17·7	0	14	418*n*
		3929	0·955	269·7	351·1	− 2·5	3	17	
		3929	0·946	270·2	349·4	− 2·3	0	9	269*c*
		3929	0·944	269·5	349·1	− 2·9	2	18	
		3929	0·932	269·8	347·1	− 2·9	9	35	
		3930	0·932	250·0	348·2	−21·3	0	9	354*c*
		3930	0·916	247·9	345·5	−23·1	0	4	
		3911	0·886	288·9	337·5	+13·0	7	54	
		3911*b*	0·867	288·9	335·3	+12·4	27	206	686*c*
		3911*c*	0·825	290·4	330·5	+12·3	11	81	
		3916*a*	0·601	302·8	309·5	+12·7	28	170	
		3916	0·538	307·6	304·2	+12·6	0	3	
		3923*a*	0·153	281·5	287·0	− 5·5	50	282	
		3923	0·109	288·3	284·3	− 5·4	0	3	
		3923	0·100	279·8	284·1	− 6·3	0	4	
		3928	0·696	54·8	241·9	+17·8	0	9	
		3928*a*	0·711	52·2	241·8	+20·0	5	23	312*c*
		3928*b*	0·720	53·7	240·6	+19·5	9	76	
			0·793	61·5	231·7	+17·2			541
Mar. 4		Centre			(278·4)	(−7·3)	(151)	(1017)	(2823)
63·468	AW, FT		0·913	249·1	332·3	−22·0			427
		3929	0·991	268·0	348·0	− 3·0	0	25	377*c*
		3929	0·984	267·9	345·5	− 3·4	0	77	
		3911	0·964	285·7	337·7	+13·0	9	48	
		3911*b*	0·949	285·3	334·8	+12·0	25	160	525*c*
		3911*c*	0·924	286·6	330·5	+12·3	11	60	
		3916*a*	0·743	294·5	309·4	+12·7	28	161	121*c*
		3923*a*	0·361	273·1	286·8	− 5·7	49	280	
		3923	0·317	271·3	284·2	− 6·6	0	2	
1895.				°	°	°			
63d·468	AW, FT	3923	0·305	275·9	283·4	− 5·2	0	3	
		3931	0·510	44·1	244·3	+14·7	0	6	
		3931	0·548	41·4	243·5	+17·5	0	10	
		3931	0·537	44·8	242·7	+15·7	0	10	
		3928*a*	0·594	40·4	241·6	+20·2	4	16	
		3928	0·585	43·5	240·7	+18·4	0	22	
		3928*b*	0·596	42·0	240·7	+19·7	7	39	
		3932	0·986	68·2	189·0	+20·0	0	53	344*c*
		3932	0·988	70·2	187·8	+18·2	0	19	
			0·902	107·9	200·5	−19·3			300
			0·913	99·1	199·1	−11·3			189
Mar. 5		Centre			(265·7)	(−7·3)	(133)	(991)	(2283)
64·296	AW, FT		0·940	252·7	325·9	−18·7			188
			0·826	267·3	310·7	− 6·3			292
I.			0·782	305·4	297·9	+21·6			311
		3911*b*	0·992	282·5	335·6	+11·3	8	165	512*nf*
		3911*c*	0·978	284·0	330·6	+12·0	0	53	
		3916*a*	0·847	289·7	309·3	+12·4	30	121	191*c*
		3923*a*	0·531	270·7	286·9	− 5·9	51	239	83*c*
		3928*a*	0·507	24·5	241·9	+20·3	0	11	
		3928	0·489	26·5	241·5	+18·7	0	2	
		3928*b*	0·507	26·4	241·0	+19·8	6	28	
		3932	0·933	65·5	190·6	+19·7	0	64	391*n*
		3932	0·960	67·1	185·2	+19·5	0	44	
		3933*a*	0·963	72·9	183·2	+14·3	77	249	
		3933	0·981	73·8	178·6	+14·3	0	57	315*c*
		3934*a*	0·995	75·9	172·5	+12·2	0	289	
			0·864	104·4	194·5	−16·1			351
Mar. 6		Centre			(254·8)	(−7·3)	(172)	(1322)	(2634)
65·600	CL, FT		0·946	264·9	309·2	− 7·2			230
			0·905	295·4	297·5	+19·2			293
			0·833	275·0	293·6	+ 0·1			149
		3916*a*	0·962	285·5	309·3	+12·7	20	147	293*c*
		3923*a*	0·767	268·5	287·9	− 5·9	31	204	107*c*
		3923	0·743	268·4	285·8	− 6·1	0	10	
		3928*a*	0·469	351·3	242·0	+20·3	0	3	
		3928	0·438	351·0	241·8	+18·3	0	3	
		3928*b*	0·459	353·6	240·8	+19·8	3	10	
		3935	0·511	355·7	240·1	+23·3	0	7	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3929, March 4–5. A number of spots, mostly small, in an irregular stream, first seen close to the West limb. The preceding portion of the group has passed out of view by the second day. The following portion seems to have increased considerably.
Group 3930, March 4. Two small faint spots; *sf* Group 3926.
Group 3931, March 5. A few small faint spots in an irregular cluster, *sp* Group 3928.
Group 3932, March 5–13. A widely extended group, in general wedge-shaped, the point of the wedge preceding. The individual spots are mostly small, and do not last more than two or three days. The more stable spots are distinguished by the letters *a*, *b*, *c* and *d*. The group rapidly diminishes after March 9, and assumes the form of two parallel straggling streams.
Group 3933, March 6–17. A large regular spot, *a*, *sf* Group 3932. It is usually attended by some small unstable companions.
Group 3934, March 6–18. A large double spot, *a*, with a very small companion on March 9. *a* has divided into regular spots, *b* and *c*, by March 10. Of these, *c* is much the larger. *b* and *c* both diminish, but *b* the more rapidly, and has disappeared by March 17. One or two small companions are often seen near the principal spots.
Group 3935, March 7–8. A very small faint spot, *nf* Group 3928.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
65d·600	CL,FT	3932*a*	0·783	58·8	192·8	+18·8	6	15	
		3932	0·789	59·6	192·0	+18·5	2	5	
		3932	0·798	60·1	191·0	+18·5	3	8	
		3932	0·799	60·8	190·7	+18·0	3	9	
		3932	0·812	58·4	190·4	+20·3	0	5	
		3932	0·816	57·8	190·2	+20·9	0	11	
		3932	0·837	57·6	188·2	+22·0	0	4	523*c*
		3932	0·828	60·3	188·1	+19·5	3	12	
		3932	0·835	58·7	188·0	+21·1	1	7	
		3932	0·820	63·2	187·9	+17·1	0	4	
		3932*b*	0·848	62·3	185·4	+18·8	17	79	
		3932*c*	0·868	56·8	185·2	+24·0	5	13	
		3933*a*	0·848	68·3	183·6	+14·0	46	207	
		3933	0·880	69·7	179·6	+14·0	2	9	646*c*
		3934*a*	0·925	74·3	172·6	+11·5	41	301	
			0·820	105·8	182·3	−17·1			149
Mar. 7		Centre			(237·7)	(−7·3)	(183)	(1073)	(2390)
66·484	AW, AR		0·925	251·6	294·6	−19·8			184
			0·925	276·2	292·8	+ 2·9			250
			0·911	293·8	287·1	+18·1			266
			0·877	240·9	286·9	−29·0			166
		3923*a*	0·880	267·5	287·9	− 5·7	12	158	312*p*
		3928*b*	0·507	332·2	240·5	+19·5	1	8	
		3935	0·551	336·0	240·0	+23·0	0	4	
		3932*a*	0·662	50·8	193·4	+18·6	5	13	
		3932	0·681	52·8	191·3	+18·3	0	12	
		3932	0·702	51·5	190·4	+20·0	0	4	
		3932*d*	0·704	53·3	189·5	+19·0	13	64	
		3932	0·728	52·2	188·2	+20·8	6	18	
		3932	0·741	51·1	187·7	+22·0	2	16	
		3932	0·764	50·6	186·1	+23·5	2	12	451*c*
		3932	0·740	55·4	186·0	+19·3	0	14	
		3932	0·748	53·8	186·0	+20·6	0	8	
		3932	0·761	51·7	185·9	+22·5	0	3	
		3932	0·766	53·1	184·8	+21·9	5	9	
		3932*b*	0·750	57·3	184·4	+18·5	21	79	
		3932*c*	0·789	51·5	183·6	+24·1	6	22	
		3933*a*	0·741	63·4	183·1	+14·0	48	244	
		3933	0·779	65·0	179·4	+14·3	0	9	341*c*
		3934*a*	0·833	70·7	172·8	+11·6	54	308	384*c*
			0·810	112·6	172·2	−22·5			137
1895.				°	°	°			
66d·484	AW, AR		0·867	135·1	170·6	−42·2			120
			0·959	100·6	151·6	−12·3			386
Mar. 8		Centre			(226·0)	(−7·3)	(175)	(1005)	(2997)
67·185	CL, M		0·941	243·9	288·0	−27·0			363
			0·928	289·9	281·4	+15·4			242
I.			0·906	236·1	281·2	−33·7			240
		3923*a*	0·948	265·8	288·6	− 6·3	23	115	778*f*
		3932*a*	0·556	39·9	194·8	+18·6	4	11	
		3932	0·598	42·7	191·4	+19·5	2	10	
		3932*d*	0·601	44·7	190·4	+18·8	11	95	
		3932	0·631	43·6	189·2	+20·8	3	12	
		3932	0·627	44·8	188·9	+20·0	0	7	
		3932	0·648	42·6	188·7	+22·1	10	50	
		3932	0·609	49·1	188·1	+17·1	0	3	266*c*
		3932	0·688	42·6	186·2	+24·2	0	3	
		3932	0·684	44·1	185·7	+23·2	0	3	
		3932	0·686	45·5	184·9	+22·7	4	9	
		3932*b*	0·654	50·4	184·8	+18·5	20	119	
		3932*c*	0·717	44·1	183·5	+24·9	3	9	
		3933*a*	0·638	56·9	183·4	+14·4	44	223	279*c*
		3933	0·680	58·9	179·9	+14·8	1	5	
		3934*a*	0·744	66·5	172·7	+12·1	49	293	475*c*
		3934	0·770	63·8	171·3	+14·9	0	4	
		3936*a*	0·971	65·2	145·2	+21·9	0	29	318*f*
			0·925	97·5	148·5	− 9·7			281
Mar. 9		Centre			(216·8)	(−7·2)	(174)	(1000)	(3242)
68·511	CL,FT		0·794	296·6	246·7	+16·0			256
		3937	0·704	305·6	236·3	+18·4	0	3	128*p*
		3937	0·689	305·9	235·1	+18·0	0	6	
		3938	0·175	183·5	199·9	−17·2	7	18	
		3938	0·189	180·1	199·4	−18·1	0	3	
		3938	0·173	166·3	196·9	−16·9	3	7	
		3938	0·191	167·9	196·9	−17·9	2	4	
		3939	0·093	132·8	195·3	−10·8	0	4	
		3939	0·121	115·3	192·9	−10·2	3	6	
		3932*d*	0·457	16·0	191·7	+18·8	10	19	
		3932	0·432	17·6	191·5	+17·1	0	3	
		3932	0·449	16·7	191·5	+18·3	0	6	
		3932	0·487	15·8	191·2	+20·7	0	2	
		3932	0·477	16·7	190·9	+19·9	0	2	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3936, March 9-13. A small regular spot, *a*, with a small companion on March 11. The group is not seen on March 12, but a very small spot is seen on March 13.
Group 3937, March 10. Two very small faint spots.
Group 3938, March 10 16. A number of spots, mostly small, in a short irregular stream. The group appears suddenly on the central meridian, and is chiefly gathered in two close clusters.
Group 3939, March 10–16. A number of spots, mostly small, in a short irregular stream. The group appears suddenly *n* of Group 3938, close to the central meridian.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
68d.511	CL,FT	3932	0·490	18·3	189·9	+20·6	1	6	
		3932	0·504	18·4	189·5	+21·4	6	21	
		3932	0·509	19·5	188·8	+21·5	0	2	
		3932	0·524	20·7	187·8	+22·2	0	5	
		3932	0·503	25·3	186·1	+19·9	0	7	
		3932	0·484	27·9	185·6	+18·3	1	6	
		3932	0·577	22·0	185·5	+25·3	0	3	
		3932	0·509	26·7	185·3	+20·0	0	2	
		3932*b*	0·492	29·9	184·4	+18·2	16	71	
		3932*c*	0·569	25·9	183·6	+23·8	0	16	
		3933*a*	0·450	36·9	183·2	+14·1	40	217	
		3934*b*	0·525	51·7	174·5	+12·4	14	61	
		3934	0·530	57·9	172·3	+ 9·9	0	2	
		3934*c*	0·542	55·5	172·3	+11·4	40	203	
		3936*a*	0·865	60·6	145·7	+20·9	11	24	140*c*
		3940*a*	0·993	84·7	117·0	+ 4·4	33	271	
			0·786	98·0	147·1	−10·7			109
			0·849	112·4	141·2	−22·8			165
Mar. 10		Centre			(199·3)	(−7·2)	(187)	(1000)	(798)
69·408	AW,M		0·888	263·1	250·5	− 9·5			94
			0·864	298·5	241·2	+20·1			1228
		3938	0·285	233·3	201·1	−16·8	11	62	
		3938	0·273	226·5	199·4	−17·9	0	2	
		3938	0·256	225·8	198·4	−17·3	2	6	
		3938	0·241	219·9	196·7	−17·8	6	27	
		3938	0·249	217·5	196·6	−18·4	1	7	
		3938	0·227	221·7	196·4	−16·8	2	17	
		3938	0·237	216·3	195·8	−18·1	0	3	
		3939	0·171	245·4	196·5	−11·2	0	8	
		3939	0·157	243·4	195·6	−11·1	0	10	
		3939	0·117	244·6	193·5	−10·1	2	6	
		3939	0·106	241·8	192·8	−10·0	1	8	
		3932*d*	0·444	349·5	192·3	+18·6	4	10	
		3932	0·430	349·5	192·1	+17·8	0	4	
		3932	0·465	353·0	190·9	+20·2	0	6	
		3932	0·473	355·2	189·8	+20·8	0	5	
		3932	0·431	355·9	189·2	+18·2	0	3	
		3932	0·455	358·3	188·2	+19·7	0	5	
		3932	0·424	358·5	188·1	+17·8	0	4	
		3932	0·505	359·5	187·7	+23·0	0	3	
		3932	0·488	2·0	186·4	+21·9	0	2	
		3932	0·447	2·3	186·3	+19·2	0	5	
1895.				°	°	°			
69d.408	AW,M	3932	0·507	3·1	185·7	+23·1	0	4	
		3932	0·465	4·5	185·2	+20·3	0	7	
		3932	0·503	4·4	185·0	+22·8	0	2	
		3932*b*	0·435	6·4	184·5	+18·3	12	50	
		3932	0·510	5·9	184·1	+23·2	1	6	
		3932	0·558	5·4	184·0	+26·4	0	5	
		3932	0·472	3·1	183·4	+20·8	0	2	
		3932*c*	0·528	7·9	182·9	+24·2	0	15	
		3932	0·523	11·0	181·2	+23·6	0	5	
		3933*a*	0·368	11·5	183·1	+13·8	40	217	
		3933	0·363	20·6	179·9	+12·7	0	3	
		3933	0·399	19·9	179·4	+14·9	0	4	
		3933	0·385	23·4	178·4	+13·5	0	9	
		3933	0·418	22·0	178·1	+15·6	0	7	
		3934*b*	0·399	33·2	174·5	+12·4	13	59	
		3934*c*	0·406	38·6	172·5	+11·4	45	217	
		3936*a*	0·762	55·0	145·7	+20·6	3	12	} 107*f*
		3936	0·775	54·9	144·7	+21·2	0	8	
		3940*a*	0·952	82·9	116·3	+ 4·5	39	221	495*f*
			0·923	105·0	119·2	−16·6			213
			0·963	121·8	111·6	−32·5			44
Mar. 11		Centre			(187·4)	(−7·2)	(182)	1056)	(2181)
70·608	AW, FT		0·929	294·6	235·3	+19·7			1116
		3938	0·518	248·9	201·9	−16·9	5	42	
		3938	0·498	248·7	200·6	−16·8	3	20	
		3938	0·465	247·1	198·2	−16·9	0	10	
		3938	0·455	245·2	197·3	−17·5	7	30	
		3938	0·444	244·1	196·4	−17·7	8	16	
		3938	0·434	245·4	196·0	−17·0	0	15	
		3939	0·460	257·7	198·9	−12·0	0	4	
		3939	0·425	259·2	196·8	−11·1	18	72	
		3939	0·384	258·8	194·2	−10·8	0	5	
		3939	0·373	257·1	193·4	−11·4	2	11	
		3939	0·364	261·2	193·0	− 9·9	3	15	
		3932	0·553	338·0	184·7	+23·7	0	9	
		3932*b*	0·489	334·1	184·7	+19·0	3	15	
		3932*c*	0·556	341·0	183·1	+24·6	0	4	
		3933*a*	0·411	330·8	183·6	+14·0	41	210	
		3934*b*	0·337	349·9	175·2	+12·1	6	17	
		3934	0·403	354·2	174·1	+16·3	0	3	
		3934	0·358	355·1	173·5	+13·6	2	8	
		3934*c*	0·327	355·6	173·2	+11·7	39	212	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3940, March 10–22. A large regular spot, *a*. A small spot is separated from *a* on the following side, the separation having become complete by March 14, though the new spot is not measured separately until March 15. One or two small companions are seen near *a*, March 16–19.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
70d.608	AW, FT	3940*a*	0·833	79·5	116·7	+ 4·6	33	210	379*f*
			0·839	107·6	114·3	+18·7			166
			0·918	69·6	108·7	+15·5			353
			0·898	121·4	108·2	−31·3			142
			0·980	79·5	94·8	+ 8·7			260
Mar. 12		Centre			(171·7)	(−7·2)	(170)	(928)	(2416)
71·445	AW, FT		0·965	293·0	231·3	+20·0			750
		3938	0·663	252·4	201·8	−17·0	7	44	
		3938	0·649	251·3	200·6	−17·6	1	17	
		3938	0·627	250·0	198·7	−18·1	0	4	156*c*
		3938	0·619	249·4	198·0	−18·3	0	8	
		3938	0·596	250·4	196·5	−17·4	11	61	
		3939	0·614	260·6	198·6	−11·4	5	19	
		3939	0·601	260·6	197·7	−11·4	9	38	
		3939	0·591	261·7	197·0	−10·7	1	17	
		3939	0·578	263·0	196·1	− 9·9	4	15	
		3939	0·558	262·3	194·6	−10·3	0	5	
		3939	0·548	260·7	193·9	−11·1	2	7	
		3939	0·540	261·2	193·4	−10·9	0	2	
		3939	0·540	259·7	193·3	−11·6	4	19	
		3932	0·596	316·4	186·3	+19·0	0	3	
		3932	0·585	320·1	184·0	+20·0	0	9	
		3933*a*	0·518	312·4	183·7	+13·8	33	184	
		3934*b*	0·411	321·8	175·6	+11·9	6	16	
		3934	0·446	326·5	175·3	+14·8	0	3	
		3934	0·431	327·6	174·3	+14·3	0	3	
		3934	0·416	327·3	173·9	+13·4	1	4	
		3934*c*	0·389	326·0	173·4	+11·7	36	175	
		3934	0·362	326·6	172·2	+10·5	0	4	
		3936	0·542	30·5	143·5	+20·9	0	3	
		3940*a*	0·716	76·5	116·5	+ 4·4	36	197	236*f*
		3941	0·908	79·3	96·9	+ 6·6	0	24	272*f*
			0·887	64·7	103·1	+18·5			389
			0·969	98·4	84·2	− 9·9			350
Mar. 13		Centre			(160·6)	(−7·2)	(156)	(881)	(2153)
72·179	AW, FT	3938	0·776	253·9	201·9	−17·0	10	65	
		3938	0·765	253·1	200·8	−17·5	0	14	
I.		3938	0·761	251·8	200·4	−18·5	0	3	85*c*
		3938	0·734	251·4	197·9	−18·5	0	14	
		3938	0·719	252·5	196·7	−17·5	9	32	
		3938	0·708	252·9	195·8	−17·2	2	12	
1895.				°	°	°			
72d.179	AW, FT	3939	0·745	260·2	199·3	−12·1	3	20	
		3939	0·728	261·0	197·9	−11·5	13	74	
I.		3939	0·702	263·0	195·8	−10·1	6	20	77*c*
		3939	0·679	262·8	193·9	−10·2	1	15	
		3939	0·671	261·4	193·3	−11·1	2	22	
		3933*a*	0·632	302·8	184·0	+14·0	33	189	
		3934*b*	0·525	307·3	176·1	+12·0	4	12	
		3934	0·528	311·9	174·7	+14·0	0	4	
		3934	0·515	312·9	173·7	+13·8	0	3	
		3934*c*	0·499	310·4	173·7	+12·2	28	178	
		3940*a*	0·592	71·7	116·7	+ 4·8	40	196	87*c*
		3941	0·814	76·7	98·2	+ 6·5	0	5	149*f*
			0·889	64·4	93·2	+18·8			222
			0·929	99·6	81·9	−11·6			374
Mar. 14		Centre			(150·9)	(−7·2)	(151)	(878)	(994)
73·228	M, FT		0·843	299·8	185·1	+20·4			650
		3938	0·901	254·5	202·1	−17·0	15	62	
I.		3938	0·864	252·8	197·3	−18·4	0	10	
		3938	0·859	254·9	196·8	−16·6	0	7	283*c*
		3938	0·857	253·8	196·5	−17·5	7	33	
		3938	0·852	254·5	196·0	−16·9	0	5	
		3939	0·880	260·5	199·3	−11·7	25	186	
		3939	0·833	261·8	193·9	−10·8	6	59	406*c*
		3933*a*	0·784	294·1	184·4	+13·9	38	215	
		3934*b*	0·695	295·6	176·8	+12·0	0	5	
		3934	0·698	299·2	175·9	+14·4	0	6	284*c*
		3934*c*	0·669	297·8	174·3	+12·6	33	147	
		3942*a*	0·563	318·8	160·0	+18·5	0	12	
		3942*b*	0·558	325·0	157·0	+20·4	0	10	
		3940*a*	0·391	59·6	117·4	+ 4·7	32	145	
		3940	0·411	61·3	116·0	+ 4·7	4	17	
			0·778	96·9	85·7	− 9·8			410
			0·867	61·1	83·1	+20·7			190
			0·907	97·7	71·5	−10·0			546
Mar. 15		Centre			(137·1)	(−7·1)	(160)	(919)	(2769)
74·256	AW, CL	3938	0·976	254·3	202·1	−16·8	15	53	
		3938	0·966	253·4	199·7	−17·8	0	8	
I.		3938	0·951	253·5	196·6	−17·9	0	3	497*c*
		3938	0·950	253·9	196·3	−17·5	6	22	

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3941, March 13–14. A very close pair of small spots, measured as one on March 13. Only one is seen on March 14.
Group 3942, March 15–19. A wide pair of spots, *a* and *b*, on March 15. *b* has disappeared by March 16, but other small spots have appeared south of *a*, making the group a short straight stream. A large spot, *c*, has appeared *np* of *a* by March 17, and increases rapidly on the succeeding days. *d*, the last spot of the group, also increases in size.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
74d·256	AW, CL	3939	0·970	259·8	200·3	−11·6	15	137	
		3939	0·944	260·7	194·9	−11·1	3	18	
I.		3939	0·937	261·3	193·7	−10·6	0	6	599c
		3939	0·933	260·6	193·1	−11·3	0	34	
		3933a	0·899	288·8	184·3	+13·4	55	189	
		3934c	0·815	291·0	174·7	+13·1	25	131	1692n
		3943	0·659	266·9	164·9	− 7·4	1	4	
		3942	0·712	304·4	161·5	+18·1	0	8	
		3942a	0·698	305·7	160·0	+18·3	0	11	
		3942	0·684	305·7	159·0	+17·8	0	8	127c
		3942	0·676	306·5	158·2	+17·9	0	3	
		3944	0·424	232·6	144·6	−21·5	0	6	
		3940a	0·228	28·7	117·2	+ 4·5	33	153	
		3940	0·241	34·8	115·6	+ 4·4	2	7	
		3940	0·243	37·4	115·0	+ 4·1	0	1	
		3945	0·251	85·4	108·3	− 5·8	1	3	
		3945	0·279	83·7	107·4	− 5·1	0	2	
		3946	0·909	97·9	57·6	−10·2	7	26	656sf
		3946	0·925	96·3	55·4	− 8·5	10	34	
			0·753	56·1	82·1	+19·5			148
			0·806	100·2	69·4	−12·4			570
			0·910	67·4	62·2	+17·1			194
Mar. 16		Centre			(123·5)	(−7·1)	(173)	(867)	(4483)
75·469	CL, AW		0·977	296·6	180·4	+24·0			325
			0·915	250·9	174·5	−20·3			143
		3933a	0·981	285·4	184·0	+13·5	41	176	
		3934	0·948	287·5	176·1	+14·1	2	10	536n
		3934c	0·939	286·6	174·8	+12·9	15	112	
		3942c	0·872	297·2	162·8	+19·5	18	106	
		3942a	0·857	296·2	161·4	+18·1	0	16	
		3942	0·835	297·0	158·9	+17·9	0	11	276c
		3942	0·829	298·8	157·6	+19·0	0	6	
		3942d	0·818	299·7	156·2	+19·3	7	28	
		3947	0·661	258·7	149·1	−12·8	4	13	
		3947	0·645	259·0	147·9	−12·6	2	9	
		3947	0·631	258·6	146·8	−12·7	0	4	
		3940a	0·264	319·0	117·6	+ 4·5	25	146	
		3940	0·237	324·2	115·6	+ 4·0	0	4	
		3945	0·046	340·2	108·5	− 4·6	0	5	
		3945	0·064	1·1	107·5	− 3·5	0	3	
1895.				°	°	°			
75d·469	CL, AW	3946a	0·736	98·9	59·9	−11·4	9	42	
		3946	0·754	98·6	58·3	−11·2	0	5	
		3946	0·771	98·5	56·8	−11·1	4	12	
		3946	0·782	94·7	55·9	− 8·1	16	109	286c
		3946	0·786	97·6	55·4	−10·4	0	5	
		3946	0·790	98·9	55·1	−11·4	0	7	
		3946	0·800	96·4	54·1	− 9·4	3	17	
			0·853	104·4	48·6	−16·0			581
			0·913	58·8	48·5	+24·7			86
			0·925	96·2	39·5	− 8·4			118
Mar. 17		Centre			(107·6)	(−7·1)	(146)	(846)	(2351)
76·425	M, FT		0·956	245·8	169·3	−25·2			128
		3934c	0·991	283·9	175·1	+12·7	25	109	205nf
		3942c	0·948	293·0	162·2	+19·1	41	355	
		3942	0·923	292·0	158·4	+17·2	0	11	436c
		3942	0·907	293·6	155·7	+17·9	0	7	
		3942d	0·909	295·2	155·4	+19·3	6	66	
		3940	0·500	294·6	122·1	+ 5·7	0	1	
		3940a	0·430	295·4	117·8	+ 4·0	19	144	
		3948	0·257	343·4	99·2	+ 7·1	0	6	
		3946a	0·565	99·7	60·5	−11·3	15	60	
		3946	0·585	97·9	59·1	−10·3	2	55	
		3946	0·592	99·5	58·6	−11·4	4	10	
		3946	0·596	96·0	58·2	− 9·3	0	4	
		3946	0·616	94·6	56·8	− 8·5	17	82	
		3946	0·620	98·0	56·5	−10·5	4	11	
		3946	0·634	99·1	55·5	−11·3	1	9	
		3946	0·646	99·3	54·6	−11·4	0	2	
		3946	0·653	96·0	54·0	− 9·3	12	51	
			0·757	106·4	45·8	−17·0			130
			0·937	77·9	24·0	+ 8·9			91
			0·950	91·4	23·1	− 3·6			207
Mar. 18		Centre			(95·0)	(−7·1)	(146)	(983)	(1197)
77·198	CL, FT		0·908	262·2	150·5	−10·0			249
			0·840	246·1	141·7	−23·8			114
I.		3942c	0·983	290·5	160·9	+18·6	63	424	
		3942	0·972	289·7	157·9	+17·2	0	23	710c
		3942d	0·961	292·0	154·9	+18·8	17	112	
		3940a	0·575	287·4	118·0	+ 4·0	23	136	
		3940	0·538	291·4	114·9	+ 5·2	0	5	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3943, March 16. A very small faint spot.
Group 3944, March 16. A very small faint spot.
Group 3945, March 16–17. A pair of very small faint spots showing a strong drift towards the equator.
Group 3946, March 16–27. An irregular group which rapidly increases in size, and which has become by March 20 a large compact wedge-shaped stream, of which the largest spot, *a*, is the apex and leader. *a* coalesces with the spots immediately following it, and becomes very large. The remainder of the group narrows down.
Group 3947. March 17. Three small spots closely following each other.
Group 3948. March 18. A very small faint spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
77d·198	CL,FT	3946*a*	0·407	100·9	60·9	−10·9	38	162	
		3946	0·417	97·1	60·1	− 9·4	0	4	
I.		3946	0·434	98·2	59·1	− 9·9	0	7	
		3946	0·441	101·3	58·7	−11·3	1	12	
		3946	0·456	97·5	57·6	− 9·8	12	80	
		3946	0·466	94·5	56·9	− 8·4	13	68	
		3946	0·498	100·1	55·0	−11·1	3	19	
		3946	0·513	95·8	53·8	− 9·1	15	69	
		3946	0·507	93·3	54·2	− 7·8	4	16	
		3949	0·899	91·4	20·7	− 4·4	2	16	} 164*c*
		3949	0·913	93·6	18·7	− 6·2	4	26	
			0·887	89·1	22·4	− 2·5			128
Mar. 19		Centre			(84·8)	(−7·1)	(195)	(1179)	(1365)
78·118	AW, FT	3950	0·962	250·4	141·6	−20·8	0	11	149*c*
		3940*a*	0·805	280·4	118·4	+ 4·1	19	138	174*f*
		3951	0·506	311·1	89·0	+13·0	0	5	
		3951	0·477	311·8	87·3	+12·0	0	6	
		3946*a*	0·098	142·0	62·6	−11·4	29	164	
		3946	0·123	141·0	61·6	−12·4	12	44	
		3946	0·123	116·8	59·7	−10·2	9	93	
		3946	0·141	117·5	58·8	−10·7	0	4	
		3946	0·161	128·8	58·7	−12·7	0	5	
		3946	0·166	123·4	58·0	−12·1	0	6	
		3946	0·160	115·8	57·7	−10·9	0	22	
		3946	0·151	100·0	57·5	− 8·5	5	26	
		3946	0·158	107·9	57·4	− 9·7	5	16	
		3946	0·171	117·4	57·2	−11·4	0	2	
		3946	0·177	120·9	57·2	−12·1	8	24	
		3946	0·176	108·9	56·4	−10·2	0	3	
		3946	0·174	104·5	56·3	− 9·4	1	20	
		3946	0·206	116·7	55·3	−12·1	0	16	
		3946	0·189	93·9	55·2	− 7·7	4	23	
		3946	0·205	110·6	54·9	−11·0	0	43	
		3946	0·199	96·6	54·6	− 8·2	0	3	
		3946	0·212	103·5	54·1	− 9·7	0	3	
		3946	0·226	112·5	53·8	−11·8	0	8	
		3946	0·219	100·5	53·6	− 9·1	2	14	
		3952	0·359	89·4	45·0	− 6·3	0	6	
		3949	0·681	89·2	23·2	− 4·7	15	37	
		3949	0·701	89·6	21·6	− 4·7	6	16	
		3949	0·721	91·6	19·9	− 6·0	4	28	
		3949	0·726	90·2	19·5	− 5·0	0	10	
1895.				°	°	°			
78d·118	AW, FT	3949	0·735	92·8	18·6	− 6·9	16	81	
			0·924	69·5	1·8	+16·5			157
			0·936	106·6	355·8	−18·0			135
			0·951	92·6	353·9	− 4·7			129
Mar. 20		Centre			(66·1)	(−7·0)	(135)	(877)	(744)
79·626	AR, AW		0·873	254·0	114·0	−17·4			117
			0·842	292·6	106·0	+14·7			185
			0·747	284·6	99·1	+ 6·0			188
		3940*a*	0·915	277·6	117·9	+ 4·0	16	126	251*f*
		3951*a*	0·654	296·7	89·1	+11·5	5	17	
		3951	0·647	297·7	88·4	+11·9	1	14	
		3951	0·632	298·8	87·0	+11·9	1	5	
		3951	0·625	300·1	86·2	+12·4	3	12	
		3946*a*	0·183	245·8	62·5	−11·2	59	349	
		3946	0·150	247·6	60·8	−10·2	14	103	
		3946	0·141	236·8	59·6	−11·4	0	4	
		3946	0·121	250·5	59·3	− 9·3	1	6	
		3946	0·148	228·9	59·2	−12·6	0	6	
		3946	0·103	252·3	58·4	− 8·8	0	4	
		3946	0·118	235·0	58·3	−10·9	1	11	
		3946	0·127	226·7	58·1	−12·0	4	15	
		3946	0·089	255·7	57·7	− 8·2	2	13	
		3946	0·099	240·4	57·6	− 9·8	3	8	
		3946	0·107	228·5	57·4	−11·0	5	30	
		3946	0·084	245·6	57·1	− 8·9	4	17	
		3946	0·115	217·7	56·8	−12·2	6	17	
		3946	0·082	234·5	56·6	− 9·7	0	1	
		3946	0·060	273·5	56·1	− 6·8	1	11	
		3946	0·072	234·8	56·1	− 9·4	0	2	
		3946	0·085	220·1	55·9	−10·7	0	13	
		3946	0·070	224·0	55·5	− 9·9	0	1	
		3946	0·097	210·0	55·5	−11·8	0	3	
		3946	0·046	264·9	55·3	− 7·3	0	6	
		3946	0·070	216·6	55·1	−10·3	0	5	
		3946	0·083	205·7	54·8	−11·3	7	30	
		3946	0·055	202·2	53·9	− 9·9	1	7	
		3946	0·027	98·7	51·2	− 7·3	0	2	
		3946	0·058	124·2	49·9	− 8·9	0	3	
		3949*a*	0·482	87·5	23·9	− 5·0	36	200	
		3949	0·529	88·6	20·8	− 5·2	0	2	
		3949*b*	0·554	89·5	19·0	− 5·6	36	203	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3949, March 19–29. A pair of small spots on March 19. The group has expanded into a short stream by the succeeding day. The group increases rapidly until March 22, and two large spots, *a* and *b*, have formed by March 21. The group diminishes after March 22, *b* decreasing especially quickly. *a* has divided into three unequal portions by March 26. The letter is still retained for the largest part.
Group 3950, March 20. A small spot.
Group 3951, March 20–23. A pair of very small spots on March 20. The group increases in size and has become a short stream of spots by March 21, but has decreased again after March 23. *a*, the largest spot, is the leader on March 21, 22 and 23.
Group 3952, March 20. A very small faint spot, *f* Group 3946.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for day).
1895.				°	°	°			
79d.626	AR, AW	3949	0·587	93·0	16·6	− 7·4	4	11	
		3949	0·621	90·0	14·3	− 5·5	3	7	
			0·839	64·3	0·6	+17·1			258
			0·829	106·4	356·4	−17·5			125
			0·900	90·1	348·6	− 3·2			160
			0·912	115·1	346·6	−25·7			194
			0·942	74·8	344·7	+11·8			247
Mar. 21		Centre			(52·7)	(−7·0)	(213)	(1264)	(1725)
80·503	CL, AR		0·919	238·1	107·9	−32·0			147
			0·890	283·8	102·3	+ 8·9			352
			0·903	292·8	101·7	+17·2			111
		3940*a*	0·978	275·9	118·4	+ 4·3	19	112	151*f*
		3951*a*	0·795	290·4	90·6	+11·6	11	66	
		3951	0·790	291·5	89·9	+12·3	0	7	330*c*
		3951	0·765	293·0	87·3	+12·6	4	20	
		3951	0·748	293·8	85·7	+12·7	4	17	
		3946*a*	0·362	257·8	62·3	−10·9	71	546	
		3946	0·310	257·0	59·1	−10·6	3	43	
		3946	0·301	260·9	58·7	− 9·3	3	30	
		3946	0·296	264·1	58·5	− 8·4	1	6	
		3946	0·287	253·2	57·5	−11·4	7	77	
		3946	0·280	260·1	57·5	− 9·4	1	11	
		3946	0·264	258·1	56·4	− 9·8	1	6	
		3946	0·246	253·4	55·1	−10·7	17	126	
		3946	0·259	238·7	54·4	−14·4	0	7	
		3946	0·228	260·7	54·4	− 8·8	0	8	
		3949*a*	0·286	84·1	24·8	− 5·0	45	267	
		3949	0·341	85·0	21·5	− 4·8	6	25	
		3949	0·378	85·0	19·2	− 4·5	1	3	
		3949*b*	0·377	88·6	19·1	− 5·9	43	184	
		3949	0·391	86·2	18·4	− 4·9	2	15	
		3949	0·397	89·9	17·9	− 6·3	1	9	
		3949	0·407	92·9	17·2	− 7·5	1	7	
			0·918	68·6	338·4	+16·5			202
Mar. 22		Centre			(41·3)	(−6·9)	(241)	(1592)	(1293)
81·417	CL, M		0·954	279·2	100·4	+ 6·6			325
			0·861	263·5	89·0	− 9·2			169
			0·887	294·4	87·1	+17·9			256
		3951*a*	0·901	285·8	91·0	+11·0	7	29	534*c*
		3951	0·859	289·1	85·2	+12·5	4	14	
1895.				°	°	°			
81d.417	CL, M	3946*a*	0·555	261·6	63·0	−10·4	67	506	
		3946	0·515	262·3	60·3	− 9·9	0	55	
		3946	0·493	261·0	59·7	−10·4	0	8	
		3946	0·484	263·2	58·2	− 9·3	15	57	
		3946	0·444	260·1	55·5	−10·6	21	298	
		3953	0·195	197·6	25·7	−17·6	2	8	
		3949*a*	0·085	63·0	24·9	− 4·7	40	254	
		3949	0·140	70·1	21·6	− 4·2	0	9	
		3949	0·139	82·6	21·3	− 5·8	0	7	
		3949	0·155	77·7	20·5	− 5·0	2	6	
		3949*b*	0·181	82·0	18·9	− 5·4	31	170	
			0·880	67·6	331·6	+15·9			265
Mar. 23		Centre			(29·2)	(−6·9)	(189)	(1421)	(1549)
82·225	AW, M		0·935	261·4	88·3	−10·5			231
			0·950	284·7	88·0	+11·6			383
I.			0·941	293·4	84·4	+19·2			263
		3954*a*	0·876	257·2	80·2	−14·5	0	8	283*f*
		3946*a*	0·695	262·4	62·8	−10·3	80	549	
		3946	0·659	261·3	59·9	−11·0	0	5	
		3946	0·643	263·0	58·7	− 9·8	3	43	404*c*
		3946	0·629	260·6	57·6	−11·3	3	58	
		3946	0·617	263·0	56·8	− 9·8	0	16	
		3946	0·591	261·2	54·8	−10·7	23	207	
		3949*a*	0·127	287·1	25·5	− 4·7	41	246	
		3949	0·055	286·4	21·5	− 6·0	0	4	
		3949	0·052	324·3	20·2	− 4·5	0	6	
		3949*b*	0·032	330·0	19·4	− 5·4	11	88	
		3955	0·960	74·7	307·2	+12·6	10	44	240*c*
			0·800	65·7	329·8	+14·7			190
			0·844	95·1	320·6	− 8·0			133
			0·933	65·9	314·0	+19·5			96
			0·988	109·6	295·8	−20·4			165
Mar. 24		Centre			(18·5)	(−6·9)	(171)	(1274)	(2388)
83·431	AW, FT	3954*a*	0·978	257·6	81·6	−13·5	0	24	324*f*
		3954	0·960	255·2	77·4	−16·1	0	5	
		3946*a*	0·871	262·8	63·6	− 9·6	54	418	
		3946	0·853	263·8	61·5	− 8·8	0	72	
		3946	0·842	261·7	60·3	−10·6	3	13	414*c*
		3946	0·824	263·1	58·4	− 9·5	8	82	
		3946	0·789	262·3	55·0	−10·3	18	147	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north. south. preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3953, March 23. A small spot.
Group 3954, March 24–25. A small spot with a very small companion on March 25.
Group 3955, March 24–28. A small regular spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
83d.431	AW, FT	3949a	0·400	273·9	26·1	− 4·7	29	195	
		3949	0·374	275·6	24·4	− 4·3	8	65	
		3949	0·306	274·9	20·3	− 5·0	3	8	
		3949b	0·286	275·5	19·1	− 5·0	8	45	
		3956	0·829	58·8	313·3	+21·0	0	13	83c
		3955	0·850	71·0	307·5	+12·2	8	22	76c
			0·931	60·1	300·2	+24·6			315
Mar. 25		Centre			(2·6)	(−6·8)	(139)	(1109)	(1212)
84·486	AW, AR		0·936	296·3	53·0	+21·7			78
		3946a	0·965	262·6	64·1	− 8·9	30	353	
		3946	0·947	260·9	60·7	−10·9	3	41	
		3946	0·939	262·1	59·2	− 9·8	7	47	1591c
		3946	0·935	261·1	58·5	−10·7	0	8	
		3946	0·915	261·8	55·4	−10·2	7	85	
		3946	0·909	263·1	54·5	− 9·1	2	10	
		3949a	0·620	271·1	27·0	− 4·7	30	138	
		3949	0·601	270·1	25·7	− 5·4	0	6	
		3949	0·597	271·7	25·3	− 4·4	11	44	
		3949	0·593	273·7	24·9	− 3·3	0	3	94c
		3949	0·585	269·9	24·5	− 5·6	0	3	
		3949	0·532	271·5	20·8	− 5·0	0	6	
		3949b	0·514	271·7	19·6	− 5·0	6	19	
		3956	0·688	49·4	314·8	+20·9	0	4	
		3956	0·711	49·4	313·2	+22·0	0	4	
		3956	0·705	51·0	312·9	+20·8	0	18	
		3956	0·738	49·3	311·3	+23·3	0	3	85c
		3956	0·731	51·3	310·9	+21·8	0	3	
		3956	0·741	50·7	310·4	+22·7	0	5	
		3955	0·713	65·3	307·3	+12·3	9	26	51c
		3957	0·919	67·4	286·0	+17·7	0	5	133c
		3958	0·902	92·1	284·2	− 4·9	1	6	545c
			0·860	55·3	297·5	+25·1			277
			0·823	112·6	293·7	−22·4			107
			0·887	63·3	291·5	+19·9			229
			0·862	125·0	291·1	−33·4			104
			0·930	116·8	279·7	−27·4			136
Mar. 26		Centre			(348·7)	(−6·8)	(106)	(837)	(3430)
85·234	CL, M		0·968	293·5	50·3	+20·7			49
I.			0·917	254·2	46·1	−17·2			488
			0·878	265·6	40·6	− 7·1			71

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
85d.234	CL, M	3946	0·986	261·0	60·0	−10·0	51	204	1488c
I.		3946	0·972	259·9	56·1	−11·4	10	50	
		3949a	0·748	269·1	27·4	− 5·2	21	131	149c
		3949	0·731	269·9	25·9	− 4·7	7	43	
		3949b	0·657	269·9	20·0	− 5·1	0	9	
		3956	0·644	42·0	311·2	+22·6	0	6	
		3955	0·598	58·1	307·7	+12·7	7	28	
		3957	0·832	62·4	288·1	+18·5	4	25	
		3957	0·835	63·7	287·3	+17·6	2	17	296c
		3957	0·858	63·7	284·9	+18·5	6	26	
		3958a	0·835	92·7	282·1	− 6·0	0	21	410c
			0·771	47·3	299·8	+26·3			174
			0·710	90·8	293·6	− 5·3			200
			0·847	117·7	281·9	−26·9			173
			0·854	107·3	280·0	−18·3			78
Mar. 27		Centre			(338·9)	(−6·7)	(108)	(560)	(3576)
86·464	CL, FT		0·970	265·0	39·0	− 6·5			102
			0·965	254·6	38·5	−16·6			199
		3949a	0·904	267·9	27·5	− 4·8	18	110	287c
		3949b	0·841	267·7	20·1	− 5·6	0	4	275c
		3949	0·789	266·5	15·0	− 6·9	0	5	
		3955	0·420	38·2	307·3	+12·7	0	8	
		3957a	0·631	50·5	292·1	+17·8	27	108	
		3957	0·640	52·1	290·9	+17·4	15	45	
		3957	0·649	54·2	289·5	+16·7	0	4	
		3957	0·669	53·0	288·6	+18·2	7	26	
		3957	0·668	57·4	287·1	+15·6	7	26	
		3957	0·692	54·4	286·5	+18·3	0	4	
		3957b	0·704	55·6	285·2	+18·1	16	56	
		3958	0·571	91·4	287·8	− 6·3	1	5	
		3958	0·585	91·6	286·8	− 6·4	6	16	
		3958	0·593	92·5	286·2	− 6·9	2	6	
		3958	0·604	92·7	285·4	− 7·0	0	3	
		3958	0·616	92·2	284·6	− 6·6	0	5	
		3958	0·627	93·4	283·7	− 7·4	0	6	
		3958a	0·643	91·6	282·6	− 6·2	18	66	
Mar. 28		Centre			(322·7)	(−6·7)	(117)	(503)	(863)
87·621	AW, FT		0·888	293·7	5·7	+17·5			219
		3949a	0·984	266·4	27·3	− 4·7	6	111	675f
		3957a	0·482	29·3	293·1	+18·3	51	241	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3956, March 25–27. A small faint spot on March 25. A number of very small faint spots in an irregular stream on March 26. Only one very small spot remains on March 27.

Group 3957, March 26–April 5. A very small spot on March 26; three small spots on March 27. The group rapidly increases in size, and becomes a fine stream, its leader, *a*, being a large spot with very dark umbra. The stream becomes straighter after March 30, an extension to the south being last seen on that day. *b*, the last spot of the group on March 28, has divided into three parts, *c*, *d* and *e*, by March 31, and *e* into two parts by April 2, *f* and *g*. Only *a* and *f* remain on April 5.

Group 3958, March 26–April 2. A very small spot on March 26. The group increases in size on the succeeding days, and on March 29 consists of several very small spots in a straight line followed by a large spot, *a*, with double nucleus, and a second stream of small spots at an angle to the first stream. The first stream has disappeared by March 31, and *a* has greatly diminished.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
87d.621	AW, FT	3957	0·491	33·0	291·2	+17·8	0	6	
		3957	0·503	32·6	290·9	+18·6	0	3	
		3957	0·482	35·2	290·6	+16·8	0	3	
		3957	0·486	38·0	289·3	+16·1	0	5	
		3957	0·512	37·3	288·5	+17·7	3	7	
		3957	0·484	40·7	288·4	+15·1	5	13	
		3957	0·513	39·2	287·7	+17·1	0	~~26~~ 6	
		3957	0·492	42·0	287·6	+15·1	2	10	
		3957	0·505	42·6	286·7	+15·5	6	25	
		3957	0·520	41·2	286·5	+16·7	0	9	
		3957b	0·542	41·1	285·5	+17·8	13	113	
		3958	0·329	91·5	288·1	− 6·9	2	8	
		3958	0·333	94·3	287·9	− 7·8	0	10	
		3958	0·340	91·6	287·5	− 6·9	1	8	
		3958	0·353	92·3	286·7	− 7·1	1	5	
		3958	0·354	94·5	286·6	− 7·8	0	4	
		3958	0·366	92·6	285·9	− 7·2	3	7	
		3958	0·383	92·4	284·8	− 7·1	0	3	
		3958a	0·412	91·1	283·0	− 6·6	20	101	
		3958	0·455	93·9	280·3	− 7·8	1	5	
		3959	0·891	77·2	246·4	+ 9·1	0	12	
		3959	0·891	76·2	246·2	+ 8·3	7	24	
		3959	0·910	76·8	243·8	+ 9·1	0	6	117c
		3959	0·916	77·2	242·9	+ 8·9	0	11	
			0·922	63·0	245·5	+21·7			507
			0·940	70·3	240·7	+15·9			487
Mar. 29		Centre			(307·4)	(−6·7)	(121)	(776) 756	(2005)
88·229	AW, FT		0·988	265·5	20·8	− 5·5			497
I.			0·930	289·8	4·5	+15·6			198
			0·824	251·7	354·9	−18·7			182
			0·784	290·2	347·8	+11·3			158
		3957a	0·442	11·7	294·0	+19·0	61	246	
		3957	0·434	17·9	291·4	+17·8	0	5	
		3957	0·428	21·2	290·1	+16·9	0	3	
		3957	0·461	23·5	288·3	+18·4	0	2	
		3957	0·419	26·8	288·1	+15·4	0	21	
		3957	0·431	29·0	286·9	+15·6	3	10	
		3957b	0·468	28·5	285·9	+17·8	11	78	
		3957	0·474	30·8	284·7	+17·6	2	12	
		3958	0·181	91·8	288·9	− 6·9	1	4	
		3958	0·194	94·4	288·2	− 7·4	0	3	
		3958	0·200	92·3	287·8	− 7·0	0	11	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
88d.229	AW, FT	3958	0·221	92·5	286·6	− 7·0	0	2	
I.		3958a	0·279	90·4	283·2	− 6·5	14	106	
		3958	0·319	92·9	280·8	− 7·2	1	8	
		3958	0·331	95·1	280·0	− 8·0	2	8	
		3959a	0·808	74·0	247·8	+ 8·8	22	61	
		3959	0·849	75·0	243·5	+ 9·1	0	5	302c
		3959b	0·857	75·2	242·6	+ 9·1	11	47	
			0·871	61·1	244·8	+21·1			652
			0·934	67·9	234·2	+17·9			302
Mar. 30		Centre			(299·4)	(−6·6)	(128)	(632)	(2291)
89·522	CL, M		0·939	286·3	349·6	+12·8			131
			0·891	251·7	345·7	−19·2			100
			0·853	291·6	337·2	+14·6			136
		3957a	0·474	334·7	294·6	+18·9	41	233	
		3957	0·455	337·4	292·9	+18·4	6	30	
		3957	0·430	341·5	290·5	+17·5	1	4	
		3957	0·411	342·6	289·6	+16·6	0	2	
		3957c	0·435	349·0	287·3	+18·7	12	37	
		3957d	0·406	350·1	286·5	+17·0	14	73	
		3957	0·414	352·0	285·8	+17·7	2	7	
		3957e	0·427	352·7	285·6	+18·5	0	29	
		3957	0·416	345·7	284·2	+18·0	4	22	
		3958a	0·017	254·5	283·2	− 6·8	10	40	
		3958	0·011	43·4	281·9	− 6·0	0	6	
		3958	0·044	117·1	280·0	− 7·7	2	9	
		3958	0·061	130·4	279·6	− 8·8	0	4	
		3959a	0·608	66·3	248·2	+ 8·8	19	104	
		3959	0·607	69·3	247·6	+ 7·0	0	7	
		3959	0·654	70·0	244·1	+ 7·8	1	5	185c
		3959	0·671	69·3	243·0	+ 8·7	0	10	
		3959b	0·686	69·5	241·9	+ 8·9	19	83	
		3960a	0·989	108·3	199·5	−19·0	0	110	125c
			0·760	51·5	242·1	+23·3			148
			0·873	59·2	222·6	−30·0			114
			0·968	76·9	208·8	+10·9			79
			0·972	100·1	205·2	−11·3			339
Mar. 31		Centre			(282·3)	(−6·5)	(131)	(815)	(1357)
90·460	CL, FT		0·919	246·7	337·0	−23·9			218
			0·924	288·9	334·4	+14·7			330
			0·777	302·4	314·0	+20·1			201

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3959, March 29–April 6. Two very close pairs of small spots on March 29. These pairs have both coalesced to form single spots, *a* and *b*, by the succeeding day. *a* and *b* increase up to March 31, and afterwards slowly diminish. A number of very small spots are frequently seen near them, and make up with them a straight stream.

Group 3960. March 31–April 9. A single spot, *a*, which rapidly diminishes in size. As it approaches extinction, a number of small unstable spots in a short stream begin to form near it and continue the group until April 9.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
90d.460	CL,FT		0·705	295·4	310·5	+12·8			136
		3957a	0·573	316·8	294·3	+18·8	50	285	
		3957	0·541	317·7	292·3	+17·6	1	6	
		3957	0·530	318·6	291·4	+17·4	3	20	
		3957	0·521	320·0	290·4	+17·5	3	15	
		3957c	0·510	326·4	287·2	+19·0	5	29	
		3957	0·497	326·4	286·7	+18·3	2	13	
		3957d	0·476	326·2	285·9	+17·1	10	74	
		3957e	0·493	328·1	285·8	+18·5	6	39	
		3958a	0·241	267·1	283·9	− 6·9	12	31	
		3958	0·223	266·2	282·8	− 7·1	0	2	
		3958	0·184	258·6	280·4	− 8·4	0	3	
		3958	0·175	260·3	279·9	− 8·0	0	5	
		3959a	0·447	55·0	248·2	+ 8·9	18	89	
		3959	0·458	57·0	247·1	+ 8·5	0	3	
		3959b	0·530	61·3	241·9	+ 9·1	12	70	
		3960a	0·934	108·1	200·1	−19·2	22	107	1039c
			0·780	52·3	227·6	+23·8			174
			0·890	73·0	209·6	+12·0			66
			0·914	99·8	203·3	−11·6			676
			0·961	69·2	199·3	+18·0			136
April 1		Centre			(269·9)	(−6·4)	(144)	(791)	(2976)
91·212	FT,CL		0·953	299·1	326·8	+25·2			180
M.			0·852	267·7	318·5	− 5·4			256
			0·844	299·8	311·5	+20·9			172
			0·802	289·6	310·3	+11·6			154
			0·789	308·9	302·5	+25·0			219
		3957a	0·677	307·3	294·6	+18·9	37	209	
		3957	0·662	307·7	293·4	+18·5	4	20	
		3957	0·646	306·5	292·8	+17·2	0	2	
		3957	0·642	307·7	292·1	+17·7	8	23	
		3957	0·641	309·2	291·4	+18·4	0	1	
		3957c	0·608	314·3	287·4	+19·4	4	17	
		3957	0·608	315·1	287·0	+19·7	0	3	
		3957	0·598	314·2	286·8	+18·9	0	3	
		3957f	0·593	314·7	286·3	+18·9	2	10	
		3957	0·590	314·3	286·3	+18·6	0	2	
		3957g	0·581	313·8	286·0	+17·9	8	33	
		3957d	0·564	312·9	285·5	+16·8	2	10	
		3958	0·416	266·4	284·6	− 7·4	3	11	
		3958	0·414	268·1	284·5	− 6·7	2	5	
		3958	0·406	268·4	284·0	− 6·5	5	10	
1895.				°	°	°			
91d.212	FT,CL	3958	0·396	267·4	283·4	− 6·9	0	10	
M.		3961	0·388	157·1	250·3	−27·2	3	10	
		3961	0·383	153·6	249·1	−26·2	2	6	
		3961	0·429	151·2	246·5	−28·2	3	8	
		3959a	0·337	37·8	248·0	+ 9·1	20	73	
		3959b	0·409	49·1	241·8	+ 9·4	13	56	
		3962	0·278	87·4	243·9	− 5·5	1	3	
		3960a	0·867	108·4	199·7	−19·1	20	78	828c
		3963a	0·957	82·5	187·9	+ 5·2	0	25	
		3963b	0·977	81·2	183·5	+ 7·2	15	36	328c
		3964a	0·978	75·5	184·2	+12·7	22	132	
			0·793	69·1	210·9	+12·3			117
			0·853	99·1	201·1	−11·1			808
			0·924	66·5	196·7	+18·8			512
April 2		Centre			(260·0)	(−6·4)	(174)	(796)	(3574)
92·470	AW, CL		0·924	286·4	308·4	+12·5			348
M.			0·936	295·8	308·0	+21·4			194
			0·905	304·3	300·5	+27·3			216
		3957a	0·820	297·2	293·3	+18·0	56	241	
		3957c	0·771	301·8	287·3	+19·4	0	2	171c
		3957f	0·757	301·9	286·0	+18·9	3	16	
		3957g	0·746	301·3	285·3	+18·0	3	11	
		3961	0·348	197·6	250·1	−25·7	9	23	
		3961	0·353	196·8	249·9	−26·0	0	3	
		3961	0·372	193·3	248·9	−27·5	1	8	
		3961	0·375	187·5	246·6	−28·1	0	2	
		3961	0·344	188·3	246·6	−26·2	1	5	
		3961	0·345	186·3	245·8	−26·4	3	13	
		3961	0·387	184·4	245·3	−28·9	4	10	
		3961	0·394	183·6	245·0	−29·5	0	3	
		3959a	0·271	343·1	248·0	+ 8·6	15	44	
		3959b	0·272	6·7	241·6	+ 9·2	7	21	
		3960a	0·703	110·7	199·5	−19·0	8	27	235f
		3963	0·818	78·6	189·9	+ 5·5	0	5	
		3963a	0·831	79·1	188·6	+ 5·4	0	9	336c
		3963b	0·881	78·1	183·3	+ 7·3	2	13	
		3964a	0·880	72·4	184·5	+12·2	15	93	857s
April 3		Centre			(243·4)	(−6·4)	(127)	(549)	(2357)
93·417	FT, AW		0·984	283·5	308·7	+12·0			181
			0·930	249·0	300·0	−21·9			110
			0·961	300·5	299·0	+27·0			182

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3961, April 2–7. A number of small unstable spots in two straight streams, which eventually merge into a single stream.
Group 3962, April 2. A very small spot.
Group 3963, April 2–4. A pair of small spots, *a* and *b*, on April 2. A third is seen preceding them on April 3. Only *b* remains on April 4.
Group 3964, April 2–11. A large regular spot, *a*, *n* of Group 3963, and which steadily diminishes in area. A very small companion is seen near *a* on April 8.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
93d·417	FT, AW		0·846	265·4	288·9	− 7·3			352
		3957*a*	0·920	292·9	293·9	+18·2	48	295	
		3957*c*	0·871	296·9	286·3	+19·7	0	4	
		3957*g*	0·865	295·0	286·2	+18·0	0	15	567*c*
		3957*f*	0·864	296·1	285·7	+18·7	13	30	
		3965	0·843	288·8	285·4	+12·1	0	5	
		3961	0·470	225·1	252·4	−25·2	3	9	
		3961	0·460	222·8	251·1	−25·6	0	2	
		3961	0·448	222·0	250·2	−25·4	0	2	
		3961	0·441	220·7	249·4	−25·5	0	3	
		3961	0·456	213·4	247·4	−28·4	0	4	
		3961	0·430	213·9	246·4	−26·9	0	2	
		3961	0·420	214·3	246·1	−26·3	1	10	
		3961	0·454	210·2	246·0	−29·2	12	40	
		3961	0·417	212·8	245·5	−26·6	2	12	
		3959*a*	0·392	311·6	248·1	+ 9·1	6	28	
		3959	0·340	317·7	244·2	+ 8·4	0	5	
		3959*b*	0·334	324·5	242·2	+ 9·5	9	26	
		3959	0·312	321·7	242·1	+ 8·0	0	2	
		3959	0·321	324·2	241·8	+ 8·9	0	3	
		3959	0·338	327·3	241·6	+10·3	0	2	
		3960*a*	0·552	116·6	199·4	−19·7	4	15	
		3960	0·585	114·9	196·8	−19·5	0	4	
		3963*b*	0·764	74·8	183·1	+ 7·4	0	7	67*c*
		3964*a*	0·767	68·6	184·2	+11·9	17	86	341*f*
April 4		Centre			(230·9)	(−6·3)	(115)	(611)	(1800)
94·414	AR, FT		0·922	264·5	285·2	− 7·5			694
			0·858	242·6	275·9	−26·6			207
		3957*a*	0·980	289·9	293·2	+18·0	25	333	806*c*
		3957*f*	0·947	292·7	285·2	+19·2	0	56	
		3961	0·626	238·0	253·2	−24·4	4	14	
		3961	0·599	235·7	250·6	−24·9	3	8	
		3961	0·576	234·7	248·7	−24·7	0	3	
		3961	0·557	231·0	246·3	−25·9	1	6	
		3961	0·572	226·8	245·9	−28·5	0	2	
		3961	0·553	230·2	245·8	−26·2	0	1	
		3961	0·550	229·4	245·4	−26·4	0	4	
		3961	0·571	225·2	245·2	−29·2	7	20	
		3961	0·545	228·8	244·9	−26·6	0	3	
		3961	0·563	226·2	244·9	−28·4	0	1	
		3961	0·549	227·7	244·7	−27·1	0	3	
1895.				°	°	°			
94d·414	AR, FT	3961	0·564	224·2	244·4	−29·4	0	7	
		3959*a*	0·554	297·2	247·5	+ 9·3	1	13	
		3959	0·518	298·4	245·0	+ 8·7	2	14	
		3959	0·503	304·1	242·7	+10·7	0	1	
		3959	0·489	303·7	242·0	+10·1	1	13	
		3959	0·466	300·2	241·6	+ 7·8	0	5	
		3959*b*	0·470	304·5	240·7	+ 9·8	7	22	
		3966	0·240	240·3	230·0	−12·9	0	3	
		3966	0·230	242·4	229·7	−12·1	0	6	
		3966	0·224	245·2	229·6	−11·4	0	4	
		3966	0·220	242·8	229·2	−11·9	4	11	
		3966	0·212	243·0	228·8	−11·6	0	4	
		3966	0·230	233·3	228·6	−14·0	0	2	
		3966	0·213	232·8	227·7	−13·6	4	9	
		3966	0·196	230·7	226·6	−13·3	2	7	
		3967	0·249	328·4	225·2	+ 6·0	0	6	
		3960*a*	0·378	127·7	199·3	−19·2	1	6	
		3960	0·400	124·8	197·5	−19·0	0	2	
		3964*a*	0·621	61·3	184·0	+12·1	14	80	
		3968*a*	0·989	102·9	135·3	−13·6	27	168	
			0·753	63·6	173·5	+15·1			223
			0·906	64·8	157·3	+19·7			293
			0·955	110·9	144·2	−21·7			186
April 5		Centre			(217·7)	(−6·2)	(103)	(837)	(2409)
95·125	M, FT		0·967	264·0	283·9	− 7·4			344
			0·977	288·1	283·4	+16·2			276
I.			0·911	239·6	273·3	−30·1			119
			0·848	310·3	255·9	+29·2			53
			0·697	303·2	245·9	+17·6			127
		3961	0·730	242·2	253·2	−24·3	0	5	
		3961	0·718	241·2	251·9	−24·7	0	3	
		3961	0·705	240·0	250·6	−25·2	3	13	
		3961	0·697	240·6	250·0	−24·5	2	7	
		3961	0·693	238·3	249·1	−26·0	0	3	
		3961	0·679	238·0	247·9	−25·8	4	14	393
		3961	0·669	236·4	246·7	−26·5	0	4	
		3961	0·661	231·7	244·6	−29·1	5	15	
		3961	0·650	234·2	244·5	−27·3	0	2	
		3961	0·638	232·7	243·1	−27·7	0	2	
		3959*b*	0·590	295·5	240·8	+ 9·6	0	8	
		3966	0·385	253·9	230·4	−11·8	11	20	
		3966	0·361	247·2	228·2	−13·8	4	17	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3965, April 4. A very small spot.
Group 3966, April 5–8. A number of very small spots in a semicircle. The group has become a straight stream by April 7.
Group 3967, April 5. A very small spot.
Group 3968, April 5–17. A large regular spot, *a*, usually seen with one or two small companions.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
95d·125	M, FT	3966	0·338	246·1	226·8	−13·7	2	9	
		3969	0·236	331·1	214·8	+ 5·9	0	3	
I.		3960	0·247	147·8	200·4	−18·1	1	6	
		3960	0·270	145·6	199·1	−18·9	0	2	
		3960	0·250	141·7	199·0	−17·3	0	3	
		3960	0·285	142·5	197·8	−19·0	0	3	
		3960	0·289	138·1	196·6	−18·4	1	5	
		3960	0·309	138·4	195·8	−19·3	0	2	
		3964*a*	0·511	52·8	183·8	+12·4	15	76	
		3968*a*	0·960	102·2	133·8	−13·4	43	203	271*f*
			0·846	61·0	159·5	+20·5			274
			0·913	109·1	142·0	−19·9			150
April 6		Centre			(208·3)	(−6·1)	(91)	(425)	(2007)
96·184	AW, CL		0·832	289·8	247·6	+12·8			414
			0·857	304·1	245·8	+25·0			367
I.		3961	0·850	244·3	251·9	−25·0	2	10	
		3961	0·816	241·8	247·6	−26·4	8	28	396*c*
		3961	0·790	237·3	243·8	−29·2	0	13	
		3966	0·611	258·2	231·9	−12·0	1	7	
		3966	0·599	254·3	230·8	−14·3	0	2	
		3966	0·595	257·2	230·7	−12·6	0	1	
		3966	0·579	257·7	229·6	−12·1	0	1	95*c*
		3966	0·577	254·7	229·2	−13·8	0	1	
		3966	0·546	254·5	227·0	−13·6	0	8	
		3969	0·465	299·6	218·4	+ 7·7	0	2	
		3969	0·438	298·1	217·2	+ 6·2	0	1	
		3969	0·441	300·8	216·8	+ 7·4	0	6	
		3969	0·416	299·2	215·7	+ 6·0	0	4	
		3969	0·399	298·8	214·9	+ 5·3	0	3	
		3969	0·382	301·3	213·5	+ 5·6	0	4	
		3960	0·240	209·6	201·5	−18·1	0	9	
		3960	0·220	212·4	201·4	−16·8	0	1	
		3960	0·223	189·6	199·6	−18·8	0	4	
		3960	0·231	201·4	199·5	−18·4	0	3	
		3960	0·225	195·7	198·1	−18·6	0	1	
		3970	0·210	20·2	190·2	+ 5·2	0	3	
		3970	0·237	25·2	188·6	+ 6·3	0	1	
		3970	0·254	32·5	186·5	+ 6·3	1	4	
		3964*a*	0·359	29·0	184·2	+12·3	10	59	
		3968*a*	0·865	102·4	134·2	−13·8	32	185	
		3968	0·932	104·9	125·0	−16·1	0	12	445*c*
			0·721	54·4	156·0	+20·0			211
1895.				°	°	°			
96d·184	AW, CL		0·791	109·2	142·5	−18·9			134
I.			0·895	80·6	132·1	+ 5·6			172
April 7		Centre			(194·4)	(−6·1)	(54)	(373)	(2234)
97·660	AB, AW		0·940	243·0	245·3	−27·4			710
			0·929	290·9	239·8	+16·9			887
		3966	0·780	257·8	226·3	−13·3	0	5	191*p*
		3969	0·725	287·0	219·2	+ 8·0	0	7	
		3969	0·707	287·8	217·6	+ 8·1	5	22	
		3969	0·656	288·7	213·5	+ 7·4	7	28	70*c*
		3969	0·639	287·5	212·6	+ 6·3	2	9	
		3960	0·470	242·2	200·7	−18·0	2	7	
		3960	0·457	239·1	199·3	−19·0	0	13	
		3960	0·419	237·9	196·8	−18·4	0	14	
		3970*a*	0·343	301·6	191·9	+ 4·6	14	32	
		3970	0·330	300·0	191·5	+ 3·7	1	4	
		3970	0·326	303·1	190·7	+ 4·4	0	10	
		3970	0·326	307·4	189·9	+ 5·6	0	3	
		3970	0·306	304·2	189·5	+ 4·0	0	7	
		3970*b*	0·305	308·1	188·8	+ 5·0	5	11	
		3970	0·309	319·3	186·6	+ 7·7	0	7	
		3964*a*	0·348	333·9	183·9	+12·2	9	48	
		3964	0·362	335·8	183·6	+13·3	0	4	
		3971	0·448	104·4	148·7	−11·8	0	9	
		3971	0·462	103·1	147·7	−11·4	6	22	
		3971	0·486	107·2	146·5	−13·5	0	2	
		3971	0·503	107·8	145·5	−14·0	0	5	
		3971	0·502	105·5	145·3	−13·0	0	2	
		3968*a*	0·656	105·1	134·2	−14·4	21	151	62*c*
		3968	0·681	103·3	132·1	−13·4	0	10	
		3968	0·724	105·5	128·8	−15·3	0	12	74*c*
			0·876	78·5	113·4	−13·0			209
			0·927	69·5	110·3	+16·4			324
			0·905	97·2	109·7	− 9·1			280
			0·917	106·4	107·9	−17·4			546
April 8		Centre			(174·9)	(−6·0)	(72)	(444)	(3353)
98·450	M, FT		0·984	243·2	245·8	−27·4			379
			0·969	284·2	238·2	+12·1			244
			0·899	259·2	228·9	−12·3			185
			0·922	301·1	225·4	+25·6			301

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3969, April 6–11. A very small faint spot on April 6. Others have formed near it by April 7, and the group rapidly increases, forming, by April 9, an irregular stream consisting chiefly of three spots, *a*, *b* and *c*, *c* being large.

Group 3970, April 7–13. A few very small spots, *s* of Group 3964, and *f* Group 3969. The group has expanded into a straight stream by April 7, *a* and *b*, the first and last spots, being the largest. *a* and *b* continue to increase and have become large well-defined spots by April 11, whilst the smaller intermediate spots have died out by April 12.

Group 3971, April 8–11. A few small spots in a short straight stream, suddenly appearing *p* Group 3968. The axis of the group is at first inclined at an angle of about 30° to the equator, but eventually becomes parallel to it.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
98d.450	M, FT	3972	0·832	262·7	221·1	− 9·4	0	6	
		3972	0·826	262·0	220·4	−10·0	0	7	131c
		3972	0·818	262·2	219·6	− 9·8	0	2	
		3972	0·808	261·3	218·6	−10·6	1	9	
		3969a	0·835	283·5	219·3	+ 7·8	0	15	
		3969b	0·811	282·8	217·1	+ 6·7	14	28	
		3969	0·797	285·0	215·4	+ 8·2	2	8	210c
		3969c	0·778	284·5	213·7	+ 7·3	28	122	
		3969	0·760	283·4	212·3	+ 6·2	0	3	
		3960	0·603	246·4	200·1	−18·9	0	3	
		3960	0·562	245·9	197·1	−18·3	0	3	
		3970a	0·507	288·6	193·2	+ 4·0	31	109	
		3970	0·502	291·1	192·4	+ 5·1	0	3	
		3970	0·462	290·1	190·2	+ 3·7	0	4	
		3970	0·463	292·8	189·8	+ 4·9	0	10	
		3970b	0·449	294·4	188·6	+ 5·2	18	56	
		3970	0·435	299·7	186·8	+ 6·9	0	3	
		3964a	0·449	312·8	184·1	+12·0	7	35	
		3971	0·296	111·6	148·2	−12·0	4	13	
		3971	0·303	109·3	147·6	−11·5	0	3	
		3968a	0·516	108·1	134·2	−14·4	21	115	
		3968	0·546	106·1	132·0	−13·7	0	2	
			0·820	97·2	109·2	− 9·3			354
			0·863	66·2	109·0	+17·1			240
			0·882	75·8	104·6	+ 9·5			257
			0·878	106·4	102·9	−17·2			475
			0·963	68·7	96·8	+14·3			190
			0·947	101·3	92·7	−12·6			311
April 9		Centre			(164·5)	(−6·0)	(126)	(559)	(3277)
99·470	AW, AR		0·976	258·7	229·1	−12·3			184
			0·973	294·7	223·7	+22·4			283
			0·835	259·4	207·8	−12·1			130
			0·843	299·9	202·4	+21·2			214
		3972	0·919	260·3	218·2	−11·3	0	9	160c
		3972	0·918	261·0	218·0	−10·6	0	11	
		3969a	0·950	281·0	221·3	+ 8·5	0	13	
		3969b	0·931	280·3	218·2	+ 7·3	10	28	385c
		3969c	0·896	281·4	213·2	+ 7·5	17	126	
		3970a	0·704	282·0	194·5	+ 4·2	18	97	
		3970	0·691	282·3	193·4	+ 4·1	9	25	
		3970	0·676	283·6	192·1	+ 4·7	0	3	
		3970	0·651	286·1	189·8	+ 5·8	0	3	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
99d.470	AW, AR	3970b	0·631	285·9	188·4	+ 5·2	24	135	
		3964a	0·608	298·9	183·8	+12·1	4	15	
		3973a	0·439	348·3	156·4	+19·5	6	15	
		3973	0·444	352·2	154·7	+20·1	0	4	
		3973	0·459	356·1	152·9	+21·3	5	15	
		3971	0·109	168·0	149·7	−12·0	0	4	
		3971	0·127	154·9	147·9	−12·5	2	13	
		3971	0·137	138·1	145·7	−11·7	0	4	
		3974	0·302	148·6	141·4	−20·7	0	3	
		3968a	0·321	118·2	134·1	−14·3	18	110	
		3968	0·337	112·0	132·4	−12·8	0	5	
		3975a	0·989	95·8	69·1	− 6·6	0	54	688sp
		3975b	0·999	99·7	63·1	− 9·9	21	166	
			0·914	66·4	89·0	+18·7			344
			0·966	113·0	75·0	−23·7			117
April 10		Centre			(151·0)	(−5·9)	(134)	(858)	(2505)
100·443	CL, AR		0·935	260·7	207·7	−10·7			305
			0·885	252·7	200·5	−18·0			992
			0·917	295·0	200·2	+20·1			204
		3969b	0·987	278·7	217·7	+ 7·6	2	19	373c
		3969c	0·970	279·5	212·8	+ 7·7	12	87	
		3970a	0·842	278·7	194·4	+ 4·1	21	115	
		3970	0·833	279·2	193·5	+ 4·4	4	12	
		3970	0·821	279·9	192·1	+ 4·7	0	8	226c
		3970	0·793	282·2	189·1	+ 6·0	1	5	
		3970b	0·780	281·2	188·1	+ 5·0	23	118	
		3976	0·811	296·9	187·3	+17·8	0	3	
		3964a	0·751	291·8	183·4	+12·1	5	15	
		3973a	0·523	322·4	157·7	+19·0	5	12	
		3973	0·513	324·7	156·3	+19·2	0	2	
		3971	0·240	242·4	150·6	−12·0	0	3	
		3971	0·239	240·8	150·4	−12·3	0	2	
		3971	0·224	240·0	149·5	−12·1	0	2	
		3974	0·260	193·3	141·7	−20·6	0	3	
		3968a	0·161	155·6	134·2	−14·2	21	115	
		3968	0·209	157·5	133·3	−16·9	1	2	
		3977	0·853	66·0	83·7	+17·0	0	5	79c
		3977	0·871	67·2	81·4	+16·6	1	6	
		3978	0·899	107·7	73·8	−18·4	1	6	297f
		3975a	0·925	95·1	70·2	− 7·0	4	32	1129c
		3975b	0·952	98·9	65·5	−10·2	28	158	

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3972, April 9–10. A few very small faint spots, first seen near the West limb.
Group 3973, April 10–12. Three small but well-defined spots in a straight line, suddenly appearing near the central meridian. The leader, *a*, alone remains by April 12.
Group 3974, April 10–11. A very small faint spot.
Group 3975, April 10–22. Two spots, *a* and *b*, the latter being a large spot with double nucleus. *a* has disappeared by April 13, and *b* has broken up by April 14, and the group nearly disappears. A fresh outburst has taken place by April 16.
Group 3976, April 11. A very small faint spot.
Group 3977, April 11–13. A pair of very small spots on April 11; another pair on April 13. The group is not seen on April 12.
Group 3978, April 11–14. A very small spot on April 11. A wide pair of small spots, *a* and *b*, on the succeeding days. A third spot is seen between *a* and *b* on April 14.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
100d·443	CL, AR	3979*a*	0·942	78·0	69·3	+ 9·3	14	53	
		3979	0·951	79·0	67·6	+ 8·5	8	51	1406*c*
		3979	0·970	79·0	63·6	+ 9·2	10	52	
		3979*b*	0·981	76·8	61·0	+11·7	34	348	
			0·823	59·2	89·0	+21·1			90
April 11		Centre			(138·1)	(−5·8)	(195)	(1234)	(5101)
101·434	CL, FT		0·958	253·0	199·1	−17·9			481
			0·939	293·6	191·1	+19·8			280
			0·858	245·9	183·6	−23·6			174
			0·832	291·7	177·7	+14·4			267
		3970*a*	0·942	276·9	194·6	+ 4·8	18	106	
		3970*b*	0·904	278·1	188·8	+ 4·7	10	39	484*c*
		3973*a*	0·662	306·8	158·9	+18·5	4	12	
		3968	0·250	223·9	135·4	−16·0	0	2	
		3968*a*	0·217	226·5	134·4	−14·3	21	107	
		3968	0·244	214·8	133·4	−17·3	1	5	
		3980	0·179	24·9	120·8	+ 3·6	5	14	
		3980	0·206	23·9	120·3	+ 5·1	0	3	
		3980	0·189	30·0	119·7	+ 3·6	0	2	
		3980	0·221	33·8	118·0	+ 4·8	0	10	
		3978*a*	0·765	108·4	75·6	−17·8	4	16	
		3978*b*	0·799	111·2	72·7	−20·4	6	20	
		3975*a*	0·813	94·4	70·6	− 7·0	0	9	
		3975*b*	0·858	98·3	65·8	−10·1	43	200	823*c*
		3979	0·814	75·2	72·6	+ 8·5	0	4	
		3979	0·828	73·7	71·5	+10·0	0	3	
		3979	0·830	76·3	70·8	+ 8·0	0	5	
		3979	0·838	74·9	70·3	+ 9·3	10	36	
		3979*a*	0·851	74·6	68·9	+ 9·9	20	134	761*c*
		3979	0·860	75·7	67·7	+ 9·2	0	7	
		3979	0·882	75·7	65·2	+ 9·7	0	4	
		3979	0·894	76·1	63·7	+ 9·6	10	93	
		3979*b*	0·917	74·4	60·8	+11·8	46	362	
			0·770	104·6	74·8	−15·0			140
			0·913	106·5	58·8	−17·4			554
April 12		Centre			(125·1)	(−5·8)	(198)	(1193)	(3964)
102·399	AW, FT		0·936	245·5	181·9	−24·9			251
			0·921	289·3	179·7	+20·0			339
			0·859	244·6	170·7	−24·7			70
			0·750	305·1	153·3	+21·2			58
1895.				°	°	°			
102d·399	AW, FT	3970*a*	0·992	275·2	194·4	+ 4·6	0	62	
		3970*b*	0·975	276·2	188·6	+ 4·7	0	16	236*c*
		3981	0·796	297·6	164·3	+ 2·5	2	7	878*f*
		3968*a*	0·401	246·9	134·6	−14·3	21	109	
		3968	0·407	238·9	133·6	−17·4	1	3	
		3968	0·348	247·6	131·0	−13·0	0	2	
		3980	0·244	310·9	122·9	+ 3·6	0	6	
		3980	0·231	314·5	121·8	+ 3·6	0	2	
		3980	0·213	329·9	118·4	+ 5·0	0	5	
		3980	0·199	327·6	118·4	+ 4·0	0	5	
		3980	0·203	330·4	118·0	+ 4·5	0	7	
		3977	0·574	48·3	85·7	+17·4	0	3	
		3977	0·600	48·6	84·1	+18·3	0	2	
		3978*a*	0·607	112·5	76·3	−18·0	1	7	
		3978*b*	0·662	115·2	72·6	−20·8	4	16	
		3982	0·645	121·5	75·4	−24·2	6	16	
		3982	0·678	122·8	73·1	−25·9	6	12	
		3982	0·681	121·4	72·5	−25·2	0	1	
		3982	0·678	117·4	71·8	−22·5	0	2	
		3975	0·702	99·5	67·7	−10·7	1	4	
		3975*b*	0·722	98·4	66·0	−10·0	27	201	81*c*
		3979	0·692	73·7	70·5	+ 6·9	1	8	
		3979*a*	0·706	70·4	70·1	+ 9·5	32	174	
		3979	0·723	71·3	68·5	+ 9·3	3	7	
		3979	0·741	71·6	67·0	+ 9·5	0	5	
		3979	0·767	72·8	64·6	+ 9·3	10	43	
		3979	0·780	72·7	63·4	+ 9·7	3	7	250*c*
		3979	0·787	72·1	62·9	+10·3	0	4	
		3979	0·788	75·5	62·1	+ 7·8	0	3	
		3979	0·795	72·8	62·1	+ 9·9	5	15	
		3979	0·799	74·6	61·3	+ 8·7	0	8	
		3979*b*	0·808	71·1	61·2	+11·6	54	320	
			0·786	104·5	60·5	−14·9			198
			0·860	103·6	52·8	−14·6			290
			0·917	110·4	45·5	−21·0			198
			0·976	94·5	34·7	− 5·6			115
April 13					(112·3)	(−5·7)	(177)	(1082)	(2964)
103·497	AW, AR		0·977	288·2	172·9	+16·4			236
			0·958	277·4	170·2	+ 5·5			193
			0·888	295·9	155·8	+19·9			453
			0·768	257·5	148·0	−13·2			83
		3968*a*	0·605	254·1	134·5	−14·0	16	107	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3979, April 11–22. A fine group consisting chiefly of two large double spots, *a* and *b*, and a slight connecting stream of small spots.
Group 3980, April 12–17. A few small unstable spots, irregularly scattered.
Group 3981, April 13. A very small spot.
Group 3982, April 13–14. A few small unstable spots forming *s* of Group 3978.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
103d·497	AW, AB	3980	0·501	288·7	126·1	+ 4·3	0	2	
		3980	0·477	289·3	124·5	+ 4·0	0	3	
		3980	0·449	290·6	122·6	+ 4·0	2	6	
		3978*a*	0·408	121·8	76·6	−17·6	0	3	
		3978	0·429	120·6	75·1	−17·7	0	3	
		3978*b*	0·481	124·5	72·8	−20·9	0	8	
		3982	0·459	134·7	77·0	−24·0	0	8	
		3975	0·508	98·3	67·3	− 9·1	8	24	
		3975	0·539	99·2	65·3	− 9·6	5	50	
		3975	0·565	98·5	63·4	− 9·5	0	3	
		3975	0·570	99·7	63·2	−10·1	2	5	
		3979	0·491	64·0	71·5	+ 7·4	0	1	
		3979*a*	0·516	60·8	70·7	+ 9·6	40	188	
		3979	0·504	64·4	70·6	+ 7·6	0	6	
		3979	0·539	62·6	68·9	+ 9·5	0	8	
		3979	0·549	62·4	68·3	+ 9·8	0	4	
		3979	0·560	63·6	67·4	+ 9·6	0	8	112*c*
		3979	0·572	64·6	66·3	+ 9·4	0	2	
		3979	0·600	65·9	64·2	+ 9·5	0	5	
		3979	0·614	65·3	63·4	+10·2	0	8	
		3979	0·614	68·6	62·6	+ 8·4	0	3	
		3979	0·632	66·3	61·9	+10·2	0	5	
		3979*b*	0·651	64·2	61·1	+12·0	60	323	
			0·772	110·6	48·0	+19·4			233
			0·891	106·2	34·6	−17·0			232
			0·935	94·9	28·4	− 6·6			527
April 14		Centre			(97·8)	(−5·6)	(133)	(783)	(2069)
104·470	AW, FT		0·954	293·6	153·8	+20·6			227
		3983	0·888	263·8	147·8	− 8·0	0	3	287*s*
		3968*a*	0·768	256·6	135·1	−13·8	14	91	304*c*
		3980	0·651	282·4	124·4	+ 3·8	2	8	
		3980	0·638	282·4	123·5	+ 3·6	3	12	
		3980	0·614	282·5	121·8	+ 3·2	0	3	
		3980	0·604	283·0	121·0	+ 3·3	0	12	
		3980	0·601	284·7	120·5	+ 4·3	1	4	
		3984	0·324	260·9	103·8	− 8·2	0	5	
		3984	0·299	262·6	102·3	− 7·5	0	4	
		3984	0·293	260·3	101·9	− 8·1	0	3	
		3975	0·286	101·9	68·6	− 8·6	3	8	
		3975	0·295	102·7	68·1	− 9·0	0	6	
		3975	0·330	102·5	66·0	− 9·3	0	5	
		3975	0·350	104·5	65·0	−10·2	0	4	
1895.				°	°	°			
104d·470	AW, FT	3975	0·354	103·9	64·7	−10·0	2	8	
		3975	0·362	99·5	63·9	− 8·5	0	2	
		3975	0·369	100·8	63·6	− 9·1	0	6	
		3979*a*	0·354	42·5	71·0	+ 9·8	32	183	
		3979	0·388	47·5	68·2	+ 9·9	0	4	
		3979	0·420	52·2	65·4	+ 9·7	0	3	
		3979	0·437	54·3	64·0	+ 9·6	0	14	
		3979	0·468	55·2	62·1	+10·4	0	4	
		3979*b*	0·493	53·4	61·2	+12·0	58	316	
			0·762	92·8	35·3	− 5·7			103
			0·865	95·9	25·0	− 7·8			406
April 15		Centre			(85·0)	(−5·5)	(115)	(708)	(1327)
105·499	AW, FT		0·930	247·4	140·0	−23·0			75
		3983	0·971	262·3	148·0	− 8·8	0	8	247*s*
		3983	0·971	263·2	147·8	− 7·9	0	14	
		3968*a*	0·894	257·2	135·1	−13·9	14	91	162*f*
		3980	0·817	278·4	125·3	+ 3·7	5	24	
		3980	0·783	278·8	122·0	+ 3·5	0	6	134*c*
		3980	0·767	280·4	120·4	+ 4·4	0	6	
		3975	0·060	153·1	69·8	− 8·5	2	5	
		3975	0·051	139·6	69·5	− 7·7	0	4	
		3975	0·073	152·0	69·4	− 9·1	0	3	
		3975	0·059	123·0	68·6	− 7·3	0	1	
		3975	0·071	134·3	68·5	− 8·2	0	9	
		3975	0·085	135·3	67·9	− 8·9	0	3	
		3975	0·088	122·8	67·1	− 8·1	16	76	
		3975	0·114	125·8	66·0	− 9·2	0	3	
		3975	0·127	130·1	65·8	−10·0	0	11	
		3975	0·120	119·6	65·4	− 8·8	4	22	
		3975	0·140	125·0	64·7	−10·0	0	2	
		3975	0·150	125·8	64·3	−10·4	5	22	
		3979*a*	0·259	359·2	71·6	+ 9·6	30	154	
		3979	0·263	3·5	70·5	+ 9·8	2	6	
		3979*b*	0·342	29·6	61·5	+12·0	59	322	
			0·740	96·1	24·0	− 4·2			125
			0·941	60·1	6·7	+25·7			45
			0·914	104·5	5·0	−15·4			75
			0·952	69·3	2·3	+17·8			116
April 16		Centre			(71·4)	(−5·4)	(137)	(792)	(979)
106·456	AW, AB		0·831	262·8	115·2	− 9·0			138
			0·832	250·6	114·7	−19·1			83
			0·841	291·2	112·7	+14·6			208

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3983, April 15–16. A very small faint spot *p* Group 3968 on April 15. A pair of small spots on April 16.
Group 3984, April 15. Three very small faint spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
106d.456	AW, AR	3968a	0·972	257·0	135·9	−13·9	13	90	2058f
		3980	0·929	275·8	126·4	+ 3·3	11	36	565c
		3975	0·278	242·0	73·3	−12·6	0	4	
		3975	0·250	255·3	72·9	− 8·8	0	2	
		3975	0·232	263·0	72·2	− 6·8	0	2	
		3975	0·204	254·4	70·2	− 8·3	0	2	
		3975	0·198	258·2	70·0	− 7·5	0	3	
		3975	0·194	254·2	69·6	− 8·2	0	13	
		3975	0·186	249·6	68·9	− 9·1	4	7	
		3975	0·174	253·5	68·5	− 8·1	11	31	
		3975	0·164	250·0	67·7	− 8·5	0	4	
		3975	0·153	251·4	67·2	− 8·0	3	15	
		3975	0·160	243·6	67·1	− 9·3	8	28	
		3975	0·146	239·0	66·1	− 9·6	1	8	
		3975	0·131	242·9	65·5	− 8·7	0	11	
		3975	0·123	237·3	64·8	− 9·1	0	4	
		3975	0·138	228·3	64·8	−10·5	14	111	
		3975	0·164	218·3	64·8	−12·7	0	4	
		3975	0·119	232·5	64·3	− 9·5	2	8	
		3975	0·109	200·1	61·0	−11·2	1	3	
		3975	0·102	181·2	58·9	−11·1	0	7	
		3975	0·041	139·7	57·3	− 7·1	0	3	
		3979a	0·339	319·3	71·7	+ 9·7	30	143	
		3979	0·329	323·1	70·3	+10·0	1	4	
		3979	0·331	325·3	69·8	+10·6	0	1	
		3979	0·276	332·3	66·2	+ 8·8	0	2	
		3979	0·297	341·1	64·4	+11·0	0	2	
		3979	0·355	348·8	62·9	+15·0	0	1	
		3979b	0·299	351·0	61·5	+11·9	59	324	
		3985	0·382	113·2	37·7	−13·6	0	3	
		3985	0·400	113·2	36·6	−14·0	0	3	
		3985	0·412	116·0	36·3	−15·3	0	8	
			0·858	53·8	7·9	+27·1			55
			0·890	63·9	0·5	+20·3			84
			0·889	91·0	356·1	− 3·3			100
			0·917	107·8	352·1	−18·4			102
			0·953	74·0	348·6	+13·5			184
April 17		Centre			(58·8)	(−5·3)	(158)	(887)	(1724)
107·482	FT, AW		0·964	275·5	119·1	+ 3·9			304
			0·926	261·7	113·3	− 9·7			175
			0·894	252·7	108·6	−17·8			170
			0·905	288·7	107·3	+14·4			167

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
107d.482	FT, AW	3975	0·425	263·0	70·3	− 7·7	1	3	
		3975	0·421	260·9	69·9	− 8·5	2	14	
		3975	0·405	262·5	69·0	− 7·8	3	22	
		3975	0·397	259·0	68·3	− 9·1	6	35	
		3975	0·393	261·9	68·2	− 8·0	0	3	
		3975	0·366	260·6	66·5	− 8·2	1	3	
		3975	0·364	256·7	66·2	− 9·6	0	30	
		3975	0·348	254·2	65·0	−10·3	13	134	
		3979a	0·507	298·6	71·9	+ 9·4	22	149	
		3979	0·486	302·8	69·6	+10·5	0	4	
		3979	0·393	311·4	62·5	+10·1	2	8	
		3979	0·383	312·3	61·8	+ 9·9	0	3	
		3979b	0·401	316·1	61·6	+11·8	40	272	
		3979	0·376	313·9	61·1	+10·1	2	10	
		3986	0·248	214·9	53·7	−16·9	1	5	
		3986	0·232	215·4	53·2	−16·0	0	2	
		3986	0·195	208·0	50·6	−15·1	3	8	
			0·901	69·2	344·1	+16·2			212
			0·964	98·5	335·2	− 9·6			76
April 18		Centre			(45·2)	(−5·2)	(96)	(705)	(1104)
108·431	CL, FT		0·966	262·4	108·0	− 8·6			78
			0·963	252·3	107·6	−18·4			141
			0·947	272·7	103·6	+ 0·9			119
			0·942	284·0	101·3	+11·4			212
			0·907	295·8	93·4	+20·8			424
			0·855	257·1	91·5	−13·7			340
		3975	0·611	264·7	70·4	− 7·3	0	3	
		3975	0·609	263·2	70·2	− 8·2	3	11	
		3975	0·596	265·0	69·3	− 7·1	7	20	
		3975	0·595	262·0	69·2	− 8·9	1	15	
		3975	0·585	263·7	68·5	− 7·8	4	18	
		3975	0·565	260·5	67·0	− 9·6	3	20	
		3975	0·545	264·2	65·7	− 7·5	1	5	
		3975	0·540	261·3	65·3	− 9·0	4	18	
		3975	0·541	258·0	65·2	−10·8	15	92	
		3975	0·449	254·7	58·8	−11·4	0	2	
		3979a	0·667	290·3	71·9	+ 9·5	21	144	161c
		3979	0·556	297·1	62·8	+10·2	1	4	
		3979b	0·551	300·8	61·5	+11·9	42	269	
		3979	0·530	297·3	61·1	+ 9·5	0	2	
		3986	0·345	240·6	50·7	−14·6	0	2	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3985, April 17. Three very small faint spots.
Group 3986, April 18–19. Three very small faint spots on April 18. The last alone remains by April 19.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
108d·431	CL,FT	3987	0·868	72·5	335·0	+12·4	2	10	95c
		3987	0·875	70·7	334·5	+14·1	0	4	
		3988	0·954	70·1	323·0	+17·2	19	140	665c
		3988	0·980	69·4	317·0	+19·0	5	25	
April 19		Centre			(32·7)	(−5·1)	(128)	(804)	(2235)
109·444	CL,FT		0·947	289·9	87·7	+17·1			292
			0·888	257·8	82·1	−13·1			398
		3975	0·769	263·0	69·6	− 8·6	0	2	
		3975	0·761	264·1	68·9	− 7·8	3	27	189c
		3975	0·757	262·5	68·6	− 8·9	0	9	
		3975	0·718	260·2	65·1	−10·5	18	129	
		3979a	0·814	285·5	71·8	+ 9·5	29	135	367c
		3979	0·726	289·5	63·2	+10·4	0	6	
		3979b	0·711	292·2	61·4	+11·9	36	258	
		3987	0·730	68·3	335·6	+12·0	2	19	
		3987	0·757	66·2	334·9	+14·3	0	4	74c
		3987	0·760	67·6	333·2	+13·4	0	4	
		3988a	0·863	67·2	323·3	+16·8	19	127	
		3988	0·892	68·3	319·6	+16·8	0	24	
		3988	0·903	67·3	318·4	+18·0	14	40	
		3988	0·906	66·3	318·2	+19·0	2	11	
		3988	0·921	66·1	316·1	+19·7	0	22	
		3988	0·919	68·3	315·8	+17·7	0	10	
		3988	0·923	67·7	315·4	+18·3	0	33	
		3989a	0·979	65·1	304·6	+23·1	86	551	
April 20		Centre			(19·3)	(−5·0)	(209)	(1411)	(1320)
110·234	CL,FT		0·941	257·9	79·4	−13·0			788
			0·830	253·8	64·8	−16·2			238
I.		3975	0·902	265·8	73·4	− 5·9	0	5	
		3975	0·872	264·1	69·7	− 7·5	0	14	
		3975	0·872	263·4	69·7	− 8·2	0	5	
		3975	0·860	263·6	68·3	− 8·0	0	4	441c
		3975	0·856	259·6	67·9	−11·4	0	2	
		3975	0·836	260·9	65·7	−10·3	4	18	
		3975	0·835	259·5	65·6	−11·4	19	87	
		3979a	0·941	282·6	77·5	+10·1	0	7	
		3979	0·909	282·5	72·7	+ 9·2	23	113	690c
		3979b	0·825	287·6	62·1	+11·5	40	245	
		3987	0·594	62·8	336·4	+11·6	1	5	
1895.				°	°	°			
110d·234	CL,FT	3988a	0·765	63·1	323·6	+16·8	27	135	
		3988	0·778	62·2	322·8	+17·8	0	3	
I.		3988	0·782	63·0	322·2	+17·5	2	7	
		3988	0·795	62·9	321·0	+18·0	12	85	
		3988	0·804	61·9	320·5	+19·0	0	6	
		3988	0·797	64·6	320·3	+16·8	14	54	
		3988	0·825	62·6	318·2	+19·2	10	55	660c
		3988	0·823	64·4	317·9	+17·7	5	55	
		3988	0·838	64·5	316·3	+18·2	2	7	
		3988	0·842	63·1	316·3	+19·5	0	8	
		3988	0·845	62·7	316·1	+19·8	0	10	
		3988	0·846	64·1	315·6	+18·7	0	5	
		3988	0·857	62·6	314·9	+20·4	11	73	
		3988	0·854	64·1	314·8	+19·0	0	4	
		3989a	0·931	62·3	305·1	+23·5	130	553	
		3989	0·952	62·3	301·4	+24·4	0	13	
		3989	0·964	62·9	298·6	+24·5	0	8	660c
		3989	0·971	64·4	296·5	+23·4	9	121	
		3989b	0·978	62·1	295·0	+26·0	31	223	
		3990	0·988	71·1	290·2	+17·8	0	46	
			0·952	96·4	296·5	− 7·7	0		135
April 21		Centre			(8·9)	(−4·9)	(347)	(1976)	(3612)
111·353	AW,M		0·758	262·1	43·4	− 9·2			92
			0·774	245·6	43·3	−21·9			112
I.		3975	0·945	259·9	65·3	−11·1	15	104	1260c
		3979a	0·983	280·7	72·3	+ 9·6	9	103	596c
		3979b	0·937	284·8	61·7	+12·0	71	236	
		3991	0·359	236·7	12·2	−16·0	0	2	
		3991a	0·309	235·7	9·3	−14·7	11	26	
		3991	0·294	232·8	8·1	−15·0	0	8	
		3992	0·196	197·1	357·5	−15·7	0	6	
		3988a	0·602	54·2	323·6	+16·4	27	135	
		3988	0·616	55·8	322·2	+16·1	0	7	
		3988	0·631	53·3	322·1	+18·0	21	88	
		3988	0·630	56·3	321·1	+16·3	21	94	
		3988	0·651	53·4	320·8	+18·7	0	3	
		3988	0·665	55·1	319·2	+18·3	0	3	
		3988	0·660	56·7	319·0	+17·2	1	24	619c
		3988	0·688	57·2	316·8	+18·0	4	23	
		3988	0·703	55·3	316·4	+19·7	5	48	
		3988	0·727	51·9	315·9	+22·7	0	3	
		3988	0·735	54·9	314·1	+21·2	7	37	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.

The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3987, April 19–21. Some small spots *sp* Group 3988.

Group 3988, April 19–30. A number of spots in two straight parallel streams. The streams speedily intermingle and form one fine irregular stream, which tends to simplify by the coalescence of the individual spots, especially of the preceding spots, with *a*, the leader. *a* has in this way become a large composite spot by April 23, and continues to develop until April 26.

Group 3989, April 20–May 2. A fine group consisting principally of a very large regular spot, *a*, and a distant large companion, *b*. A few spots, mostly small, are seen round *b* and between *a* and *b*. Groups 3987, 3988 and 3989 form together one magnificent straight stream, inclined at an angle of 20° to the equator.

Group 3990, April 21–25. A very close pair of small spots *s* Group 3989. The two spots are always measured as one.

Group 3991, April 22–26. A small dark spot, *a*, generally attended by one or two small companions. *a* has divided into two parts by April 25.

Group 3992, April 22. A small spot *f* Group 3991.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
111d·353	AW,M	3988	0·744	56·7	312·7	+20·4	0	13	
		3988	0·756	55·1	312·3	+22·0	0	9	
I.		3989*a*	0·834	57·2	304·3	+23·7	127	610	
		3989	0·827	60·1	304·0	+21·2	0	14	
		3989	0·879	58·3	298·9	+24·7	6	50	911*c*
		3989	0·894	60·9	296·1	+23·2	7	57	
		3989*b*	0·910	58·7	294·6	+25·7	32	189	
		3990	0·925	68·5	289·7	+17·7	11	84	237*s*
			0·873	110·3	293·7	−20·1			93
			0·878	96·2	292·6	− 7·8			311
			0·989	78·2	274·0	+10·9			230
April 22		Centre			(354·1)	(−4·9)	(375)	(1976)	(4461)
112·599	CL,FT		0·969	254·9	53·9	−15·8			419
			0·892	266·6	40·4	+ 0·9			186
			0·890	247·2	40·1	−22·4			162
			0·722	260·8	23·9	−10·0			192
		3991*a*	0·543	252·6	9·7	−13·4	2	16	
		3988*a*	0·426	33·9	323·5	+16·0	40	267	
		3988	0·449	31·4	323·5	+17·8	2	6	
		3988	0·455	33·8	322·4	+17·5	17	69	
		3988	0·442	37·7	321·5	+15·8	0	12	
		3988	0·504	38·5	318·4	+18·6	0	5	
		3988	0·491	40·3	318·3	+17·4	0	3	
		3988	0·510	40·9	317·2	+18·1	11	46	
		3988	0·546	40·4	315·7	+20·1	4	18	
		3988	0·571	41·4	314·0	+20·9	0	3	
		3988	0·560	42·9	313·9	+19·8	0	19	
		3988	0·581	41·2	313·5	+21·5	0	8	392*c*
		3988	0·591	40·8	313·2	+22·1	0	4	
		3989	0·644	48·5	306·7	+21·1	0	7	
		3989*a*	0·692	47·7	303·8	+23·7	121	543	
		3989	0·741	51·0	298·8	+24·0	0	6	
		3989	0·732	52·8	298·7	+22·5	0	13	
		3989	0·754	50·9	297·8	+24·7	0	8	
		3989	0·739	54·3	297·6	+21·9	4	12	
		3989	0·765	51·9	296·4	+24·5	2	11	
		3989	0·755	54·4	296·2	+22·5	4	66	
		3989*b*	0·783	52·0	294·8	+25·3	26	171	
		3990	0·795	63·8	289·5	+17·4	6	37	315*f*
			0·904	75·6	274·8	+10·9			339
April 23		Centre			(337·7)	(−4·8)	(239)	(1350)	(2005)
1895.				°	°	°			
113d·410	AW, AR		0·962	264·3	41·3	− 6·8			177
			0·957	248·8	40·4	−21·6			315
			0·844	261·8	24·7	− 9·5			171
		3991*a*	0·687	256·0	10·0	−13·0	13	61	
		3991	0·653	254·5	7·2	−13·6	3	30	75*c*
		3993	0·631	248·2	4·7	−17·3	0	1	
		3993	0·603	248·5	2·7	−16·6	5	19	45*c*
		3993	0·611	243·8	2·4	−19·5	1	5	
		3988*a*	0·360	8·0	324·0	+16·2	41	238	
		3988	0·395	8·8	323·4	+18·2	2	6	
		3988	0·415	8·4	323·3	+19·4	0	1	
		3988	0·387	11·2	322·5	+17·7	15	53	
		3988	0·371	12·6	322·2	+16·5	3	20	
		3988	0·380	14·1	321·5	+16·9	2	19	
		3988	0·391	16·6	320·3	+17·3	2	25	
		3988	0·411	21·7	317·9	+17·7	5	33	
		3988	0·428	21·6	317·5	+18·7	1	13	
		3988	0·402	23·6	317·4	+16·9	0	3	
		3988	0·430	24·4	316·2	+18·4	4	21	
		3988	0·465	23·9	315·5	+20·4	2	17	
		3988	0·467	26·4	314·3	+20·0	2	10	
		3988	0·508	25·5	313·4	+22·6	0	5	
		3988	0·487	27·4	313·2	+20·9	0	8	
		3989*a*	0·596	37·5	303·7	+23·8	125	544	
		3989	0·628	36·0	302·8	+26·2	1	18	
		3989	0·632	41·0	300·1	+24·2	0	2	
		3989	0·642	42·1	298·9	+24·2	0	2	
		3989	0·629	44·8	298·5	+22·3	2	24	
		3989	0·637	47·3	296·9	+21·5	0	2	
		3989	0·649	46·7	296·4	+22·3	3	46	
		3989	0·670	43·7	296·4	+24·9	0	10	
		3989*b*	0·690	44·5	294·7	+25·4	28	166	
		3989	0·715	43·0	293·8	+27·5	0	3	152*c*
		3990	0·686	58·2	289·5	+17·4	5	25	104*f*
		3994	0·816	74·0	274·4	+10·2	0	32	
		3994	0·831	74·3	272·8	+10·3	0	4	209*c*
		3995*a*	0·985	114·9	246·0	−25·3	18	131	520*c*
			0·963	158·5	266·5	−66·1			264
			0·976	70·1	252·1	+18·3			233
April 24		Centre			(327·0)	(−4·7)	(283)	(1597)	(2265)
114·648	AR, FT		0·960	260·8	24·8	−10·2			351
			0·801	251·2	0·0	−17·8			77

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3993, April 24. A few small spots in a short stream *sf* Group 3991.
Group 3994, April 24–27. A few small faint spots in a short irregular stream.
Group 3995, April 24–May 3. A regular spot, *a*, with a small regular companion, *b*. *b* has disappeared by April 28. *a* steadily diminishes in size from day to day. It is accompanied by one or two very small unstable companions from April 29 to May 3.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
114d·648	AR, FT	3991*a*	0·864	258·5	10·5	−12·3	4	11	139*c*
		3991*a*	0·859	257·6	9·9	−13·0	0	24	
		3991	0·832	255·7	6·8	−14·4	0	4	
		3991	0·830	257·8	6·7	−12·7	0	4	
		3988*a*	0·419	327·4	324·2	+16·1	47	297	
		3988	0·390	325·7	323·7	+14·3	0	1	
		3988	0·424	332·0	322·7	+17·4	8	32	
		3988	0·384	330·2	322·0	+14·9	0	8	
		3988	0·322	324·4	321·6	+10·6	0	2	
		3988	0·412	334·1	321·5	+17·2	9	82	
		3988	0·409	344·3	317·4	+18·6	8	52	
		3988	0·427	346·5	316·8	+19·8	0	7	
		3988	0·411	346·5	316·5	+18·9	8	29	
		3988	0·442	347·9	316·4	+20·9	0	2	
		3988	0·423	348·7	315·7	+19·8	0	3	
		3988	0·438	349·4	315·6	+20·8	0	5	
		3988	0·438	350·7	315·0	+20·9	0	5	
		3989*a*	0·492	13·7	303·4	+23·9	122	572	
		3989	0·530	12·6	303·3	+26·5	0	6	
		3989	0·465	16·9	302·4	+21·8	3	20	
		3989	0·530	25·5	296·3	+24·0	0	19	
		3989	0·507	27·4	296·2	+22·2	0	5	
		3989	0·543	25·8	295·7	+24·7	0	4	
		3989	0·568	25·2	295·1	+26·4	0	3	
		3989*b*	0·556	26·9	294·6	+25·2	17	118	
		3996	0·315	119·1	294·4	−13·2	3	8	
		3996	0·326	117·0	293·4	−12·9	0	6	
		3996	0·351	116·4	291·9	−13·3	0	4	
		3996	0·358	118·3	291·8	−14·1	1	4	
		3990	0·507	43·2	289·5	+17·4	4	18	
		3994	0·623	66·4	275·3	+10·7	0	25	
		3994	0·654	67·9	272·8	+10·6	0	7	
		3995*a*	0·909	115·4	246·0	−25·0	18	90	994*c*
		3995*b*	0·921	116·1	244·2	−25·8	3	21	
		3997	0·958	117·6	237·4	−27·7	5	12	
		3997*a*	0·964	117·3	236·0	−27·5	11	49	
			0·898	74·4	248·8	+11·8			150
			0·914	66·5	248·3	+19·3			188
April 25		Centre			(310·7)	(−4·6)	(271)	(1559)	(1899)
115·645	AW, AR		0·905	252·7	2·2	−17·6			131
			0·843	292·9	351·3	+16·5			90
		3991*a*	0·955	258·4	10·5	−12·4	5	12	243*f*
		3991*a*	0·953	257·3	10·1	−13·5	0	7	
		3988	0·584	309·0	325·7	+17·5	0	2	
1895.				°	°	°			
115d·645	AW, AR	3988*a*	0·559	308·0	324·6	+16·1	67	377	
		3988	0·548	311·9	322·6	+17·4	7	37	
		3988	0·521	308·2	322·3	+14·7	1	2	
		3988	0·538	314·4	321·1	+18·0	0	5	
		3988	0·524	318·2	318·9	+18·7	0	2	
		3988	0·508	316·4	318·8	+17·3	0	5	
		3988	0·503	321·3	316·7	+18·8	6	33	
		3988	0·513	322·8	316·6	+19·8	0	10	
		3989	0·527	348·8	303·9	+26·6	0	1	
		3989*a*	0·483	348·9	303·2	+23·7	124	570	
		3989	0·537	356·1	299·8	+27·8	0	1	
		3989	0·510	356·7	299·3	+26·0	1	5	
		3989	0·467	356·9	299·0	+23·2	0	3	
		3989	0·446	357·6	298·5	+21·9	0	5	
		3989	0·482	1·3	296·7	+24·2	3	30	
		3989	0·440	3·4	295·8	+21·4	0	2	
		3989	0·493	2·9	295·8	+24·9	2	9	
		3989*b*	0·496	5·5	294·4	+25·0	17	97	
		3996*a*	0·148	173·5	296·4	−13·0	4	14	
		3996	0·161	159·9	294·2	−13·1	0	1	
		3996	0·198	162·4	293·9	−15·3	1	5	
		3996	0·169	152·8	292·9	−13·1	2	6	
		3996	0·175	148·6	292·1	−13·0	1	8	
		3996	0·216	153·6	291·7	−15·6	0	6	
		3998*a*	0·279	25·7	290·4	+10·1	7	24	
		3998	0·295	30·8	288·6	+10·2	0	1	
		3998	0·300	34·0	287·6	+ 9·9	0	1	
		3998*b*	0·322	32·4	287·3	+11·3	8	21	
		3998	0·341	35·6	285·8	+11·6	1	3	
		3994	0·451	55·0	275·4	+10·8	0	8	
		3994	0·483	57·1	273·1	+11·1	1	4	
		3994	0·493	57·9	272·3	+11·1	0	4	
		3994	0·503	57·0	272·0	+11·8	0	4	
		3994	0·508	58·1	271·4	+11·5	0	1	
		3995*a*	0·808	117·7	245·6	−24·9	16	92	706
		3995*b*	0·825	118·0	243·8	−25·5	6	20	
		3997	0·886	119·2	236·6	−27·9	1	11	
		3997*a*	0·894	118·5	235·5	−27·3	7	43	
		3999*a*	0·953	74·8	226·9	+13·0	20	75	715*c*
		3999*b*	0·984	75·3	219·3	+13·6	17	78	
			0·867	60·9	242·6	+22·4			108
			0·877	71·0	238·8	+14·3			148
			0·936	52·7	235·6	+32·5			187
April 26		Centre			(297·4)	(−4·5)	(325)	(1645)	(2328)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 3996. April 25–May 2. A few very small spots in a straight stream on April 25. A second stream parallel to the first is seen with it on April 26. The second stream has disappeared by April 28, but the first stream has considerably increased in size, and consists on April 29 mainly of four spots, *a*, *b*, *c* and *d*.
Group 3997, April 25–May 1. A spot, *a*, preceded on April 25 and 26 by a small companion. The group follows Group 3995.
Group 3998, April 26–30. Two small spots, *a* and *b*, with a few very small companions on April 26. The companions have disappeared by April 27; *a* and *b* have broken up by April 28; the group is not seen on April 29, and a very small spot is all that is visible on April 30.
Group 3999, April 26–May 5. Two regular spots, *a* and *b*, on April 26, 27 and 28. The group on April 29 and the succeeding days forms a tolerably straight stream, with four principal spots, *a*, *b*, *c* and *d*; *a* and *b* being the first and last spots. The group diminishes from day to day, and *b* has disappeared by May 1.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
116d·137	M,FT		0·956	253·6	4·2	−17·0			244
			0·874	288·2	349·3	+13·6			145
I.		3988	0·664	302·7	326·6	+17·4	0	8	
		3988a	0·636	301·8	325·9	+15·9	53	359	
		3988	0·621	305·2	322·9	+17·2	9	27	
		3988	0·611	305·9	322·0	+17·2	0	12	392c
		3988	0·604	304·7	321·9	+16·3	13	38	
		3988	0·606	307·9	321·0	+18·0	4	11	
		3988	0·589	305·9	320·6	+16·3	0	3	
		3988	0·596	310·5	319·4	+18·8	0	6	
		3988	0·576	308·1	319·1	+16·9	0	3	
		3988	0·578	309·7	318·6	+17·7	6	23	
		3988	0·567	312·7	316·9	+18·6	4	24	
		3989a	0·510	337·1	303·4	+23·7	142	579	
		3989	0·541	339·7	302·9	+26·1	0	4	
		3989	0·481	345·7	298·2	+24·0	0	8	
		3989	0·488	349·7	296·4	+24·2	0	11	
		3989	0·502	350·5	296·2	+25·2	0	8	
		3989b	0·496	353·4	294·5	+25·0	22	91	
		3996a	0·176	214·6	296·8	−12·7	3	22	
		3996	0·196	195·5	294·0	−15·3	0	1	
		3996	0·160	193·5	293·1	−13·3	0	4	
		3996	0·155	188·7	292·3	−13·2	0	12	
		3998a	0·251	358·7	291·2	+10·1	5	26	
		3998b	0·275	13·0	287·3	+11·1	6	27	
		3994	0·356	46·0	275·9	+10·0	0	8	
		3994	0·368	45·5	275·5	+10·7	1	16	
		3994	0·362	50·5	274·5	+ 9·1	0	4	
		3995a	0·748	119·4	245·3	−24·6	20	86	
		3995b	0·769	119·4	243·4	−25·1	5	38	755c
		3997a	0·851	119·6	234·7	−27·3	2	34	
		3999a	0·913	73·2	227·2	+13·4	27	108	372c
		3999b	0·964	73·9	218·3	+14·2	10	45	
			0·776	60·1	245·5	+19·7			172
			0·830	69·8	237·7	+14·0			149
			0·911	49·2	234·7	+34·1			161
April 27		Centre			(290·9)	(−4·4)	(332)	(1646)	(2390)
117·175	CL, AW		0·959	271·7	350·4	+ 0·4			116
			0·911	287·9	340·5	+14·4			228
		3988a	0·791	294·0	325·7	+15·9	60	318	
		3988	0·768	295·4	323·3	+16·3	18	132	
		3988	0·753	296·4	321·7	+16·5	5	39	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
117d·175	CL, AW	3988	0·753	299·2	320·9	+18·4	0	6	458c
		3988	0·746	300·7	319·8	+19·2	1	6	
I.		3988	0·728	300·1	318·5	+18·1	15	53	
		3988	0·720	301·5	317·5	+18·8	0	6	
		3989a	0·614	319·0	303·2	+23·7	133	520	
		3989	0·550	322·7	298·2	+21·9	0	6	
		3989b	0·561	331·3	294·5	+25·3	15	69	
		3996a	0·369	246·6	297·4	−12·5	18	76	
		3996	0·312	239·5	293·2	−13·2	3	18	
		3996	0·296	237·1	291·9	−13·4	5	50	
		3998	0·360	312·3	292·8	+ 9·9	1	8	
		3998	0·344	315·0	291·4	+ 9·9	2	9	
		3998	0·321	321·8	288·8	+10·3	0	2	
		3998	0·324	328·9	287·0	+11·8	2	8	
		3998	0·306	328·1	286·6	+10·8	3	17	
		3995a	0·606	126·1	244·8	−24·5	15	53	81c
		3997a	0·728	123·8	234·6	−27·1	7	25	57c
		3999a	0·796	69·4	227·4	+13·5	23	131	451c
		3999b	0·883	71·4	217·7	+14·2	15	59	
			0·876	56·6	222·7	+26·4			132
			0·865	79·0	218·5	+ 7·2			292
			0·934	100·0	207·9	−10·9			246
			0·959	71·3	206·1	+16·5			184
			0·960	108·9	203·2	−19·3			381
April 28		Centre			(277·2)	(−4·3)	(341)	(1611)	(2626)
118·665	CL, FT		0·773	299·4	302·8	+19·3			130
		3988a	0·946	288·8	326·1	+16·3	46	371	
		3988	0·924	284·8	323·2	+12·0	0	8	
		3988	0·926	290·9	322·4	+17·5	0	10	
		3988	0·922	289·2	322·1	+15·9	0	8	755c
		3988	0·917	291·8	320·9	+18·1	5	28	
		3988	0·910	293·4	319·5	+19·2	0	5	
		3988	0·895	293·2	317·5	+18·6	6	25	
		3989	0·812	307·1	303·6	+26·4	2	6	
		3989a	0·794	304·7	302·9	+23·8	113	525	260c
		3989	0·722	311·3	294·1	+25·0	11	41	
		3989b	0·708	312·4	292·6	+25·0	0	1	162p
		3996a	0·662	255·7	298·4	−12·6	15	83	
		3996	0·636	256·2	296·5	−12·0	0	7	
		3996b	0·626	254·7	295·6	−12·8	12	39	
		3996	0·595	254·1	293·3	−12·8	0	3	
		3996	0·587	258·6	293·1	−10·0	1	6	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
118d·665	CL,FT	3996c	0·584	253·8	292·5	−12·8	6	12	
		3996	0·588	251·0	292·4	−14·4	0	3	
		3996	0·567	253·4	291·2	−12·8	2	13	
		3996	0·565	250·2	290·7	−14·6	0	2	
		3996d	0·555	251·9	290·2	−13·4	17	76	
		3995a	0·406	150·0	244·7	−24·6	11	40	
		3995	0·470	148·8	241·6	−27·7	0	4	
		3997a	0·519	139·4	235·3	−27·0	4	17	
		3999a	0·557	58·9	228·3	+13·0	21	106	
		3999	0·578	60·7	226·5	+12·8	0	5	
		3999c	0·606	62·4	224·2	+12·8	10	55	
		3999	0·615	63·8	223·3	+12·3	0	4	157c
		3999d	0·657	62·8	220·6	+14·1	0	28	
		3999	0·655	64·9	220·2	+12·8	0	6	
		3999b	0·681	65·4	218·2	+13·2	6	26	
			0·765	81·6	208·4	+ 3·7			76
			0·828	65·4	205·5	+17·6			115
			0·821	111·6	203·3	−20·1			217
			0·957	113·6	184·3	−23·8			124
April 29		Centre			(257·5)	(−4·2)	(288)	(1563)	(1996)
119·415	AW, AR		0·947	293·2	315·6	+20·4			957
		3988a	0·985	287·1	325·8	+16·0	41	237	
		3988	0·981	288·8	324·3	+17·5	0	21	
		3988	0·978	288·0	323·5	+16·6	0	10	
		3988	0·971	289·4	321·4	+17·7	0	30	1022c
		3988	0·967	284·3	321·2	+12·7	0	10	
		3988	0·954	290·8	317·4	+18·4	0	7	
		3989a	0·874	300·5	302·9	+24·0	96	562	
		3989	0·853	305·9	298·5	+27·4	0	4	
		3989	0·834	304·0	297·2	+25·1	0	7	753c
		3989b	0·806	305·8	293·7	+25·2	7	21	
		3989	0·792	306·5	292·1	+25·2	0	3	
		3996a	0·779	256·9	298·5	−12·8	12	87	
		3996b	0·758	256·5	296·5	−12·9	8	33	
		3996	0·743	255·8	295·1	−13·3	0	5	
		3996	0·739	256·2	294·8	−12·9	1	7	
		3996	0·719	254·2	293·0	−14·2	0	1	
		3996c	0·712	255·4	292·5	−13·2	9	59	228c
		3996	0·698	256·3	291·4	−12·4	0	2	
		3996	0·692	255·5	290·8	−13·0	0	3	
		3996d	0·681	255·2	290·0	−13·1	14	71	
		3996	0·669	256·7	289·1	−11·9	0	1	
		3998	0·736	288·2	292·7	+10·4	0	4	
1895.				°	°	°			
119d·415	AW, AR	3995a	0·352	171·6	244·4	−24·4	4	26	
		3995	0·402	167·4	242·0	−27·1	0	7 8	
		3995	0·383	164·8	241·2	−25·7	0		
		3997a	0·434	153·8	235·3	−26·8	2	9	
		4000	0·474	155·0	234·4	−29·4	0	4	
		4001	0·555	153·0	230·1	−33·5	0	2	
		3999	0·493	39·6	228·3	+18·4	0	1	
		3999a	0·439	47·6	228·2	+13·3	17	98	
		3999	0·452	49·0	227·2	+13·4	0	8	
		3999	0·460	49·8	226·5	+13·4	0	5	
		3999c	0·477	52·8	224·8	+13·0	9	49	
		3999	0·494	51·5	224·2	+14·1	0	1	
		3999	0·490	54·2	223·6	+12·9	2	10	
		3999	0·514	52·4	222·8	+14·6	0	3	
		3999	0·519	52·1	222·6	+14·9	0	4	
		3999	0·534	52·7	221·6	+15·1	0	2	
		3999	0·537	54·0	221·0	+14·7	0	2	
		3999d	0·547	55·2	220·1	+14·5	7	32	
		3999	0·566	52·0	220·0	+16·7	0	2	
		3999b	0·565	58·9	217·9	+13·4	3	12	
			0·706	117·7	205·3	−22·2			321
			0·881	73·1	188·0	+12·8			273
			0·905	60·7	187·9	+24·2			121
			0·917	114·3	181·8	−23·9			130
April 30		Centre			(247·6)	(−4·1)	(232)	(1464) 1470	(3805)
120·480	CL,FT		0·848	286·2	289·5	+11·4			215
			0·687	289·5	274·5	+10·2			86
		3989a	0·955	296·5	302·3	+23·8	107	467	560c
		3989b	0·906	300·5	293·1	+25·4	0	11	
		3996a	0·902	257·7	297·9	−12·8	17	90	
		3996b	0·890	257·5	296·4	−13·0	15	50	416c
		3996c	0·847	257·7	291·2	−12·6	7	18	
		3996d	0·833	257·3	289·7	−12·8	9	28	
		4002	0·453	284·1	259·5	+ 2·8	0	1	
		4002	0·437	285·2	258·4	+ 2·9	0	5	
		4002	0·412	284·9	256·9	+ 2·4	0	4	
		3995a	0·390	205·4	244·0	−24·5	0	11	
		3995	0·370	198·8	241·0	−24·4	0	2	
		3997a	0·388	184·2	235·3	−26·6	0	5	
		3999a	0·314	17·7	227·9	+13·4	9	49	
		3999	0·322	21·3	226·6	+13·4	0	4	
		3999c	0·322	26·5	225·1	+12·7	15	30	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4000, April 30–May 2. A very small faint spot, not seen on May 1.
Group 4001, April 30. A very small faint spot.
Group 4002, May 1-4. Three very small spots on May 1. The group has become a short stream, of which *a*, the leader, is the largest by May 2. Only *a* remains on May 4.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
120d·480	CL,FT	3999*d*	0·389	35·6	220·0	+14·5	7	25	
		4003	0·662	101·1	192·4	−10·3	3	9	
May 1		Centre			(233·5)	(−4·0)	(189)	(809)	(1277)
121·395	AW, CL		0·953	264·7	293·8	− 6·3			136
			0·948	308·6	285·3	+34·6			201
			0·893	293·8	281·1	+19·2			120
			0·880	286·8	280·9	+12·7			293
		3989*a*	0·992	294·4	301·6	+23·6	63	293	551*nf*
		3996*a*	0·971	257·8	297·8	−12·8	19	89	
		3996*b*	0·964	257·2	296·2	−13·4	10	56	431*c*
		3996*d*	0·935	258·1	290·7	−12·5	0	44	
		4002*a*	0·633	278·8	260·0	+ 2·5	12	48	
		4002	0·604	279·1	257·9	+ 2·4	0	3	
		4002	0·596	280·4	257·2	+ 3·0	0	1	
		4002	0·587	280·0	256·6	+ 2·7	6	22	
		4004	0·643	302·5	255·8	+17·0	0	3	
		4004	0·622	303·1	254·2	+16·6	0	3	
		3995*a*	0·501	224·6	244·0	−24·5	1	7	
		3995	0·502	219·6	242·2	−26·3	1	3	
		3995	0·495	216·9	240·8	−26·9	0	3	
		4000	0·479	207·0	235·7	−29·0	0	3	
		3999*a*	0·321	340·8	227·6	+13·7	5	19	
		3999	0·327	345·6	226·2	+14·6	0	9	
		3999*c*	0·294	347·2	225·2	+12·7	11	49	
		3999	0·321	355·4	222·9	+14·7	0	2	
		3999	0·358	356·0	222·9	+16·9	0	1	
		3999*d*	0·316	4·2	220·0	+14·4	1	7	
		3999	0·282	5·2	219·9	+12·4	0	1	
		3999	0·351	8·3	218·4	+16·3	0	1	
		3999	0·297	2·5	213·8	+13·3	0	5	
		4003	0·487	104·0	192·8	−10·2	5	17	
		4003	0·529	106·4	190·3	−12·0	1	8	
		4003	0·528	104·8	190·2	−11·1	0	4	
		4003	0·528	103·1	190·0	−10·2	2	11	323*c*
		4003	0·550	104·8	188·7	−11·4	0	5	
		4003	0·558	102·4	187·9	−10·2	0	3	
		4005*a*	0·984	102·5	141·4	−13·0	34	97	
		4005*b*	0·991	104·8	138·7	−15·1	29	124	
			0·925	68·0	156·8	+18·6			136
			0·922	120·4	155·6	−29·5			80
			0·926	105·3	153·6	−15·6			102
May 2		Centre			(221·4)	(−3·9)	(200)	(941)	(2373)
1895.				°	°	°			
122d·381	AW, FT		0·985	257·6	288·9	−12·9			346
			0·956	283·9	279·8	+12·1			454
			0·782	297·3	255·3	+18·4			166
		4002*a*	0·811	275·7	262·1	+ 2·4	13	54	
		4002	0·754	276·3	256·8	+ 2·2	0	3	206*c*
		4002	0·752	277·4	256·5	+ 3·0	0	5	
		3995*a*	0·644	236·0	244·1	−24·2	0	3	
		3995	0·633	231·9	241·9	−26·1	1	4	
		3999*a*	0·437	314·1	227·2	+14·0	2	6	
		3999	0·429	317·1	225·9	+14·6	0	3	
		3999*c*	0·405	314·7	225·5	+12·8	9	38	
		3999*d*	0·374	325·1	221·1	+14·1	0	7	
		4006	0·363	167·0	203·3	−24·4	0	1	
		4003	0·281	118·0	193·8	−11·3	0	1	
		4003	0·280	113·4	193·3	−10·1	0	5	
		4003	0·294	113·3	192·5	−10·3	2	11	
		4003	0·331	116·7	190·9	−12·2	2	6	
		4003	0·323	109·7	190·5	− 9·9	0	4	
		4003	0·329	112·6	190·5	−10·9	0	6	
		4003	0·339	114·1	190·1	−11·6	0	1	
		4003	0·362	113·3	188·6	−11·8	2	9	
		4005*a*	0·914	102·3	142·3	−12·8	27	127	
		4005	0·925	103·1	140·7	−13·6	0	3	386*c*
		4005*b*	0·946	104·9	137·2	−15·3	30	160	
			0·796	62·9	160·1	+18·7			102
			0·904	61·0	148·7	+24·0			162
			0·962	83·8	134·9	+ 5·0			262
			0·974	110·6	131·2	−20·9			74
May 3		Centre			(208·4)	(−3·8)	(88)	(457)	(2158)
123·398	AW, M		0·857	293·7	250·3	+18·1			205
			0·797	314·0	236·6	+30·8			111
		4002*a*	0·931	274·3	263·0	+ 2·7	6	21	240*c*
		3999	0·573	298·7	225·8	+12·8	0	1	
		3999	0·568	299·5	225·3	+13·0	4	9	
		4005*a*	0·799	103·5	142·2	−13·0	22	124	
		4005	0·814	103·5	140·8	−13·1	6	31	
		4005	0·826	103·4	139·5	−13·2	0	4	
		4005	0·839	104·7	138·2	−14·3	2	11	365*c*
		4005	0·850	103·9	137·0	−13·7	0	5	
		4005*b*	0·853	106·0	136·8	−15·6	26	162	
			0·891	82·7	132·6	+ 4·8			244

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4003, May 1–3. A small spot on May 1; a small wedge-shaped stream of spots on May 2, which has become slightly elongated by May 3.
Group 4004, May 2. A pair of very small spots.
Group 4005, May 2–14. A pair of large composite spots, *a* and *b*, with a number of small spots between them, forming altogether a fine stream. *b* has broken up after May 8.
Group 4006, May 3. A very small spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
123d.398	AW, M		0·963	100·6	120·3	−11·3			47
			0·970	107·2	118·7	−17·6			88
			0·979	71·5	118·6	+17·3			83
May 4		Centre			(194·9)	(−3·7)	(66)	(368)	(1383)
124·553	CL, AR		0·988	273·5	260·4	+ 2·9			293
			0·924	289·9	244·7	+16·8			188
			0·886	240·7	240·0	−27·5			461
			0·887	308·4	234·0	+31·3			134
			0·811	232·0	228·6	−32·3			202
		4007	0·781	295·0	227·2	+16·9	0	6	183c
		3999	0·747	290·9	225·2	+12·9	2	13	
		4005a	0·630	107·0	141·6	−13·4	35	223	
		4005	0·655	105·3	139·5	−12·7	0	5	
		4005	0·658	106·8	139·4	−13·7	0	5	
		4005	0·670	107·6	138·6	−14·4	0	18	273c
		4005	0·677	108·8	138·2	−15·3	3	18	
		4005	0·687	106·7	137·2	−14·0	2	11	
		4005b	0·701	108·8	136·3	−15·7	25	183	
			0·918	109·0	113·4	−18·9			267
			0·925	102·1	112·0	−12·6			81
			0·944	72·4	111·1	+15·3			372
May 5		Centre			(179·7)	(−3·6)	(67)	(482)	(2454)
125·390	AW, FT		0·932	239·9	235·7	−29·2			511
			0·890	280·5	230·3	+ 7·8			180
			0·919	304·9	228·8	+30·0			168
			0·880	232·1	225·7	−34·5			81
			0·829	288·6	222·1	+13·3			851
		4005a	0·473	112·5	141·9	−13·4	44	201	
		4005	0·497	112·4	140·4	−13·9	0	4	
		4005	0·505	111·6	139·7	−13·7	0	7	
		4005	0·523	111·5	138·5	−14·0	1	4	
		4005	0·542	111·9	137·3	−14·6	1	10	
		4005b	0·556	113·4	136·6	−15·6	18	115	
		4005	0·570	113·5	135·7	−16·0	2	13	
		4005	0·576	114·4	135·4	−16·6	0	4	
			0·865	69·2	111·2	+16·0			350
			0·942	106·1	98·2	−16·3			419
May 6		Centre			(168·5)	(−3·4)	(66)	(358)	(2560)
1895.				°	°	°			
126d.406	AW, CL		0·963	238·8	228·6	−30·9			332
			0·929	302·5	217·9	+28·4			236
			0·804	250·4	207·6	−17·7			261
		4008	0·938	278·9	223·9	+ 7·2	3	16	758n
		4009	0·615	287·7	191·2	+ 8·1	3	15	
		4009	0·606	286·7	190·8	+ 7·3	0	16	
		4009	0·595	291·5	189·1	+ 9·9	2	8	
		4009	0·586	288·7	189·1	+ 8·1	0	5	
		4009	0·582	290·5	188·5	+ 9·0	0	8	
		4009	0·569	289·1	187·8	+ 8·0	1	7	
		4005a	0·294	127·8	141·3	−13·6	43	213	
		4005	0·318	132·1	141·0	−15·5	0	5	
		4005	0·321	126·1	139·7	−14·1	0	1	
		4005	0·346	127·9	138·7	−15·4	1	6	
		4005	0·358	124·7	137·4	−14·9	0	7	
		4005b	0·380	125·8	136·5	−15·9	22	105	
		4005	0·405	126·6	135·3	−17·1	0	1	
		4010	0·884	70·8	95·4	+15·3	0	12	206c
		4010	0·905	71·4	92·5	+15·3	0	4	
			0·852	107·8	97·4	−16·8			153
			0·956	100·2	82·1	−10·7			532
			0·970	81·6	80·0	+ 7·3			366
May 7		Centre			(155·1)	(−3·3)	(75)	(429)	(2844)
127·412	AW, CL		0·958	277·5	214·4	+ 6·3			268
			0·963	287·5	214·3	+15·9			246
			0·890	250·0	203·9	−19·2			574
			0·853	296·7	196·2	+20·7			144
			0·790	257·6	193·6	−11·7			109
		4009	0·752	285·6	188·9	+ 9·5	2	6	130c
		4005	0·185	187·4	143·2	−13·7	0	2	
		4005a	0·182	176·8	141·2	−13·7	47	237	
		4005	0·200	169·7	139·7	−14·6	0	2	
		4005	0·225	163·2	137·9	−15·6	0	4	
		4005	0·192	158·7	137·7	−13·5	0	7	
		4005	0·226	159·9	137·2	−15·4	0	5	
		4005b	0·242	157·7	136·3	−16·1	17	70	
		4011	0·889	96·4	79·1	− 7·2	0	2	1667s
		4011	0·916	95·9	75·5	− 6·7	0	8	
		4011	0·957	95·7	68·7	− 6·4	3	13	
		4012	0·988	77·3	61·9	+12·0	0	23	
			0·712	112·3	98·1	−18·0			170

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4007, May 5. A very small faint spot.
Group 4008, May 7. A small spot.
Group 4009, May 7–8. A number of small spots in a compact cluster.
Group 4010, May 7. Two small spots.
Group 4011, May 8–9. Three small widely separated spots in a straight line. The first has disappeared by May 9.
Group 4012, May 8–12. A small spot, not seen on May 11.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
128d·406	AW, CL		0·822	65·7	90·1	+17·8			158
			0·909	81·8	77·2	+ 6·1			414
May 8		Centre			(141·8)	(−3·2)	(69)	(379)	(3880)
128·401	AW, CL		0·956	248·4	201·4	−21·5			
			0·915	258·3	194·9	−12·0			366
			0·900	281·1	191·9	+ 8·6			173
			0·888	296·5	187·4	+21·7			189
			0·807	243·9	180·4	−22·7			184
		4005	0·296	225·7	141·4	−15·0	0	7	153
		4005*a*	0·278	229·3	141·3	−13·4	37	207	
		4005	0·266	209·3	136·6	−16·5	2	6	
		4005	0·256	210·1	136·4	−15·8	2	11	
		4005	0·248	210·4	136·2	−15·4	1	3	
		4005	0·262	207·8	136·1	−16·4	0	1	
		4011	0·799	95·7	75·9	− 6·5	0	2	
		4011	0·861	95·1	69·4	− 6·0	3	11	19278*f*
		4013	0·923	73·0	63·4	+14·4	2	11	
		4012	0·926	76·0	62·5	+11·7	0	11	687*c*
			0·922	66·6	64·7	+20·1			166
May 9		Centre			(128·8)	(−3·1)	(47)	(270)	(3845)
129·417	CL. AW		0·912	292·0	178·4	+18·6			
			0·902	243·8	178·3	−24·9			113
		4005	0·475	242·7	141·2	−15·3	0	10	137
		4005*a*	0·462	246·8	141·1	−13·1	34	186	
		4005	0·462	242·6	140·4	−14·9	1	5	
		4005	0·429	248·5	139·3	−11·7	0	5	
		4005	0·423	235·4	136·6	−16·6	0	3	
		4014*a*	0·551	69·5	84·1	+ 8·5	6	16	
		4014	0·562	68·4	83·5	+ 9·4	0	2	
		4014	0·568	70·5	82·8	+ 8·4	0	5	
		4014	0·581	68·7	82·2	+ 9·6	3	10	
		4013	0·798	70·5	64·9	+13·5	0	9	
		4013	0·838	70·7	60·9	+14·3	0	5	196*c*
		4012	0·820	73·7	62·2	+11·5	0	5	
			0·863	60·3	60·8	+23·5			102
			0·859	108·1	57·0	−17·1			221
			0·883	97·6	53·5	− 8·1			164
May 10		Centre			(115·4)	(−3·0)	(44)	(261)	(933)
1895.				°	°	°			
130d·386	CL, FT		0·934	289·7	169·3	+17·2			238
		4005*a*	0·634	253·1	140·8	−12·8	34	204	
		4005	0·609	253·9	139·1	−12·0	0	3	112*c*
		4005	0·601	247·7	137·6	−15·6	0	3	
		4015	0·344	245·6	121·0	−10·9	1	4	
		4015	0·312	240·5	118·5	−11·6	1	4	
		4014*a*	0·345	54·7	86·0	+ 8·6	7	17	
		4014	0·362	61·6	83·9	+ 7·1	0	2	
		4014	0·411	59·0	81·7	+ 9·5	0	3	
			0·735	108·7	56·4	−15·6			222
			0·827	96·3	46·8	− 6·9			156
			0·884	113·0	41·7	−21·6			138
			0·940	101·3	32·5	−11·6			263
May 11		Centre			(102·5)	(−2·9)	(43)	(240)	(1129)
131·420	AW, M		0·975	265·4	165·9	− 5·1			266
		4005*a*	0·795	256·2	140·9	−12·7	27	190	395*c*
		4016	0·222	201·5	93·6	−14·7	2	6	
		4016	0·206	194·3	91·8	−14·3	0	5	
		4014*a*	0·196	7·5	87·3	+ 8·4	2	12	
		4017	0·188	145·9	82·6	−11·7	0	3	
		4017	0·204	139·0	81·0	−11·6	0	10	
		4017,	0·194	132·6	80·5	−10·3	0	6	
		4018	0·308	121·1	73·2	−11·9	0	5	
		4018	0·322	115·9	71·7	−10·7	0	7	
		4018	0·336	115·6	70·9	−11·0	0	3	
		4012	0·502	62·0	62·1	+11·1	0	5	
		4019	0·955	105·5	16·2	−15·7	0	17	
		4019	0·956	107·0	16·0	−17·1	10	33	
		4019	0·970	106·2	12·9	−16·4	9	40	416*c*
		4019	0·982	108·9	9·8	−19·0	20	112	
			0·797	112·4	37·6	−19·5			188
			0·863	100·6	29·4	−10·6			454
May 12		Centre			(88·8)	(−2·8)	(70)	(454)	(1719)
132·521	AW, CL		0·947	293·1	142·9	+20·9			207
			0·916	276·5	140·0	+ 4·8			180
		4005*a*	0·918	257·2	140·7	−12·8	21	116	
		4005	0·916	255·9	140·4	−14·0	0	7	
		4005	0·906	257·9	139·0	−12·1	0	12	642*c*
		4005	0·904	256·6	138·7	−13·3	0	2	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4013, May 9–10. A small spot with, on May 10, a very small distant companion.
Group 4014, May 10–12. A few small unstable spots in a short irregular stream. *a*, the leader, is the most stable, and has a rapid forward motion in longitude.
Group 4015, May 11. A pair of very small spots.
Group 4016, May 12–13. Two or three very small faint unstable spots.
Group 4017, May 12–14. A few very small faint unstable spots, irregularly scattered.
Group 4018, May 12–13. A few very small faint unstable spots, irregularly scattered.
Group 4019, May 12–19. A number of spots, mostly small, in a very irregular group. The spots are generally unstable, and the group diminishes in size from day to day. A short-lived revival is seen on May 16, and a second, principally in the preceding part of the group, on May 19.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
132d.521	AW, CL	4016	0·381	241·3	94·3	−13·1	0	3	
		4016	0·387	239·2	94·2	−13·9	0	1	
		4016	0·360	239·5	92·8	−13·1	0	1	
		4017	0·221	224·3	83·3	−11·7	0	3	
		4017	0·206	224·9	82·8	−11·0	0	3	
		4017	0·201	218·1	81·5	−11·7	0	4	
		4017	0·189	214·7	80·6	−11·6	0	2	
		4020	0·236	207·2	80·7	−14·8	0	6	
		4020	0·209	209·7	80·4	−13·1	0	2	
		4018	0·199	185·8	75·5	−14·1	0	2	
		4018	0·147	154·5	70·6	−10·3	0	2	
		4018	0·177	153·6	69·7	−11·8	0	7	
		4018	0·191	153·4	69·3	−12·5	0	2	
		4018	0·185	149·4	68·8	−11·8	0	1	
		4021	0·752	103·1	26·1	−11·6	0	6	266*c*
		4019	0·854	108·5	16·6	−17·2	7	14	
		4019	0·854	107·1	16·4	−16·0	3	14	
		4019	0·870	109·2	14·8	−18·0	2	14	
		4019	0·871	107·5	14·5	−16·5	0	4	
		4019	0·892	108·0	11·9	−17·2	1	5	462*c*
		4019	0·904	110·3	10·4	−19·5	0	4	
		4019	0·914	110·2	9·0	−19·5	11	64	
		4019	0·917	108·8	8·4	−18·3	3	16	
		4022*a*	0·984	74·6	355·9	+14·6	6	19	219*c*
		4022*b*	0·997	75·3	349·8	+14·4	25	177	
			0·922	50·3	14·8	+34·7			113
May 13		Centre			(74·3)	(−2·7)	(79)	(513)	(2089)
133·402	M, FT		0·923	276·4	129·5	− 4·9			228
			0·873	245·7	121·8	−22·4			122
			0·863	254·8	121·8	−14·4			214
			0·833	291·4	116·4	+16·2			194
			0·742	298·4	106·1	+18·7			116
		4005*a*	0·980	257·4	141·2	−12·8	8	61	347*sf*
		4017	0·396	246·9	84·4	−11·4	0	2	
		4017	0·382	245·7	83·4	−11·4	0	5	
		4017	0·359	241·3	81·4	−12·4	0	4	
		4017	0·352	240·1	80·8	−12·6	0	3	
		4021	0·608	106·9	26·3	−12·3	0	4	
		4019	0·732	109·3	17·0	−15·8	8	18	
		4019	0·737	110·6	16·8	−16·8	3	10	416*c*
		4019	0·748	110·7	15·8	−17·1	2	10	
		4019	0·753	111·9	15·6	−18·1	6	24	
1895.				°	°	°			
133d.402	M, FT	4019	0·824	112·0	8·7	−19·5	4	22	
		4019	0·825	110·7	8·5	−18·5	4	26	
		4022*a*	0·922	72·4	357·4	+15·1	13	48	
		4022	0·925	73·6	356·7	+14·1	0	6	488*c*
		4022*b*	0·960	74·6	350·4	+14·0	18	124	
May 14		Centre			(62·7)	(−2·6)	(66)	(367)	(2125)
134·637	M, FT		0·965	258·7	121·2	−11·6			146
			0·938	249·0	115·4	−20·5			148
			0·893	289·9	107·3	+16·5			359
			0·806	254·8	99·4	−13·7			91
			0·852	303·8	98·7	+26·7			94
			0·811	246·0	98·6	−20·8			125
		4019	0·537	118·9	17·1	−17·1	2	6	
		4019	0·529	116·3	17·0	−15·7	2	7	
		4019	0·552	119·4	16·2	−17·7	0	3	
		4019	0·572	119·9	15·0	−18·6	0	3	
		4019	0·579	118·8	14·2	−18·2	3	11	
		4019	0·598	121·5	13·6	−20·3	0	3	
		4019	0·614	120·0	12·1	−20·0	5	18	
		4019	0·633	116·7	10·0	−18·5	2	10	
		4019	0·651	115·7	8·4	−18·3	2	7	
		4022*a*	0·785	69·0	357·3	+14·7	20	214	
		4022	0·801	70·4	355·5	+14·0	0	5	
		4022	0·824	71·3	353·1	+13·8	3	14	525*c*
		4022	0·832	70·1	352·5	+15·0	8	58	
		4022*b*	0·852	71·9	350·0	+14·0	18	110	
			0·902	71·2	344·1	+15·7			188
			0·981	75·9	328·7	+13·3			337
May 15		Centre			(46·4)	(−2·5)	(65)	(469)	(2013)
135·401	AW, CL		0·888	255·5	98·3	−14·0			435
			0·885	285·7	96·8	+12·7			541
			0·737	257·2	83·1	−11·0			394
		4021	0·214	137·7	27·8	−11·3	2	9	
		4019	0·408	130·4	17·2	−17·4	0	5	
		4019	0·399	127·3	17·0	−16·2	0	9	
		4019	0·405	124·5	16·0	−15·4	0	6	
		4019	0·452	131·1	15·1	−19·4	1	11	
		4019	0·447	129·3	14·9	−18·6	3	15	
		4019	0·484	130·8	13·3	−20·5	0	10	
		4019	0·499	128·8	11·8	−20·3	7	22	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4020, May 13. Two very small faint spots *s* of Group 4017.
Group 4021, May 13–16. A very small faint spot on May 13–14. It is not seen on May 15, but a small spot is seen near its place on May 16.
Group 4022, May 14–24. A small spot, *a*, followed at a considerable distance by a large spot, *b*, both apparently regular, on May 14. *a* rapidly increases in size up till May 16. A number of spots appear round *b* on May 15 and 16, and form with it a short stream inclined at an angle of about 45° to the equator. This stream steadily diminishes in size and has disappeared by May 23. *a* has divided into two portions, *c* and *d*, by May 22.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
135d·401	AW, CL	4019	0·512	124·8	9·9	−19·0	2	11	
		4019	0·530	122·2	8·1	−18·4	0	7	
		4022*a*	0·667	64·8	357·8	+14·7	44	254	
		4022	0·680	67·8	356·1	+13·0	0	7	
		4022	0·715	65·5	353·9	+15·5	4	20	
		4022	0·724	68·2	352·5	+13·9	0	11	461*c*
		4022	0·757	66·7	350·1	+15·8	11	63	
		4022*b*	0·753	69·3	349·9	+13·8	22	112	
			0·956	73·0	324·8	+15·5			785
			0·982	122·1	317·8	−32·0			112
May 16		Centre			(36·2)	(−2·3)	(96)	(572)	(2728)
136·295	CL, FT		0·964	288·3	97·3	+17·0			146
I.			0·946	255·0	94·0	−13·4			575
			0·904	281·9	88·0	+ 9·8			215
			0·866	292·1	81·6	+17·8			123
			0·831	256·2	80·0	−12·7			1030
			0·798	280·7	76·4	+ 7·2			186
			0·723	257·2	70·1	−10·8			326
			0·635	249·0	62·1	−14·9			299
		4019	0·311	156·2	16·8	−18·7	0	3	
		4019	0·299	154·1	16·6	−17·8	0	3	
		4019	0·315	151·1	15·2	−18·1	2	9	
		4019	0·360	150·7	13·6	−20·4	0	2	
		4019	0·360	148·8	13·0	−20·0	0	2	
		4019	0·371	145·8	11·6	−20·0	5	11	
		4019	0·385	141·2	9·6	−19·5	0	21	
		4022*a*	0·518	55·9	358·2	+14·9	58	228	
		4022	0·597	58·3	352·6	+16·3	8	35	
		4022	0·613	60·3	350·9	+15·8	8	33	
		4022*b*	0·612	63·5	350·2	+14·0	15	75	
		4022	0·626	63·9	349·1	+14·1	0	3	
		4022	0·636	63·7	348·5	+14·6	4	13	
			0·711	63·0	343·0	+17·2			116
			0·892	69·6	323·7	+17·0			1013
			0·944	122·4	315·9	−31·2			169
May 17		Centre			(24·4)	(−2·2)	(100)	(438)	(4198)
137·537	CL, FT		0·942	278·5	77·6	+ 7·3			277
			0·920	258·4	74·6	−11·6			1199
			0·830	282·4	62·9	+ 9·1			304
1895.				°	°	°			
137d·537	CL, FT		0·815	251·9	61·3	−15·9			194
			0·785	289·5	57·3	+13·8			89
			0·798	299·9	56·0	+22·0			82
		4019	0·304	205·8	15·9	−17·9	0	2	
		4019	0·306	203·6	15·3	−18·3	0	3	
		4019	0·274	205·5	14·9	−16·3	0	1	
		4019	0·292	202·8	14·7	−17·7	0	3	
		4019	0·313	191·2	11·6	−20·0	1	3	
		4019	0·309	189·7	11·1	−19·8	0	1	
		4019	0·319	184·5	9·4	−20·6	2	10	
		4019	0·296	183·9	9·1	−19·2	0	1	
		4019	0·288	182·2	8·6	−18·7	0	2	
		4019	0·304	180·0	7·9	−19·7	0	2	
		4022*a*	0·329	28·4	358·6	+14·7	40	207	
		4022	0·415	41·8	351·3	+16·0	3	14	
		4022	0·423	42·5	350·7	+16·1	0	3	
		4022	0·418	43·7	350·5	+15·6	3	23	
		4022*b*	0·402	47·5	350·2	+13·7	9	51	
		4022	0·429	49·4	348·4	+14·2	1	5	
		4023	0·432	63·9	344·9	+ 9·0	0	5	
		4023	0·438	66·3	344·1	+ 8·2	4	11	
		4023	0·494	65·5	340·9	+ 9·9	0	2	
		4023	0·498	68·2	340·1	+ 8·8	4	20	
		4024*a*	0·945	65·4	299·8	+22·4	65	382	415*nf*
		4025*a*	0·940	103·0	298·1	−13·0	18	52	2428*f*
			0·720	64·8	325·3	+16·2			612
			0·833	63·7	315·3	+20·4			307
			0·850	127·0	314·9	−32·0			99
May 18		Centre			(7·9)	(−2·1)	(150)	(803)	(3820)
138·259	AW, CL		0·962	259·0	72·4	−11·1			568
I.			0·938	270·0	67·9	− 0·7			161
			0·927	280·0	65·5	+ 8·5			592
			0·894	253·9	61·1	−15·3			703
			0·905	293·6	60·3	+20·3			427
			0·800	241·5	48·4	−23·7			168
		4019	0·423	226·1	17·1	−18·9	0	4	
		4019	0·404	229·3	17·0	−17·1	0	4	
		4019	0·439	221·9	16·6	−20·9	0	8	
		4019	0·412	222·1	15·4	−19·7	0	9	
		4019	0·398	220·9	14·4	−19·3	0	3	
		4019	0·389	222·0	14·3	−18·7	0	16	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4023, May 18–26. Two close pairs of small spots on May 18, *sf* Group 4022. The group expands on the succeeding days into two irregular clusters, both of which lengthen out, until on May 23 they form a single irregular stream.
Group 4024, May 18–30. A large regular spot, *a*. A very small companion is seen near it on May 21. Many others have formed by the next day. *a* has much diminished by May 24, but its companions have greatly increased in area. The group has developed yet further by May 25, covering a very large area, and being of very complex and irregular form.
Group 4025, May 18–27. A small regular spot, *a*, which diminishes from day to day. A very small companion is seen near it on May 27.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
138d·259	AW, CL	4019	0·370	213·8	11·0	−19·8	0	2	
		4019	0·367	213·5	10·8	−19·7	0	2	
I.		4019	0·361	212·3	10·2	−19·7	0	2	
		4022	0·278	351·6	0·8	+13·9	0	1	
		4022*a*	0·286	357·6	359·1	+14·6	41	207	
		4022	0·284	4·0	357·2	+14·4	1	5	
		4022	0·285	15·4	353·9	+13·9	0	3	
		4022	0·299	16·7	353·3	+14·6	0	4	
		4022	0·323	22·0	351·2	+15·4	3	14	
		4022*b*	0·300	26·5	350·5	+13·6	12	43	
		4022	0·339	24·0	350·2	+16·0	0	1	
		4022	0·314	31·5	348·7	+13·5	0	4	
		4023	0·286	52·3	345·2	+ 8·1	0	3	
		4023	0·309	52·3	344·1	+ 8·9	1	14	
		4023	0·310	55·1	343·4	+12·1	0	1	
		4023	0·323	52·8	343·4	+ 9·3	2	7	
		4023	0·320	54·7	343·1	+ 8·7	0	2	
		4023	0·344	59·6	341·0	+ 8·1	4	15	
		4023	0·358	56·5	340·9	+ 9·5	0	8	
		4023	0·358	60·0	340·2	+ 8·4	0	2	
		4023	0·376	55·0	340·2	+10·6	1	4	
		4026	0·756	130·8	316·7	−31·0	0	4	199*c*
		4024*a*	0·883	63·1	300·2	+22·4	108	438	795*nf*
		4025*a*	0·872	103·7	298·3	−12·9	17	50	393*f*
		4027*a*	0·984	86·6	279·1	+ 3·0	0	88	207*c*
			0·711	57·8	318·6	+20·6			176
			0·784	99·6	307·1	− 8·8			86
			0·919	75·2	293·0	+12·7			184
May 19		Centre			(358·4)	(−2·0)	(190)	(968)	(4659)
139·168	AW, FT		0·972	282·4	61·9	+11·6			247
			0·920	250·4	52·4	−18·7			653
I.			0·880	262·2	47·8	− 7·8			118
			0·836	277·4	42·5	+ 5·1			56
		4022*a*	0·358	323·4	359·1	+14·8	40	203	
		4022	0·336	326·5	357·4	+14·4	0	5	
		4022	0·326	325·5	357·3	+13·7	0	2	
		4022	0·331	342·2	352·4	+16·5	0	4	
		4022	0·313	342·1	352·1	+15·3	0	11	
		4022	0·276	345·7	350·4	+13·6	9	30	
		4023	0·201	3·8	345·6	+ 9·7	2	14	
		4023	0·189	7·1	345·0	+ 8·9	0	10	
		4023	0·207	8·6	344·6	+ 9·9	0	6	
1895.				°	°	°			
139d·168	AW, FT	4023	0·218	8·1	344·6	+10·6	2	8	
		4023	0·213	28·4	340·5	+ 8·9	6	10	
I.		4023	0·233	27·4	340·2	+10·0	0	3	
		4024*a*	0·792	58·5	299·4	+23·0	109	451	717*f*
		4025*a*	0·756	105·0	298·2	−12·6	10	39	474*f*
		4027*a*	0·933	85·5	277·9	+ 3·5	37	139	612*f*
		4028*a*	0·965	114·2	272·4	−23·8	0	17	187*c*
			0·695	96·8	302·6	− 6·1			148
May 20		Centre			(346·4)	(−1·9)	(215)	(952)	(3212)
140·386	M, FT		0·840	258·2	26·8	−10·8			278
			0·729	245·3	14·5	−18·9			207
		4022*a*	0·541	301·0	358·7	+14·6	28	187	
		4022	0·517	303·6	356·6	+15·1	1	4	
		4022	0·475	308·6	352·8	+15·6	0	5	
		4022	0·461	307·4	352·3	+14·7	0	4	
		4022	0·458	309·5	351·6	+15·3	0	7	
		4022	0·425	307·4	350·4	+13·3	2	10	
		4029	0·388	325·4	343·5	+16·9	0	2	
		4023	0·342	305·5	346·5	+ 9·8	4	28	
		4023	0·335	309·4	345·4	+10·6	0	2	
		4023	0·316	310·6	344·2	+10·2	0	7	
		4023	0·298	316·7	342·2	+10·9	2	5	
		4023	0·283	316·4	341·6	+10·2	0	3	
		4023	0·258	319·7	339·9	+ 9·6	3	23	
		4024*a*	0·628	49·6	299·2	+22·5	96	456	248*c*
		4024	0·690	47·3	295·9	+26·4	0	5	
		4025*a*	0·555	111·5	298·3	−13·2	5	15	
		4030	0·737	111·8	284·7	−17·1	0	2	
		4027*a*	0·783	84·9	279·0	+ 2·9	36	185	481*f*
		4027	0·814	87·7	276·0	+ 0·9	0	2	
		4027	0·830	85·3	274·5	+ 2·9	0	2	
		4028*a*	0·849	118·0	275·0	−24·4	48	221	
		4028	0·860	115·3	273·1	−22·5	13	33	
		4028	0·873	115·6	271·6	−23·0	1	5	
		4028	0·876	116·3	271·4	−23·7	0	9	
		4028	0·880	117·4	271·1	−24·7	0	3	
		4028	0·878	115·4	270·9	−23·0	9	25	
		4028	0·887	115·0	269·7	−22·8	0	6	
		4028	0·893	116·6	269·2	−24·3	0	4	352*c*
		4028	0·909	116·3	266·9	−24·5	0	2	
		4031	0·864	91·1	270·6	− 1·9	1	3	
May 21		Centre			(330·2)	(−1·7)	(249)	(1265)	(1566)

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4026, May 19. A very small faint spot.
Group 4027, May 19–30. A large regular spot, *a*, usually followed by a few very small spots in a short stream.
Group 4028, May 20–31. A small spot, *a*, on May 20, which has become a large regular spot by May 21. It is followed by a number of small spots in an irregular stream. These latter have all disappeared by May 28. A few small spots are sometimes seen preceding *a*.
Group 4029, May 21. A very small spot.
Group 4030, May 21. A very small spot.
Group 4031, May 21. A very small spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
141d·429	AW,AR		0·945	260·1	27·1	− 9·9			356
			0·851	249·2	13·2	− 18·4			338
		4022c	0·707	291·5	358·9	+ 13·8	9	84	134c
		4022d	0·708	293·2	358·6	+ 15·0	24	101	
		4022	0·652	295·3	353·8	+ 14·9	0	3	
		4022	0·642	297·0	352·7	+ 15·6	0	7	
		4022	0·627	295·4	352·0	+ 14·3	0	3	
		4023	0·545	290·7	347·4	+ 9·8	0	24	
		4023	0·529	292·5	346·0	+ 10·3	10	58	
		4023	0·519	290·3	345·8	+ 8·9	0	7	
		4023	0·511	293·2	344·8	+ 10·2	4	23	
		4023	0·510	294·7	344·4	+ 10·9	0	4	
		4023	0·498	292·4	344·1	+ 9·5	0	6	
		4023	0·478	292·7	342·8	+ 9·2	0	6	
		4023	0·460	296·1	341·1	+ 10·2	17	119	
		4024	0·461	29·7	302·2	+ 22·0	0	2	
		4024	0·452	30·9	302·0	+ 21·2	0	2	
		4024	0·479	29·6	301·6	+ 23·0	0	4	
		4024	0·510	28·1	301·1	+ 25·1	0	5	
		4024	0·461	32·9	300·9	+ 21·1	1	9	
		4024	0·511	30·3	300·0	+ 24·5	0	2	
		4024a	0·491	34·3	299·1	+ 22·4	91	483	
		4024	0·532	31·5	298·6	+ 25·4	0	5	
		4024	0·450	41·1	298·3	+ 18·3	0	4	
		4024	0·481	39·4	297·5	+ 20·2	0	8	
		4024	0·498	39·6	296·6	+ 21·0	0	5	
		4024	0·521	38·1	296·1	+ 22·6	0	2	
		4024	0·512	39·6	295·9	+ 21·7	0	1	
		4025a	0·366	123·4	298·2	− 13·1	5	20	
		4032	0·459	129·7	294·6	− 18·9	0	4	
		4032	0·468	131·1	294·6	− 19·3	1	5	
		4032	0·503	129·1	292·0	− 19·9	1	8	
		4032	0·499	127·7	291·8	− 19·2	0	4	
		4027	0·596	86·6	280·1	+ 0·8	0	3	
		4027a	0·606	84·0	279·5	+ 2·4	30	172	
		4027	0·621	83·0	278·4	+ 3·1	1	7	
		4027	0·641	86·5	276·8	+ 1·1	0	5	282f
		4027	0·656	85·5	275·7	+ 1·7	0	4	
		4027	0·672	83·7	274·6	+ 3·0	0	11	
		4027	0·680	87·3	273·8	+ 0·7	2	6	
		4028	0·696	122·1	276·8	− 22·8	0	6	
		4028a	0·710	123·8	276·2	− 24·4	56	308	
		4028	0·734	120·7	273·2	− 23·1	0	6	
		4028	0·738	120·2	272·7	− 22·9	0	1	300c

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
141d·429	AW,AR	4028	0·742	120·7	272·6	− 23·3	0	5	
		4028	0·754	121·5	271·7	− 24·3	1	9	
		4028	0·761	120·5	270·8	− 23·8	8	62	
			0·903	69·3	254·1	+ 17·8			182
			0·900	109·0	253·3	− 17·7			95
			0·943	116·1	247·5	− 25·0			311
May 22		Centre			(316·4)	(− 1·6)	(261)	(1623)	(1998)
142·395	AW,M		0·934	249·9	11·7	− 19·2			358
		4022c	0·843	287·5	359·4	+ 13·8	10	50	420c
		4022d	0·840	289·1	358·8	+ 15·1	15	75	
		4023	0·731	284·8	349·3	+ 9·7	0	9	
		4023	0·723	285·3	348·6	+ 9·9	8	29	
		4023	0·716	284·7	348·1	+ 9·4	0	7	
		4023	0·703	285·9	346·9	+ 10·0	5	26	
		4023	0·698	284·7	346·7	+ 9·1	0	10	
		4023	0·677	285·8	344·9	+ 9·5	3	15	245c
		4023	0·676	285·0	344·9	+ 8·9	0	4	
		4023	0·653	287·7	342·7	+ 10·3	1	6	
		4023	0·644	286·3	342·3	+ 9·2	1	3	
		4023	0·636	290·3	341·1	+ 11·6	1	3	
		4023	0·627	288·4	340·7	+ 10·2	10	87	
		4033	0·415	328·2	317·0	+ 19·1	0	4	
		4034	0·221	15·0	300·4	+ 10·7	0	3	
		4034	0·214	16·8	300·1	+ 10·3	3	5	
		4034	0·228	19·5	299·2	+ 10·9	0	1	
		4034	0·225	24·4	298·3	+ 10·3	1	6	
		4024	0·388	6·1	301·2	+ 21·1	0	2	
		4024	0·427	6·4	300·7	+ 23·5	1	5	
		4024	0·380	9·5	299·9	+ 20·4	0	3	
		4024a	0·412	11·4	298·7	+ 22·2	91	495	
		4024	0·376	13·0	298·6	+ 20·0	0	2	
		4024	0·385	14·5	297·8	+ 20·3	1	6	
		4024	0·393	16·5	296·9	+ 20·6	0	3	
		4024	0·426	17·4	295·8	+ 22·4	0	3	
		4024	0·465	17·7	294·8	+ 24·7	0	2	
		4024	0·508	17·7	293·7	+ 27·3	0	2	
		4024	0·503	20·0	292·7	+ 26·6	0	3	
		4024	0·532	22·6	290·4	+ 27·9	0	11	
		4025a	0·220	156·1	298·5	− 13·1	7	14	
		4032	0·334	151·7	294·1	− 18·6	1	7	
		4032	0·370	153·7	293·6	− 20·8	1	3	
		4032	0·390	150·4	292·7	− 21·2	1	3	

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Group 4032, May 22–28. A few very small faint spots on May 22. The group has greatly increased in size by May 24, and has become an irregular stream of medium length. It diminishes again as quickly after May 25. The component spots are mostly unstable; *a*, the largest spot on May 24, is the darkest.

Group 4033, May 23. A very small spot.

Group 4034, May 23–27. A few very small faint spots on May 23, *s* of Group 4024. The group has expanded into a small stream by May 24, after which it gradually diminishes.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
142d.395	AW, M	4032	0·368	150·0	292·5	−20·0	0	7	
		4032	0·378	148·7	291·7	−20·3	3	9	
		4032	0·357	146·1	291·6	−18·6	2	10	
		4027*a*	0·410	81·3	279·9	+ 2·2	26	145	
		4027	0·435	80·5	278·4	+ 2·7	0	2	
		4027	0·443	85·1	277·5	+ 0·9	0	1	
		4027	0·453	84·8	277·0	+ 1·1	0	5	
		4027	0·476	84·2	275·6	+ 1·5	0	4	
		4027	0·487	86·4	274·7	+ 0·4	0	1	
		4027	0·515	87·5	272·9	0·0	0	2	
		4028*a*	0·577	133·1	276·2	−24·5	50	267	
		4028	0·615	135·8	274·9	−27·4	0	3	
		4028	0·593	130·6	274·3	−23·9	0	3	
		4028	0·613	131·4	273·3	−25·2	0	6	210*c*
		4028	0·675	135·9	270·9	−30·1	0	4	
		4028	0·630	126·1	270·3	−23·0	5	41	
		4028	0·655	126·3	268·6	−24·0	0	6	
		4035*a*	0·968	84·8	228·6	+ 4·7	9	64	278*n*
			0·871	62·0	247·1	+23·3			154
			0·868	76·1	244·7	+11·5			40
			0·876	110·2	243·9	−18·4			124
			0·922	119·7	239·1	−27·8			268
			0·955	73·2	232·3	+15·6			167
May 23		Centre			(303·7)	(−1·5)	(256)	(1487)	(2264)
143·515	CL, FT	4022*c*	0·952	285·4	359·8	+14·1	0	37	
		4022*d*	0·949	286·6	359·2	+15·3	0	57	482*c*
		4023	0·890	282·3	350·8	+10·3	14	64	
		4023	0·883	281·5	350·0	+ 9·5	2	16	
		4023	0·853	281·6	346·5	+ 9·1	6	27	
		4023	0·841	282·7	345·1	+ 9·9	3	14	689*c*
		4023	0·814	282·6	342·3	+ 9·4	0	8	
		4023	0·813	284·6	342·0	+11·0	0	5	
		4023	0·798	285·1	340·4	+11·1	21	87	
		4034	0·310	312·3	302·3	+10·7	1	6	
		4034	0·316	314·1	302·2	+11·3	7	30	
		4034	0·280	319·1	299·6	+10·9	0	5	
		4034	0·279	323·0	298·7	+11·5	5	28	
		4024	0·398	336·2	298·7	+19·9	0	4	
		4024*a*	0·431	338·6	298·6	+22·2	54	382	
		4024	0·383	338·3	297·5	+19·3	1	12	
		4024	0·396	340·6	296·9	+20·5	21	100	
		4024	0·448	344·8	296·3	+24·1	0	16	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
143d.515	CL, FT	4024	0·432	344·4	296·1	+23·1	5	28	
		4024	0·455	346·3	295·7	+24·7	0	8	
		4024	0·444	347·6	294·9	+24·2	0	16	
		4024	0·424	347·7	294·5	+23·0	0	6	
		4025*a*	0·262	219·9	298·8	−13·0	4	11	
		4032	0·335	204·5	297·3	−19·0	0	10	
		4032	0·323	201·5	296·1	−18·8	0	9	
		4032*a*	0·337	199·6	295·8	−19·8	9	53	
		4032	0·344	197·2	295·1	−20·5	0	4	
		4032	0·327	191·9	293·0	−20·0	4	30	
		4032	0·337	190·1	292·5	−20·7	0	6	
		4032	0·334	188·1	291·8	−20·6	0	27	
		4032	0·301	187·1	291·1	−18·7	0	19	
		4032	0·329	185·3	290·8	−20·4	0	6	
		4032	0·305	183·9	290·2	−19·0	0	6	
		4036	0·499	357·5	290·3	+28·4	0	7	
		4027*a*	0·156	65·9	280·7	+ 2·3	23	126	
		4027	0·257	70·7	274·9	+ 3·5	0	3	
		4027	0·265	68·7	274·6	+ 4·2	0	10	
		4028*a*	0·439	153·3	276·5	−24·3	46	270	
		4028	0·481	144·2	271·0	−24·2	0	42	
		4037	0·818	71·4	236·0	+14·3	13	40	
		4037	0·868	69·6	230·9	+16·9	5	18	
		4037	0·872	70·4	230·3	+16·3	0	4	279*c*
		4037	0·876	69·7	229·9	+16·9	0	5	
		4035*a*	0·870	84·2	228·9	+ 4·4	8	32	341*nf*
			0·862	121·3	233·1	−27·3			292
May 24					(288·9)	(−1·4)	(252)	(1694)	(2083)
144·499	CL, FT		0·814	287·6	328·6	+13·4			266
			0·759	295·2	321·7	+18·6			332
		4023	0·971	280·5	351·4	+ 9·9	22	142	
		4023	0·951	280·3	347·2	+ 9·4	17	119	
		4023	0·943	280·9	345·7	+ 9·8	0	8	640*c*
		4023	0·922	282·1	342·2	+10·6	0	20	
		4023	0·912	282·8	340·7	+11·1	0	32	
		4034	0·506	295·3	303·6	+11·3	7	21	
		4034	0·492	296·5	302·5	+11·5	2	11	
		4034	0·465	298·2	300·5	+11·5	0	4	
		4034	0·447	299·4	299·2	+11·5	3	16	
		4034	0·436	298·4	298·8	+10·8	0	9	
		4034	0·435	299·6	298·5	+11·2	0	7	
		4024	0·374	314·2	302·2	+22·4	0	4	
		4024	0·552	312·5	301·6	+20·7	0	4	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4035, May 23–31. A regular spot, *a*, diminishing steadily in size from day to day. On May 28 and the two succeeding days some very small spots are seen near *a*.
Group 4036, May 24. A very small faint spot *nf* Group 4024.
Group 4037, May 24–June 1. Two compact clusters on May 24. These increase in size on the succeeding days and form one irregular and complex stream which undergoes continual change. The group diminishes after May 28, and breaks up again into two distinct clusters.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895. 144d499	CL,FT	4024	0·569	316·6	301·0	+23·2	0	17	
		4024	0·576	317·6	300·9	+23·9	5	16	
		4024	0·575	319·3	300·1	+24·5	0	5	
		4024	0·565	318·7	299·9	+23·8	0	6	
		4024a	0·542	317·2	299·2	+22·2	61	298	
		4024	0·507	314·5	298·4	+19·5	28	125	
		4024	0·556	322·2	297·9	+24·8	1	8	
		4024	0·545	323·4	296·8	+24·7	0	3	
		4024	0·526	321·3	296·7	+23·0	11	100	
		4024	0·490	318·6	296·0	+20·3	11	86	
		4024	0·499	321·4	295·4	+21·6	3	19	
		4024	0·514	324·2	294·9	+23·3	24	212	
		4025a	0·432	241·5	298·7	−13·0	3	13	
		4032	0·483	230·5	299·0	−19·0	3	11	
		4032a	0·468	227·8	297·4	−19·5	15	65	
		4032	0·453	228·8	296·9	−18·5	0	2	
		4032	0·454	226·7	296·3	−19·3	0	3	
		4032	0·461	224·4	295·9	−20·4	0	4	
		4032	0·422	224·7	294·1	−18·7	0	3	
		4032	0·430	221·7	293·5	−20·0	4	19	
		4032	0·416	223·1	293·3	−18·9	0	7	
		4032	0·423	217·6	291·9	−20·8	5	20	
		4032	0·390	218·3	290·6	−19·0	11	56	
		4027a	0·111	304·0	281·2	+ 2·3	22	123	
		4028a	0·393	181·0	276·3	−24·3	51	268	
		4028	0·362	177·8	275·0	−22·4	0	3	
		4028	0·388	177·2	274·7	−24·0	0	5	
		4028	0·399	169·6	271·4	−24·3	0	10	
		4037	0·660	66·5	237·4	+14·2	12	56	
		4037	0·690	65·7	235·3	+15·5	9	42	
		4037	0·714	66·8	233·2	+15·3	0	6	
		4037	0·731	65·0	232·2	+17·0	5	24	
		4037	0·722	69·0	232·1	+14·0	0	5	290c
		4037	0·734	67·6	231·4	+15·3	0	4	
		4037	0·753	65·7	230·2	+17·1	7	43	
		4037	0·752	66·7	230·0	+16·4	0	4	
		4035a	0·731	82·6	229·4	+ 4·5	8	26	
			0·841	124·2	223·5	−28·9			280
			0·813	76·9	222·6	+ 9·9			291
			0·919	110·0	210·3	−18·9			502
May 25		Centre			(275·9)	(−1·3)	(350)	(2114)	(2601)
145·134 I.	AW, CL		0·819	295·4	319·1	+19·8			858
		4023	0·989	279·6	348·3	+ 9·3	22	155	683n

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				°	°	°			
1895. 145d·134 I.	AW, CL	4034	0·627	290·0	304·2	+11·4	4	21	
		4034	0·610	290·6	302·9	+11·4	4	26	
		4034	0·600	291·9	301·9	+11·9	0	2	91c
		4034	0·583	291·5	300·8	+11·3	0	4	
		4034	0·562	291·8	299·4	+11·0	0	7	
		4024	0·656	306·7	301·8	+22·0	7	43	
		4024	0·648	305·1	301·8	+20·8	0	10	
		4024	0·656	309·2	300·9	+23·4	6	50	
		4024	0·645	309·8	299·9	+23·3	0	29	
		4024a	0·632	307·9	299·8	+21·8	58	258	316c
		4024	0·596	306·4	297·9	+19·6	65	244	
		4024	0·634	313·2	297·8	+24·6	0	15	
		4024	0·591	312·5	295·4	+22·4	50	409	
		4024	0·599	316·2	294·4	+24·5	0	6	
		4025a	0·547	248·0	298·6	−12·8	3	12	
		4032	0·594	238·3	299·6	−19·2	0	8	
		4032a	0·580	237·0	298·3	−19·4	12	46	
		4032	0·571	235·5	297·3	−19·8	1	5	
		4032	0·558	235·2	296·4	−19·5	0	5	
		4032	0·520	233·7	293·6	−19·0	0	15	
		4032	0·518	231·2	292·7	−20·0	0	15	
		4032	0·511	229·8	291·9	−20·3	0	2	
		4032	0·514	228·2	291·5	−21·1	0	3	
		4032	0·492	230·5	291·0	−19·3	1	7	
		4032	0·484	231·6	290·9	−18·5	0	2	
		4032	0·480	230·5	290·3	−18·8	3	21	
		4027a	0·247	284·5	281·2	+ 2·4	25	128	
		4027	0·174	289·8	276·8	+ 2·2	0	4	
		4027	0·149	293·4	275·2	+ 2·2	0	4	
		4027	0·148	302·0	274·6	+ 3·3	0	3	
		4028a	0·418	199·1	276·0	−24·3	57	260	
		4028	0·400	195·8	274·2	−23·7	0	6	
		4028	0·400	189·2	271·4	−24·3	0	8	
		4037	0·548	60·8	237·9	+14·4	14	63	
		4037	0·568	61·2	236·5	+14·9	4	15	
		4037	0·588	60·5	235·4	+15·7	0	18	
		4037	0·609	62·0	233·6	+15·6	0	9	
		4037	0·605	63·6	233·5	+14·6	1	21	
		4037	0·620	61·2	233·0	+16·4	10	19	298c
		4037	0·638	57·9	232·7	+18·8	0	5	
		4037	0·631	61·8	232·1	+16·3	0	3	
		4037	0·640	59·5	232·1	+18·0	0	27	
		4037	0·666	61·7	229·6	+17·4	5	42	
		4035a	0·626	80·9	229·2	+ 4·8	9	22	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
145d·134	AW, CL	4038	0·931	110·3	200·0	−19·3	0	14	627c
			0·764	128·8	224·4	−29·4			209
			0·889	133·2	212·1	−38·1			275
May 26		Centre			(267·4)	(−1·2)	(361)	(2091)	(3357)
146·431	AW, CL		0·957	289·1	321·9	+17·9			392
			0·917	299·6	313·0	+26·4			127
			0·913	236·1	312·3	−31·1			102
		4034	0·825	284·8	304·6	+11·5	6	17	153c
		4034	0·785	285·6	300·6	+11·4	0	10	
		4024a	0·811	298·8	300·3	+22·3	71	335	
		4024	0·809	301·8	299·2	+24·5	0	8	
		4024	0·783	296·5	298·2	+19·7	48	341	
		4024	0·793	300·1	298·1	+22·7	0	4	
		4024	0·784	301·7	296·8	+23·5	2	10	
		4024	0·792	304·4	296·6	+25·7	0	8	
		4024	0·788	303·8	296·5	+25·2	0	7	414c
		4024	0·776	301·0	296·3	+22·7	8	30	
		4024	0·782	302·5	296·3	+24·0	4	17	
		4024	0·766	299·4	295·9	+21·3	4	52	
		4024	0·756	295·9	295·7	+19·2	7	37	
		4024	0·765	302·1	295·0	+23·2	47	331	
		4024	0·747	299·1	294·3	+20·4	5	18	
		4025a	0·761	254·1	298·7	−12·8	1	3	77c
		4025	0·744	251·3	296·8	−14·6	0	4	
		4032	0·803	248·4	301·8	−17·9	0	2	
		4032	0·785	250·8	300·4	−15·6	0	5	
		4032	0·786	246·9	299·9	−18·7	7	16	185c
		4032	0·769	245·9	298·0	−19·0	0	3	
		4032	0·763	245·0	297·3	−19·5	0	5	
		4032	0·723	242·3	293·2	−20·4	0	7	
		4032	0·716	244·1	293·0	−19·0	0	4	108c
		4032	0·696	243·2	291·3	−19·1	0	1	
		4039	0·759	310·5	291·2	+28·6	1	9	232c
		4027a	0·522	276·3	281·4	+ 2·4	26	129	
		4027	0·506	277·7	280·3	+ 2·9	0	2	71c
		4027	0·442	279·9	276·0	+ 3·4	0	8	
		4027	0·423	279·6	274·9	+ 3·1	0	2	
		4028	0·581	227·5	278·1	−24·0	1	5	
		4028	0·554	229·4	277·2	−22·0	3	11	
		4028	0·584	224·3	277·1	−25·6	0	13	170c
		4028a	0·557	225·3	275·9	−24·0	53	253	
		4028	0·522	224·0	273·4	−23·0	0	1	
		4028	0·503	221·8	271·6	−23·0	0	8	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
146d·431	AW, CL	4040	0·195	225·7	258·4	− 8·9	0	2	
		4040	0·164	225·9	257·1	− 7·7	0	6	
		4040	0·148	219·3	255·7	− 7·7	0	3	
		4037	0·328	38·9	238·1	+13·7	12	79	
		4037	0·332	42·0	237·2	+13·2	0	2	
		4037	0·343	40·2	237·2	+14·1	4	13	
		4037	0·359	41·7	236·1	+14·4	0	6	
		4037	0·356	44·3	235·5	+13·7	7	25	
		4037	0·347	47·4	235·2	+12·5	0	10	
		4037	0·373	44·8	234·6	+14·2	0	3	
		4037	0·385	45·7	233·8	+14·5	1	9	
		4037	0·400	45·0	233·3	+15·3	2	9	
		4037	0·427	43·3	232·5	+17·0	0	11	
		4037	0·432	47·0	231·2	+16·0	22	88	
		4037	0·447	48·9	229·9	+16·0	1	6	
		4037	0·462	46·9	229·7	+17·3	9	28	
		4037	0·456	49·5	229·2	+16·2	0	1	
		4041	0·474	140·5	231·3	−22·4	0	5	
		4035a	0·365	76·1	229·5	+ 4·0	4	18	
		4038	0·783	114·3	201·3	−19·5	0	5	376s
		4042a	0·877	98·2	189·4	− 7·7	13	77	200f
		4043	0·968	55·9	178·6	+32·5	0	14	69f
			0·793	139·7	209·9	−38·0			150
			0·865	63·0	194·0	+22·5			73
			0·950	75·3	179·5	+13·6			116
			0·972	98·3	174·1	− 8·4			142
May 27		Centre			(250·3)	(−1·1)	(369)	(2136)	(3157)
147·402	AW, FT		0·973	239·6	312·5	−29·8			89
			0·887	283·1	299·0	+11·1			236
			0·856	305·7	290·2	+29·3			424
			0·811	247·5	289·5	−18·6			267
		4024a	0·911	295·3	300·3	+22·5	42	312	
		4024	0·897	292·6	298·9	+19·7	31	230	
		4024	0·882	296·8	296·0	+22·9	0	28	
		4024	0·879	298·9	295·1	+24·6	35	240	529c
		4024	0·876	297·3	295·1	+23·2	0	17	
		4024	0·868	295·3	294·6	+21·2	19	275	
		4032	0·903	250·3	300·8	−18·2	2	8	312c
		4032	0·888	249·8	298·6	−18·3	0	5	
		4027a	0·698	274·3	281·5	+ 2·3	24	129	88c
		4028a	0·690	235·0	275·6	−24·0	56	256	160c
		4037	0·248	359·2	237·7	+13·3	20	132	
		4037	0·221	0·9	237·3	+11·7	0	9	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4038, May 26–27. A small faint spot.
Group 4039, May 27. A small faint spot *n*/ Group 4024.
Group 4040, May 27. A few very small faint spots.
Group 4041, May 27. A very small spot.
Group 4042, May 27–June 3. A spot, *a*, with double nucleus on May 27, which is followed by a short stream of small spots on May 28. *a* diminishes very quickly, and has disappeared by May 31.
Group 4043, May 27–28. A small faint spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
147d·402	AW, CL	4037	0·269	7·5	235·4	+14·4	1	7	
		4037	0·234	9·8	235·2	+12·3	0	8	
		4037	0·255	9·0	235·2	+13·6	2	21	
		4037	0·266	11·9	234·3	+14·0	0	6	
		4037	0·286	11·8	234·0	+15·2	0	41	
		4037	0·321	16·0	232·2	+16·9	0	11	
		4037	0·306	17·2	232·1	+15·9	7	33	
		4037	0·310	22·3	230·5	+15·6	1	7	
		4037	0·337	21·5	230·1	+17·2	12	77	
		4035	0·142	43·8	231·9	+ 4·9	0	2	
		4035*a*	0·159	56·8	229·9	+ 4·0	0	13	
		4042*a*	0·747	99·7	189·7	− 7·9	6	27	
		4042	0·762	99·2	188·3	− 7·6	0	2	122*c*
		4042	0·786	99·4	186·2	− 8·0	0	2	
		4042	0·792	98·5	185·5	− 7·4	0	3	
		4043	0·908	52·9	178·3	+32·7	0	12	119*f*
			0·712	118·1	195·6	−20·3			194
			0·923	119·5	172·9	−27·5			216
			0·917	97·9	171·3	− 7·7			196
May 28		Centre			(237·5)	(−1·0)	(258)	(1913)	(2952)
148·400	CL, M		0·965	281·5	298·4	+10·9			267
			0·945	250·9	294·2	−18·3			537
			0·948	301·0	292·1	+28·8			486
		4024*a*	0·978	293·1	300·7	+22·4	39	367	
		4024	0·966	291·1	297·8	+20·1	62	421	
		4024	0·959	296·2	295·4	+24·7	27	258	745*c*
		4024	0·956	293·5	295·2	+22·1	21	93	
		4027*a*	0·846	273·0	281·8	+ 2·1	27	127	647*c*
		4028*a*	0·815	241·3	275·3	−23·5	45	221	427*c*
		4037	0·351	313·7	239·3	+13·1	0	15	
		4037	0·347	316·6	238·4	+13·7	9	45	
		4037	0·325	319·4	236·8	+13·4	9	29	
		4037	0·321	323·6	235·6	+14·0	1	12	
		4037	0·292	320·5	235·2	+12·1	0	4	
		4037	0·323	328·4	234·3	+15·0	3	23	
		4037	0·343	335·5	232·8	+17·2	0	3	
		4037	0·314	336·1	231·9	+15·7	0	9	
		4037	0·305	338·4	231·0	+15·5	0	3	
		4037	0·335	340·5	231·0	+17·4	0	12	
		4037	0·334	344·0	229·8	+17·8	12	48	
		4037	0·341	347·3	228·8	+18·4	2	12	
		4035	0·181	304·4	232·9	+ 5·0	0	11	
1895.				°	°	°			
148d·400	CL, M	4035*a*	0·129	311·6	229·8	+ 4·0	3	9	
		4035	0·161	324·2	229·7	+ 6·6	0	9	
		4035	0·108	322·6	228·1	+ 4·0	0	4	
		4042*a*	0·572	102·0	190·1	− 7·5	3	19	
		4042	0·618	101·5	186·8	− 7·8	0	8	132*c*
		4042	0·630	99·8	185·8	− 6·9	3	28	
			0·833	48·5	176·6	+32·8			74
			0·816	98·6	170·1	− 7·5			234
			0·974	102·5	147·7	−12·4			215
May 29		Centre			(224·3)	(−0·9)	(266)	(1790)	(3764)
149·396	AW, FT		0·990	251·9	292·6	−18·0			323
			0·978	281·0	288·6	+10·6			79
			0·976	303·6	285·6	+32·5			282
			0·956	258·2	283·7	−11·5			106
			0·930	311·5	272·6	+37·6			78
			0·865	255·6	270·2	−12·8			73
		4024	0·997	295·5	295·7	+25·4	19	96	220*c*
		4024	0·995	291·6	294·5	+21·4	0	55	152*c*
		4024	0·995	290·6	294·5	+20·4	10	35	
		4027*a*	0·947	272·3	282·2	+ 2·0	21	128	577*f*
		4028*a*	0·913	244·2	274·8	−23·7	42	237	330*f*
		4037	0·515	297·5	239·1	+13·1	0	4	
		4037	0·516	299·0	238·8	+13·8	5	17	
		4037	0·499	298·8	237·8	+13·2	0	6	
		4037	0·494	300·2	237·2	+13·7	8	21	
		4037	0·485	301·4	236·3	+14·0	2	8	
		4037	0·465	305·4	234·2	+14·9	0	1	
		4037	0·440	314·5	230·3	+17·2	2	13	
		4037	0·447	317·1	229·8	+18·4	3	9	
		4037	0·430	315·1	229·6	+17·0	0	3	
		4037	0·435	320·2	228·2	+18·8	4	23	
		4035	0·393	285·5	233·5	+ 5·4	0	5	
		4035	0·379	293·2	231·7	+ 8·0	0	3	
		4035	0·356	286·3	231·2	+ 5·1	0	6	
		4035*a*	0·328	284·1	229·7	+ 3·9	0	1	
		4042*a*	0·377	108·2	190·1	− 7·4	0	3	
		4042	0·427	103·0	186·6	− 6·2	0	3	
		4042	0·441	104·0	185·8	− 6·7	4	15	
		4044	0·913	102·7	145·9	−11·9	0	10	289*c*
			0·941	83·7	141·4	+ 5·7			207
			0·986	100·6	131·2	−10·6			229
May 30		Centre			(211·2)	(−0·7)	(120)	(702)	(2945)

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4044, May 30–June 10. A disturbed area in which one or two very small unstable spots are occasionally seen from May 30 to June 4. A great outburst has taken place by June 5, and an irregular stream, chiefly in two clusters, is seen. The following cluster is the more important, and consists on June 6 and the succeeding days chiefly of a large double spot, *a*. The group diminishes after June 6. It is not seen on June 1 or 3.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
150d·517	CL,FT		0·966	270·2	271·1	− 0·1			409
			0·916	258·2	262·1	−11·0			58
		4028*a*	0·983	246·3	274·8	−23·4	47	209	351*f*
		4037	0·715	290·0	239·9	+13·8	3	8	
		4037	0·706	290·8	239·0	+14·1	7	26	
		4037	0·706	290·1	239·0	+13·7	0	3	
		4037	0·694	289·9	238·2	+13·3	3	15	152*c*
		4037	0·677	291·5	236·6	+14·0	1	8	
		4037	0·646	290·7	234·4	+12·8	0	3	
		4037	0·621	298·8	230·8	+16·9	1	3	
		4037	0·615	302·1	229·5	+18·6	0	3	
		4037	0·605	301·7	228·9	+18·1	0	5	
		4037	0·597	303·6	227·9	+18·8	5	10	
		4035*a*	0·558	277·2	229·9	+ 3·6	0	5	
		4045	0·289	184·9	197·8	−17·2	3	9	
		4045	0·282	181·1	196·6	−16·8	3	9	
		4045	0·298	176·9	195·3	−17·7	3	11	
		4042	0·194	119·6	186·6	− 6·0	0	2	
		4042	0·206	120·8	186·1	− 6·6	4	11	
		4044	0·790	104·7	145·1	−11·9	0	4	186*c*
		4044	0·799	104·7	144·3	−12·0	0	3	
		4046	0·948	73·8	126·0	+15·1	8	45	
		4046	0·948	74·7	125·9	+14·3	7	42	
		4046	0·956	75·5	124·3	+13·7	7	42	
		4046	0·958	74·7	124·0	+14·4	0	25	534*c*
		4046	0·972	72·7	120·8	+16·7	11	57	
		4046	0·975	74·7	119·9	+14·8	5	16	
		4046	0·990	75·7	115·1	+14·1	0	39	
			0·917	101·8	130·4	−11·0			326
May 31					(196·3)	(−0·5)	(118)	(613)	(2016)
151·232	AW, FT		0·986	259·6	266·7	−10·3			131
			0·885	242·9	246·0	−23·9			204
I.		4037	0·824	286·8	240·7	+13·6	0	4	
		4037	0·817	287·1	240·0	+13·7	2	8	
		4037	0·809	287·9	239·1	+14·1	2	18	
		4037	0·771	288·0	235·5	+13·6	0	10	292*c*
		4037	0·729	294·1	230·6	+17·0	0	7	
		4037	0·704	297·9	227·6	+18·9	2	9	
		4045	0·348	210·8	197·4	−17·8	2	13	
		4045	0·338	210·5	197·0	−17·3	4	13	
		4045	0·340	207·9	196·3	−17·8	0	4	
		4045	0·325	205·9	195·2	−17·4	0	13	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
151d·232	AW,FT	4045	0·328	204·2	194·8	−17·8	6	20	
		4042	0·101	172·7	186·0	− 6·2	0	8	
I.		4046	0·882	72·3	126·3	+15·4	5	20	
		4046	0·889	72·9	125·3	+15·0	6	29	
		4046	0·894	74·1	124·5	+14·0	9	42	
		4046	0·901	73·6	123·7	+14·6	0	5	
		4046	0·908	73·5	122·8	+14·7	0	3	756*c*
		4046	0·918	73·5	121·3	+14·9	3	11	
		4046	0·931	71·4	119·6	+17·1	12	53	
		4046	0·934	73·2	118·8	+15·5	8	31	
		4046	0·939	71·9	118·1	+16·8	3	14	
		4046	0·952	74·9	113·5	+14·4	0	30	
			0·858	103·9	128·5	−12·1			229
June 1		Centre			(186·7)	(−0·4)	(64)	(365)	(1612)
			0·958	245·3	242·2	−23·7			216
			0·905	288·3	233·9	+16·4			527
			0·878	276·3	231·5	+ 5·4			146
			0·818	284·4	224·3	+11·6			138
152·463	AW,M	4045	0·525	235·5	197·4	−17·5	4	16	
		4045	0·498	232·9	195·0	−17·7	5	24	
		4045	0·453	235·7	193·2	−15·0	0	3	
		4042	0·297	250·6	186·8	− 5·9	0	2	
		4042	0·284	246·0	185·6	− 6·9	0	1	
		4044	0·455	115·6	145·8	−11·6	2	5	
		4046	0·717	68·7	126·9	+14·9	0	3	
		4046	0·727	69·1	126·1	+14·8	3	24	
		4046	0·729	70·8	125·6	+13·6	9	25	
		4046	0·735	69·9	125·2	+14·4	0	8	
		4046	0·756	70·2	123·4	+14·6	0	6	
		4046	0·775	69·9	121·7	+15·3	0	4	
		4046	0·784	69·1	121·0	+16·0	0	1	823*c*
		4046	0·795	68·2	120·2	+16·9	5	31	
		4046	0·791	71·1	120·0	+14·7	0	2	
		4046	0·804	68·7	119·2	+16·8	0	6	
		4046	0·811	69·9	118·3	+16·0	6	15	
		4046	0·812	69·9	118·2	+16·0	6	19	
		4046	0·847	72·9	114·1	+14·2	4	19	
		4047	0·931	73·5	103·1	+15·2	0	5	301*c*
		4047*a*	0·953	71·2	99·4	+17·8	7	31	
		4048*a*	0·935	102·5	101·9	−11·8	10	56	
		4048	0·937	104·6	101·8	−13·8	0	9	
		4048*b*	0·956	103·2	98·1	−12·7	9	63	551*c*

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4045, May 31–June 4. Several small spots, mostly unstable, in a short stream.
Group 4046, May 31–June 9. A large number of spots, mostly small and unstable, in an irregular straggling stream. The group diminishes from day to day.
Group 4047, June 2–6. A small spot, *a*, with a few very small unstable companions *nf* Group 4046.
Group 4048, June 2–10. A fine irregular stream, with five principal spots, *a*, *b*, *c*, *d* and *e*, of which *d* is the only large spot; *b* and *c* are measured together on June 3. The group rapidly diminishes, and has disappeared by June 8. Two or three very small spots are seen near its place on June 8 and 10.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
152d.463	AW,M	4048c	0·957	102·0	97·9	−11·6	12	66	
		4048d	0·970	101·8	95·0	−11·5	19	148	
		4048e	0·973	103·0	94·4	−12·7	3	40	
			0·957	79·4	98·0	+10·0			80
June 2		Centre			(170·5)	(−0·3)	(104)	(632)	(2782)
153·397	AW,FT		0·946	275·3	228·8	+ 5·0			175
			0·933	285·5	226·0	+14·4			564
			0·888	233·3	215·2	−32·2			203
		4045	0·671	243·9	197·1	−17·3	1	9	
		4045	0·638	242·5	194·3	−17·3	3	18	90c
		4042	0·525	258·1	189·1	− 6·4	0	6	
		4042	0·494	256·6	186·9	− 6·7	0	10	
		4046	0·574	63·9	126·1	+14·4	10	43	
		4046	0·588	65·7	124·8	+13·8	0	5	
		4046	0·597	64·6	124·4	+14·6	0	3	
		4046	0·632	65·0	121·8	+15·3	2	9	
		4046	0·644	64·8	121·0	+15·7	0	7	
		4046	0·652	63·4	120·8	+16·8	3	12	80f
		4046	0·680	65·1	118·3	+16·4	3	10	
		4046	0·679	66·5	118·0	+15·5	2	6	
		4046	0·687	66·0	117·5	+16·0	3	8	
		4046	0·688	67·0	114·1	+15·4	1	8	
		4046	0·721	69·3	114·1	+14·6	0	13	
		4047	0·839	72·0	102·6	+14·9	0	3	
		4047a	0·863	69·7	100·3	+17·3	3	9	441c
		4048a	0·843	103·9	101·6	−11·8	10	28	
		4048	0·859	106·3	100·1	−14·1	0	2	
		4048bc	0·873	103·6	98·2	−12·0	22	125	
		4048	0·893	106·0	95·9	−14·4	0	3	1001c
		4048d	0·897	103·3	95·1	−12·0	19	68	
		4048e	0·905	104·3	94·2	−13·0	2	33	
		4049a	0·972	108·5	82·5	−18·0	28	184	197c
			0·905	78·2	94·0	+10·6			146
June 3		Centre			(158·1)	(−0·2)	(112)	(622)	(2897)
154·300	AW,FT		0·946	282·7	216·5	+12·0			223
I.			0·933	229·7	209·2	−37·2			232
			0·901	314·4	201·8	+38·9			116
			0·792	235·7	193·0	−26·5			129
			0·850	321·2	191·2	+41·3			127
			0·704	259·1	190·2	− 7·7			95

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
154d.300	AW,FT	4045	0·771	247·7	194·3	−17·1	0	8	762p
		4045	0·731	247·2	190·7	−16·5	0	6	
I.		4044	0·216	190·1	148·4	−12·4	1	3	
		4046	0·417	51·6	126·5	+14·9	7	48	
		4046	0·496	56·0	121·0	+15·9	4	17	
		4046	0·506	54·4	120·8	+16·9	4	17	
		4046	0·532	57·6	118·4	+16·5	0	4	
		4046	0·542	56·9	118·0	+17·1	2	6	
		4046	0·533	60·0	117·7	+15·4	1	7	
		4046	0·541	59·0	117·5	+16·1	2	12	
		4046	0·576	63·1	114·2	+15·0	0	2	
		4047	0·747	65·7	100·7	+17·8	0	4	
		4047a	0·749	66·6	100·4	+17·2	0	6	484c
		4047	0·766	67·4	98·7	+17·1	0	3	
		4048	0·706	104·5	102·4	−10·2	0	6	
		4048a	0·721	105·9	101·4	−11·4	10	36	
		4048	0·728	106·8	100·9	−12·2	0	4	
		4048	0·738	106·3	100·0	−12·0	0	6	
		4048b	0·751	104·6	98·6	−11·0	9	75	
		4048c	0·757	106·1	98·3	−12·1	3	48	844c
		4048	0·765	105·1	97·5	−11·6	0	6	
		4048	0·793	104·1	94·8	−11·2	0	9	
		4048d	0·794	105·1	94·8	−12·0	24	44	
		4048e	0·804	105·7	93·9	−12·6	0	12	
		4049a	0·910	109·2	82·1	−17·5	35	186	528c
			0·868	78·5	86·7	+ 9·9			304
			0·916	100·7	80·4	− 9·9			195
June 4		Centre			(146·2)	(−0·1)	(102)	(575)	(4039)
155·607	CL, AR		0·947	248·9	198·6	−19·8			321
			0·928	241·4	194·1	−26·3			167
			0·876	261·3	189·5	− 7·5			130
			0·803	261·8	181·8	− 6·5			44
		4050	0·732	262·3	175·5	− 5·6	0	2	
		4050	0·733	260·2	175·4	− 7·1	3	11	69c
		4050	0·720	262·0	174·5	− 5·7	2	8	
		4044	0·429	243·0	151·7	−11·1	14	45	
		4044	0·416	243·2	151·0	−10·7	1	3	
		4044	0·418	241·6	150·8	−11·3	1	7	
		4044	0·415	240·3	150·4	−11·7	1	7	
		4044	0·416	238·4	150·1	−12·4	0	1	
		4044	0·401	241·7	149·9	−10·8	0	11	
		4044	0·399	238·2	149·1	−12·0	0	2	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4049, June 3–15. A large regular spot, *a*, with occasionally one or two very small companions.
Group 4050, June 5–6. A few very small spots near the West limb.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
155d.607	CL, AR	4044	0·392	238·5	148·8	−11·7	0	2	
		4044	0·372	239·5	147·9	−10·7	2	6	
		4044	0·361	236·3	146·7	−11·4	19	76	
		4044	0·370	232·8	146·4	−12·8	3	16	
		4046	0·265	6·5	127·1	+15·3	1	6	
		4046	0·251	8·1	126·8	+14·4	1	5	
		4046	0·247	10·7	126·2	+14·1	0	3	
		4046	0·267	17·4	124·2	+14·9	0	2	
		4046	0·272	19·9	123·4	+14·9	0	3	
		4046	0·301	24·3	121·5	+16·0	0	3	
		4046	0·306	25·7	121·0	+16·1	5	11	
		4046	0·332	25·6	120·3	+17·5	0	3	
		4046	0·343	27·9	119·2	+17·7	0	7	
		4046	0·332	31·7	118·5	+16·5	0	3	
		4046	0·328	33·2	118·2	+16·0	1	2	
		4046	0·345	31·3	118·1	+17·2	0	8	
		4047	0·516	54·6	102·9	+17·4	0	2	
		4047	0·528	55·9	101·8	+17·2	0	2	
		4047	0·536	56·4	101·2	+17·2	0	1	
		4047*a*	0·542	56·9	100·6	+17·2	4	13	
		4048*a*	0·494	114·2	101·6	−11·6	7	21	
		4048	0·518	114·9	100·3	−12·5	0	6	
		4048	0·528	113·9	99·4	−12·3	0	4	
		4048	0·520	110·5	99·3	−10·4	0	3	
		4048*b*	0·529	112·3	99·1	−11·5	4	38	
		4048*c*	0·542	113·5	98·4	−12·4	1	7	126*c*
		4048	0·548	112·1	97·8	−11·8	0	4	
		4048	0·554	114·3	97·8	−13·1	0	2	
		4048	0·568	114·6	96·9	−13·6	0	4	
		4048*d*	0·579	111·9	95·7	−12·4	5	19	
		4048*e*	0·590	112·2	95·0	−12·8	1	5	
		4048	0·602	110·5	93·8	−12·1	0	2	
		4051	0·637	57·6	94·1	+20·0	1	11	
		4049*a*	0·759	113·7	82·3	−17·7	35	192	148*c*
		4052*a*	0·993	104·4	46·2	−14·3	26	188	223*c*
			0·846	100·8	71·8	− 9·1			333
			0·888	110·1	68·0	−17·7			497
			0·902	78·1	65·1	+10·8			385
			0·947	68·1	59·1	+20·8			128
June 5		Centre			(128·9)	(+0·1)	(138)	(777)	(2571)
156·488	AW, FT		0·975	247·4	193·0	−21·9			301
			0·957	263·1	189·9	− 6·5			214
			0·873	308·4	171·6	+32·9			107

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
156d.488	AW, FT	4050	0·871	262·0	177·3	− 6·8	0	8	168*c*
		4050	0·849	263·2	174·9	− 5·6	0	6	
		4044	0·601	251·4	152·5	−10·8	3	16	
		4044	0·597	250·5	152·1	−11·3	0	5	
		4044	0·585	250·8	151·3	−10·9	6	30	
		4044	0·573	248·1	150·0	−12·1	6	26	
		4044	0·562	248·6	149·4	−11·6	0	15	
		4044	0·555	247·8	148·7	−11·9	0	5	
		4044*a*	0·529	246·2	146·7	−12·1	45	186	
		4046	0·282	347·1	120·9	+16·2	2	6	
		4046	0·277	349·4	120·2	+16·0	0	4	
		4046	0·300	351·3	119·9	+17·5	0	4	
		4046	0·294	356·0	118·4	+17·3	0	14	
		4046	0·286	14·9	112·8	+16·3	0	2	
		4047*a*	0·399	42·1	101·0	+17·5	2	15	
		4048*a*	0·338	128·6	101·6	−11·9	3	10	
		4048	0·358	124·0	99·7	−11·2	0	4	
		4048*b*	0·374	124·4	98·9	−11·9	2	12	
		4048	0·389	125·1	98·2	−12·6	0	3	
		4048*c*	0·402	125·4	97·6	−13·1	2	14	
		4048	0·396	120·4	96·9	−11·3	0	8	
		4048*d*	0·419	121·3	95·8	−12·3	0	7	
		4048*e*	0·428	122·0	95·4	−12·8	0	3	
		4048	0·416	117·3	95·2	−10·7	0	6	
		4049*a*	0·624	119·1	82·5	−17·4	35	197	315*f*
		4052*a*	0·943	106·1	47·7	−15·0	37	190	
		4052	0·967	104·5	42·7	−14·0	0	22	
		4052	0·969	104·0	42·2	−13·5	6	40	803*c*
		4053	0·986	105·1	37·4	−14·9	0	18	
		4053*a*	0·991	105·4	35·5	−15·2	23	159	
			0·876	115·9	59·0	−22·3			367
			0·890	66·3	56·6	+21·1			160
June 6		Centre			(117·2)	(+0·3)	(172)	(1035)	(2435)
157·429	CL, M		0·936	263·7	173·7	− 5·8			192
			0·946	244·7	173·5	−23·7			111
		4044	0·760	255·3	153·0	−10·8	0	3	
		4044	0·745	255·3	151·7	−10·6	3	18	
		4044	0·737	254·4	150·8	−11·1	3	26	
		4044	0·730	253·4	150·1	−11·7	2	15	345*c*
		4044	0·700	253·1	147·6	−11·4	1	5	
		4044*a*	0·691	251·9	146·7	−12·1	34	210	
		4046	0·387	316·2	120·9	+16·5	2	19	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4051, June 5. A small spot *nf* Group 4047.
Group 4052, June 5–17. A fine compact stream of spots, which increase in number and size, and finally coalesce to form one very large complex spot, long and comparatively narrow, and inclined at an angle of about 40° to the equator. The group diminishes after June 10. The two principal parts of the group, *a* and *b*, are distinguishable through all its changes, and are measured so far as possible as if separate spots.
Group 4053, June 6–16. A fine compact stream of spots, *f* and nearly at right angles to Group 4052. Like Group 4052 it diminishes after June 10, and gradually comes into the same straight line with it. The last spot on June 6, *a*, is then the largest, but a large spot, *b*, has formed in the centre of the group by June 8. *a* is measured in two parts on June 9, and shortly after breaks up and disappears. A number of very small spots are seen *sf* the main group on June 13, and are included in it.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
157d·429	CL, M	4048a	0·216	168·1	102·1	−11·7	4	12	
		4048	0·244	153·9	98·4	−12·2	0	9	
		4048	0·262	153·0	97·7	−13·0	0	2	
		4048	0·241	140·7	95·8	−10·3	2	6	
		4049	0·401	126·7	85·5	−13·5	0	2	
		4049	0·447	128·3	83·4	−15·7	0	2	
		4049a	0·469	130·2	82·8	−17·2	29	145	
		4052a	0·849	109·0	48·4	−15·8	23	218	
		4052	0·864	107·8	46·5	−15·1	0	4	
		4052	0·867	107·0	46·0	−14·4	16	43	
		4052	0·870	106·0	45·5	−13·7	0	8	
		4052	0·878	106·2	44·6	−14·0	0	4	
		4052	0·886	106·0	43·6	−14·0	4	15	
		4053	0·904	104·4	41·1	−12·8	10	78	804c
		4053	0·909	105·4	40·5	−13·8	0	19	
		4053	0·919	103·8	38·9	−12·5	0	3	
		4053	0·925	104·4	38·0	−13·1	0	3	
		4053	0·929	106·0	37·6	−14·7	9	52	
		4053a	0·941	106·3	35·5	−15·2	18	115	
			0·773	116·7	57·6	−20·0			230
June 7		Centre			(104·7)	(+0·4)	(160)	(1036)	(1682)
158·399	M, FT	4044	0·874	259·5	152·1	− 8·9	0	2	
		4044	0·871	257·2	151·6	−10·9	0	23	796c
		4044a	0·821	254·7	145·8	−12·2	30	169	
		4046	0·546	300·3	121·2	+16·4	0	5	
		4046	0·535	301·4	120·2	+16·6	0	9	
		4046	0·534	303·3	119·7	+17·4	0	7	
		4048	0·279	219·0	104·5	− 9·6	0	11	
		4048	0·232	218·3	100·3	−10·0	0	1	
		4049a	0·346	153·0	82·5	−17·4	27	139	
		4049	0·423	145·6	77·2	−19·9	0	2	
		4052a	0·720	114·4	48·8	−16·9	36	199	
		4052a	0·732	110·1	46·9	−14·2	40	188	
		4052b	0·754	108·0	44·7	−13·1	14	82	
		4052	0·758	109·3	44·6	−14·1	6	27	
		4052	0·782	108·0	42·2	−13·7	0	28	
		4053	0·784	106·1	41·7	−12·3	0	39	799c
		4053	0·793	106·5	40·9	−12·7	0	7	
		4053b	0·803	106·9	40·0	−13·2	16	149	
		4053	0·828	106·3	37·4	−13·1	0	13	
		4053a	0·846	108·3	35·8	−15·1	24	137	
June 8					(91·9)	(+0·5)	(193)	(1237)	(1595)
1895.				°	°	°			
159d·506	CL, FT	4044	0·947	256·6	147·7	−12·5	0	16	
		4044	0·937	255·7	145·8	−13·1	0	13	469p
		4044a	0·935	257·4	145·7	−11·6	15	86	
		4046	0·712	293·4	120·2	+16·8	1	10	
		4046	0·685	290·0	118·7	+14·0	0	6	280p
		4049a	0·325	195·3	82·4	−17·6	26	136	
		4054	0·449	45·3	57·7	+18·9	0	2	
		4054	0·458	48·9	56·1	+18·0	0	9	
		4054	0·454	51·1	55·7	+17·1	0	6	
		4054	0·481	46·4	55·7	+19·8	0	5	
		4054	0·477	52·3	54·1	+17·5	2	14	
		4054	0·496	53·8	52·6	+17·5	0	10	
		4052a	0·549	120·8	48·1	−15·7	88	480	
		4052b	0·573	115·2	45·2	−13·6	15	92	
		4053	0·612	111·7	41·8	−12·6	6	22	
		4053	0·626	112·0	40·9	−13·1	5	20	
		4053	0·630	110·0	40·2	−12·0	8	52	
		4053	0·645	113·3	39·8	−14·3	1	10	
		4053b	0·647	111·4	39·2	−13·1	21	128	241c
		4053	0·658	112·7	38·7	−14·2	1	3	
		4053	0·666	111·8	37·9	−13·8	3	20	
		4053a	0·687	112·5	36·5	−14·7	8	55	
		4053a	0·702	112·9	35·3	−15·4	9	37	
		4053	0·720	112·1	33·7	−15·3	0	5	
			0·895	112·6	16·1	−19·8			250
			0·962	78·2	3·9	−11·1			321
June 9		Centre			(77·3)	(+0·6)	(209)	(1237)	(1561)
160·174	CL, FT		0·854	287·2	125·8	+15·0			518
I.		4044a	0·979	257·3	145·9	−12·3	19	90	311f
		4048	0·609	248·0	103·6	−12·6	0	2	
		4048	0·602	246·5	102·8	−13·3	0	4	81c
		4048	0·587	247·3	101·9	−12·5	1	11	
		4049a	0·391	214·6	81·8	−18·1	28	138	
		4049	0·423	210·0	81·4	−20·8	0	6	
		4054	0·356	27·3	58·5	+19·0	0	2	
		4054	0·356	29·9	57·7	+18·6	6	17	
		4054	0·353	35·9	55·9	+17·2	0	1	
		4054	0·380	37·4	54·4	+18·2	0	2	
		4054	0·380	40·2	53·6	+17·5	4	13	
		4052	0·455	127·6	51·3	−20·4	18	84	
		4052a	0·438	132·6	48·8	−16·5	85	401	
		4052b	0·449	123·8	45·9	−13·8	52	307	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4054, June 9–13. A number of small unstable spots irregularly scattered. The group rapidly diminishes, and has disappeared by June 13, but a very small pair is seen *nf* its place.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for day).
1895.				°	°	°			
160d·174	CL,FT	4053	0·510	117·3	40·8	−12·8	36	124	
		4053	0·538	118·8	39·4	−14·4	1	9	
I.		4053*b*	0·531	115·3	39·1	−12·5	42	135	
		4053	0·585	115·0	35·5	−13·7	0	3	
		4053*a*	0·591	117·1	35·5	−15·0	6	99	
		4055*a*	0·974	80·9	351·7	+ 9·1	12	84	} 420*c*
		4055*b*	0·992	78·7	345·9	+11·3	0	156	
			0·854	116·0	13·0	−21·6			169
			0·920	73·5	2·4	+15·4			309
June 10		Centre			(68·4)	(+0·7)	(310)	(1688)	(1808)
161·487	AW,M		0·955	288·1	122·9	+17·5			644
			0·813	291·2	103·5	+17·6			439
			0·771	254·8	100·1	−11·1			538
		4049*a*	0·587	236·1	81·7	−18·3	25	144	78*c*
		4054	0·344	336·4	59·4	+19·2	3	8	
		4052*a*	0·300	176·8	50·0	−16·5	65	368	
		4052	0·311	170·2	47·8	−16·9	0	4	
		4052*b*	0·267	165·7	47·1	−14·1	62	277	
		4052	0·288	163·0	46·0	−15·0	3	21	
		4053	0·294	147·2	41·6	−13·4	6	52	
		4053	0·280	142·9	41·1	−12·0	4	24	
		4053	0·321	144·4	39·9	−14·2	0	3	
		4053*b*	0·303	139·3	39·4	−12·4	23	129	
		4053	0·331	136·9	37·6	−13·1	0	10	
		4053	0·317	133·0	37·4	−11·6	0	10	
		4053	0·362	136·4	36·1	−14·3	1	8	
		4053	0·382	136·3	35·2	−15·1	2	14	
		4055*a*	0·856	80·3	352·6	+ 8·8	15	98	} 1409*c*
		4055*b*	0·906	78·2	346·6	+11·1	21	149	
			0·762	73·1	2·7	+13·4			233
			0·808	120·9	1·9	−23·9			96
			0·845	99·9	354·0	− 7·9			151
June 11		Centre			(51·0)	(+0·9)	(230)	(1319)	(3588)
162·389	AW,CL		0·987	287·5	119·5	+17·5			254
			0·876	254·5	98·9	−13·1			572
			0·877	291·4	98·7	+19·1			266
		4049*a*	0·724	242·9	81·7	−18·5	27	127	72*c*
		4054	0·469	313·4	60·2	+19·7	3	7	
		4054	0·390	323·8	53·2	+19·2	0	2	
		4052*a*	0·355	212·0	50·4	−16·5	70	390	
1895.				°	°	°			
162d·389	AW,CL	4052	0·318	211·4	48·9	−14·7	0	10	
		4052*b*	0·299	207·8	47·3	−14·3	51	262	
		4052	0·306	204·6	46·6	−15·1	3	10	
		4053	0·250	193·8	42·6	−13·0	0	7	
		4053	0·265	192·0	42·4	−14·0	2	14	
		4053	0·250	189·8	41·6	−13·2	5	17	
		4053	0·231	189·1	41·2	−12·1	3	11	
		4053	0·264	187·0	41·0	−14·1	0	5	
		4053*b*	0·235	182·1	39·6	−12·6	21	97	
		4055*a*	0·731	79·1	352·7	+ 8·6	18	84	} 249*c*
		4055	0·777	77·4	348·9	+10·4	7	27	
		4055*b*	0·796	77·1	347·1	+10·9	27	194	
			0·830	69·5	344·7	+17·5			318
			0·919	74·4	333·1	+14·7			152
			0·972	65·4	323·8	+24·1			99
			0·976	93·3	322·0	− 3·0			71
June 12		Centre			(39·1)	(+1·0)	(237)	(1264)	(2053)
163·407	AW,M		0·948	248·0	95·1	−20·4			235
			0·939	289·7	94·5	+18·9			331
			0·925	258·7	92·4	−10·0			505
			0·915	279·4	91·4	+ 9·1			84
			0·897	299·0	86·5	+26·3			118
			0·765	245·4	72·4	−17·8			219
		4049*a*	0·852	247·3	81·4	−18·6	25	138	} 207*c*
		4049	0·847	248·6	81·1	−17·4	0	4	
		4054	0·605	305·9	57·3	+21·6	0	3	
		4054	0·586	306·3	55·9	+21·2	0	2	
		4052*a*	0·506	233·2	50·5	−16·6	70	383	
		4052	0·505	228·4	48·4	−14·4	0	1	
		4052	0·478	231·3	48·4	−16·3	0	1	
		4052	0·486	228·2	47·9	−17·8	1	3	
		4052*b*	0·453	233·8	47·7	−14·4	46	293	
		4052	0·457	227·8	46·2	−16·8	0	4	
		4052	0·432	229·4	45·4	−15·3	1	6	
		4053	0·399	226·9	43·1	−14·7	0	2	
		4053	0·370	228·3	42·0	−13·1	0	6	
		4053	0·349	229·4	41·2	−12·0	0	7	
		4053	0·372	224·6	41·2	−14·3	0	3	
		4053*b*	0·337	225·1	39·7	−12·7	14	76	
		4053	0·320	226·9	39·3	−11·6	1	3	
		4053	0·336	216·8	37·5	−14·5	0	3	
		4053	0·342	212·7	36·6	−15·6	0	2	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4055, June 10–22. Two regular spots, *a* and *b*. *a* diminishes steadily from day to day: *b* undergoes a wonderful development, and has become very large by June 13. It is measured in two principal portions, *c* and *d*, on June 14, and *c* has definitely separated from *d* by June 15. Fresh spots form round *d* day by day and often coalesce with it until June 17, after which the group begins to diminish.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
163d.407	AW,M	4053	0·270	215·7	34·8	−11·6	0	5	
		4053	0·374	203·9	34·8	−18·8	0	12	
		4053	0·326	201·5	32·7	−16·5	0	2	
		4056*a*	0·555	103·2	352·8	− 6·3	4	10	
		4056	0·572	102·8	351·6	− 6·3	0	1	
		4056*b*	0·586	101·4	350·5	− 5·7	1	10	
		4055	0·562	67·7	353·5	+13·2	0	9	
		4055*a*	0·554	76·2	352·8	+ 8·5	14	71	
		4055	0·590	77·2	350·2	+ 8·4	0	2	
		4055	0·609	78·1	348·8	+ 8·1	0	2	
		4055*b*	0·629	74·1	347·7	+10·8	80	464	326*c*
		4055	0·632	77·6	347·1	+ 8·6	0	7	
		4055	0·647	72·2	346·7	+12·3	0	1	
		4055	0·669	72·2	345·0	+12·6	0	2	
		4057*a*	0·973	67·9	309·7	+21·8	18	87	
		4057	0·987	68·1	305·3	+21·8	0	25	410*p*
		4058*a*	0·997	67·6	300·0	+22·5	0	102	
			0·732	63·9	341·6	+19·5			107
			0·796	64·2	335·7	+20·9			144
			0·826	69·8	331·6	+17·2			174
			0·918	94·8	319·3	− 4·0			66
			0·955	112·2	314·8	−20·8			132
			0·962	120·6	314·7	−29·0			387
June 13		Centre			(25·6)	(+1·1)	(275)	(1752)	(3445)
164·497	CL,AW		0·972	256·9	86·7	−12·4			66
			0·969	287·7	86·1	+17·4			63
			0·960	275·3	84·6	+ 5·5			55
			0·887	261·3	73·0	− 7·1			225
			0·849	282·9	68·5	+11·6			217
			0·815	247·2	63·0	−17·7			216
		4049*a*	0·949	250·4	81·0	−18·1	18	147	434*f*
		4052*a*	0·679	244·1	50·5	−16·3	78	426	
		4052	0·666	247·5	50·2	−13·8	0	6	
		4052	0·659	248·3	49·9	−13·1	0	3	
		4052	0·641	247·9	48·5	−13·0	1	5	248*c*
		4052*b*	0·644	244·6	48·0	−15·0	20	106	
		4052	0·625	246·6	47·1	−13·4	11	80	
		4052	0·621	244·1	46·2	−14·7	1	7	
		4053	0·540	241·6	40·3	−13·8	0	9	
		4053*b*	0·524	243·0	39·6	−12·7	12	49	
		4056*a*	0·308	113·9	354·7	− 6·0	1	6	
		4056*b*	0·366	109·0	350·8	− 5·7	0	3	
1895.				°	°	°			
164d.497	CL,AW	4055*a*	0·336	68·2	352·8	+ 8·3	13	52	
		4055	0·351	67·5	352·0	+ 8·9	0	2	
		4055	0·372	66·7	350·9	+ 9·6	2	4	
		4055	0·385	67·2	350·1	+ 9·7	2	7	
		4055	0·378	71·2	350·0	+ 8·1	0	2	
		4055*c*	0·402	63·6	349·6	+11·4	20	130	
		4055	0·410	67·1	348·6	+10·3	0	4	
		4055*d*	0·441	67·4	346·7	+10·9	69	364	
		4055	0·442	72·9	345·9	+ 8·5	2	9	
		4057*a*	0·887	66·5	310·5	+21·3	15	82	
		4057	0·896	66·1	309·4	+21·8	3	13	
		4057	0·910	66·8	307·3	+21·5	2	10	
		4058	0·932	66·3	303·9	+22·5	3	17	
		4058*b*	0·938	65·7	303·0	+23·1	4	22	1004*c*
		4058	0·945	67·8	302·4	+21·2	0	6	
		4058*a*	0·947	66·7	301·1	+22·4	10	95	
		4059	0·973	68·5	295·2	+21·2	0	18	
			0·848	59·8	316·8	+25·9			236
			0·851	115·4	316·0	−20·7			65
			0·903	124·1	311·8	−29·8			351
			0·942	108·3	302·3	−16·8			462
			0·937	76·6	302·1	+13·0			134
			0·978	59·3	294·7	+30·2			222
June 14		Centre			(11·1)	(+1·2)	(287)	(1684)	(3998)
165·406	AW,CL		0·930	279·5	67·2	+ 9·3			233
			0·857	292·5	56·2	+19·8			131
			0·861	239·3	53·8	−25·2			97
		4049*a*	0·991	251·5	80·3	−18·1	19	136	470*f*
		4052*a*	0·811	248·3	50·8	−16·6	60	339	
		4052	0·783	248·0	48·0	−16·2	27	147	
		4052	0·773	250·1	47·5	−14·4	10	127	
		4052	0·755	248·7	45·6	−19·0	4	13	361*c*
		4053	0·683	248·2	39·7	−13·7	0	9	
		4053*b*	0·676	249·3	39·4	−12·8	8	28	
		4056*a*	0·136	151·9	355·4	− 5·6	3	15	
		4056	0·144	144·2	354·3	− 5·4	0	5	
		4056	0·172	146·8	353·7	− 7·0	0	1	
		4055*a*	0·162	42·0	352·8	+ 8·2	10	38	
		4055	0·189	40·7	352·0	+ 9·5	0	2	
		4055	0·197	47·3	350·7	+ 8·9	0	4	
		4055*c*	0·235	41·6	350·0	+11·4	15	121	
		4055	0·210	55·2	349·1	+ 8·1	5	14	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4056, June 13–16. A pair of small spots, *a* and *b*, with a very small companion between them on June 13. *b* has disappeared by June 15, *a* by June 16, but two or three very unstable spots are seen near.
Group 4057, June 13–25. A spot, *a*, followed by a few irregular companions, forming a short straight stream. *a* has become large and regular by June 21, and its companions have all disappeared.
Group 4058, June 13–19. A large irregular spot, *a*, on June 13, closely following Group 4057. Several small spots, of which *b* is the largest, have formed *p a* by June 14. On June 15 the group consists only of *a* and *b*, of which *b* is now the larger. The group is a close but irregular cluster until June 18, when only *b* remains.
Group 4059, June 14–17. A small spot *f* Group 4058.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
165d.406	AW, CL	4055	0·246	54·6	347·4	+ 9·5	0	65	
		4055	0·234	61·1	347·2	+ 7·8	2	13	
		4055*d*	0·270	50·3	346·9	+11·2	64	328	
		4055	0·281	57·7	345·2	+ 9·9	8	48	
		4060*a*	0·302	35·7	348·6	+15·4	7	21	
		4060	0·340	31·6	348·3	+18·0	11	41	
		4060	0·321	34·6	348·2	+16·6	0	10	
		4060	0·310	39·8	347·3	+15·0	0	3	
		4060	0·342	35·0	347·3	+17·5	2	7	
		4060	0·325	38·1	347·1	+16·0	0	3	
		4060	0·369	37·8	345·4	+18·1	0	2	
		4060	0·340	44·9	344·8	+15·1	0	4	
		4060	0·369	43·4	343·8	+16·8	8	44	
		4057*a*	0·784	63·7	310·4	+21·1	17	105	
		4057	0·788	65·2	309·7	+20·1	0	4	
		4057	0·811	63·6	307·8	+21·9	4	20	722*c*
		4058*b*	0·861	63·4	302·3	+23·4	15	74	
		4058*a*	0·869	64·9	301·0	+22·3	4	37	
		4059	0·914	66·9	294·7	+21·5	3	15	
			0·888	113·2	299·1	−19·8			283
			0·948	59·6	289·9	+29·1			308
			0·961	85·7	285·3	+ 4·5			168
June 15		Centre			(359·1)	(+1·3)	(306)	(1843)	(2773)
166·448	AW, CL		0·941	289·2	54·7	+18·6			245
		4052*a*	0·919	251·3	50·3	−16·5	73	376	
		4052	0·915	254·7	50·1	−13·3	0	9	
		4052	0·905	250·4	48·2	−17·0	0	73	514*c*
		4052	0·893	252·1	46·8	−15·2	6	49	
		4052	0·892	250·1	46·3	−16·9	0	7	
		4053*b*	0·825	252·7	39·1	−13·3	4	17	180*c*
		4053	0·815	251·0	37·9	−14·5	0	3	
		4056	0·192	235·0	354·3	− 4·8	4	50	
		4056	0·125	221·6	350·0	− 3·9	0	2	
		4055*a*	0·178	310·1	353·2	+ 8·1	10	30	
		4055	0·149	319·0	350·9	+ 8·0	5	22	
		4055*c*	0·207	333·2	350·8	+12·1	10	26	
		4055	0·132	315·3	350·6	+ 6·9	0	21	
		4055	0·177	335·4	349·5	+ 7·7	0	3	
		4055	0·206	339·4	349·5	+12·6	2	8	
		4055	0·136	328·3	349·4	+ 8·1	3	22	
		4055	0·157	334·3	349·2	+ 9·6	4	18	
		4055	0·142	337·9	348·4	+ 9·1	0	18	
1895.				°	°	°			
166d.448	AW, CL	4055*d*	0·172	348·2	347·3	+11·2	81	431	
		4055	0·137	346·0	347·2	+ 9·1	3	39	
		4055	0·144	358·3	345·6	+ 9·8	7	30	
		4060*a*	0·257	342·3	349·9	+15·6	29	176	
		4060	0·276	348·7	348·5	+17·2	0	4	
		4060	0·256	350·1	347·9	+16·0	8	28	
		4060	0·243	350·8	347·6	+15·3	0	3	
		4060	0·238	353·8	346·8	+15·1	0	2	
		4060	0·285	359·2	345·5	+18·0	0	2	
		4060*b*	0·254	1·4	344·9	+16·2	29	191	
		4060	0·272	3·6	344·3	+17·2	0	2	
		4060	0·294	6·1	343·4	+18·4	0	3	
		4060	0·280	6·8	343·3	+17·6	2	9	
		4060	0·290	8·7	342·7	+18·1	2	5	
		4057*a*	0·636	57·7	310·3	+21·1	17	116	
		4057	0·656	56·7	309·1	+22·3	1	4	
		4057	0·647	60·8	308·6	+19·6	0	11	
		4057	0·659	57·6	308·6	+21·9	4	12	
		4057	0·680	58·1	306·9	+22·2	1	4	
		4058	0·728	57·2	303·3	+24·3	0	2	207*c*
		4058	0·721	59·9	303·1	+22·2	4	29	
		4058*b*	0·737	58·6	302·1	+23·7	17	78	
		4058*a*	0·738	61·0	301·4	+22·0	0	13	
		4058	0·749	58·3	301·2	+24·2	0	7	
		4059	0·801	64·0	294·8	+21·5	0	10	345*np*
		4061*a*	0·961	116·7	274·1	−25·1	15	103	296*f*
			0·803	136·2	303·2	−34·2			188
			0·821	115·6	293·6	−19·8			183
			0·858	88·3	286·4	+ 2·3			173
			0·900	55·9	285·0	+31·1			286
			0·926	109·4	279·4	−17·3			172
June 16		Centre			(345·3)	(+1·5)	(341)	(2068)	(2789)
167·436	CL, FT		0·881	242·1	30·1	−23·5			77
			0·763	238·7	16·8	−22·2			109
		4052*a*	0·984	253·0	50·7	−16·4	83	413	1447*f*
		4055*a*	0·380	288·0	353·5	+ 8·2	8	14	
		4055	0·353	290·9	351·6	+ 8·7	11	33	
		4055	0·341	285·2	351·5	+ 6·6	0	3	
		4055	0·330	286·3	350·7	+ 6·8	0	4	
		4055*c*	0·350	300·1	350·1	+11·6	6	67	
		4055	0·339	297·7	349·9	+10·6	0	6	
		4055	0·325	291·8	349·9	+ 8·4	0	3	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4060. June 15–22. An irregular stream, forming just *n* of Group 4055. It rapidly increases in size, forming two large clusters. *a*, the principal spot in the preceding cluster, absorbs the other members of the cluster, and becomes a very large spot. The following cluster also for a time consists of a large irregular composite spot. *b*, but has broken up by June 18 into a stream of discrete spots, following each other closely, of which *c*, *d*, *e* and *f* are the principal. These are however all unstable.
Group 4061. June 16–25. A regular spot, *a*, which diminishes steadily from day to day after June 19. It is attended by one very small companion on June 19, and by two on June 23.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
167d.436	CL,FT	4055	0·348	302·7	349·6	+12·3	3	29	
		4055	0·331	305·7	348·1	+12·6	0	5	
		4055*d*	0·312	300·7	348·0	+10·7	54	513	
		4055	0·285	299·7	346·7	+ 9·7	0	4	
		4055	0·273	298·1	346·2	+ 8·9	0	12	
		4055	0·274	303·7	345·5	+10·3	7	23	
		4060*a*	0·388	307·1	350·8	+15·0	37	194	
		4060	0·386	311·3	349·7	+16·3	0	10	
		4060	0·365	309·2	349·1	+14·9	3	11	
		4060	0·370	312·0	348·7	+15·8	2	7	
		4060	0·379	318·5	347·4	+18·0	3	15	
		4060	0·362	316·8	347·1	+16·8	1	4	
		4060	0·332	315·5	346·1	+15·2	2	11	
		4060	0·330	318·1	345·4	+15·7	1	15	
		4060	0·365	324·3	345·1	+18·7	4	26	
		4060*b*	0·338	321·8	344·8	+16·9	33	170	
		4060	0·339	327·2	343·3	+18·1	14	42	
		4060	0·321	326·0	343·0	+16·9	1	9	
		4057*a*	0·492	46·3	309·9	+21·2	17	104	
		4057	0·513	45·2	309·1	+22·6	1	7	147*c*
		4057	0·514	47·0	308·4	+21·9	2	8	
		4057	0·512	51·1	307·2	+20·1	0	15	
		4058	0·593	48·9	303·0	+24·3	0	3	
		4058	0·587	51·8	302·3	+22·7	0	5	
		4058*b*	0·600	50·3	302·0	+23·8	10	48	
		4058	0·612	49·8	301·4	+24·5	0	5	
		4059	0·657	58·6	295·4	+21·2	0	5	
		4061*a*	0·885	119·1	274·1	−24·6	18	96	205*f*
			0·721	143·8	301·4	−34·1			106
			0·706	121·4	292·4	−20·3			110
			0·788	51·1	286·9	+30·7			406
			0·828	113·7	279·4	−18·4			126
			0·806	87·6	278·7	+ 2·9			132
			0·887	100·1	270·5	− 8·2			107
June 17		Centre			(332·2)	(+1·6)	(321)	(1939)	(2972)
168·440	CL,FT		0·967	254·9	32·9	−14·1			962
			0·742	288·6	5·4	+14·9			183
		4055*a*	0·586	281·7	354·2	+ 8·2	1	6	
		4055	0·576	283·3	353·3	+ 9·0	5	12	
		4055	0·546	279·2	351·6	+ 6·5	0	2	
		4055	0·551	289·4	350·9	+12·0	0	6	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
168d.440	CL,FT	4055	0·536	283·2	350·6	+ 8·5	0	9	
		4055	0·544	291·2	350·1	+12·8	0	4	
		4055	0·523	285·3	349·5	+ 9·3	10	83	
		4055	0·513	282·9	349·1	+ 8·1	0	5	
		4055*d*	0·514	289·3	348·4	+11·2	52	411	
		4055	0·495	285·5	347·7	+ 9·1	7	59	
		4055	0·469	286·3	345·9	+ 9·1	0	7	
		4055	0·462	288·1	345·2	+ 9·8	0	8	
		4060*a*	0·567	293·5	351·2	+14·4	42	180	
		4060	0·551	292·6	350·3	+13·7	0	2	
		4060	0·552	294·0	350·1	+14·4	0	9	
		4060	0·555	296·8	349·8	+15·9	8	30	
		4060	0·542	294·5	349·4	+14·4	0	2	
		4060	0·540	296·3	348·9	+15·3	3	7	
		4060	0·544	300·3	348·3	+17·4	0	3	
		4060	0·532	296·5	348·3	+15·1	0	1	
		4060	0·526	295·5	348·2	+14·6	0	1	
		4060	0·511	298·9	346·5	+15·8	0	1	
		4060	0·503	296·3	346·5	+14·4	0	3	
		4060*c*	0·515	300·5	346·4	+16·6	7	13	
		4060	0·516	303·1	345·8	+17·8	0	3	
		4060	0·510	303·2	345·4	+17·7	0	2	
		4060	0·487	298·7	345·0	+15·0	0	3	
		4060	0·512	305·5	344·9	+18·8	2	10	
		4060*d*	0·501	303·5	344·8	+17·5	18	51	
		4060	0·474	298·3	344·3	+14·5	0	2	
		4060	0·456	297·6	343·4	+13·7	0	3	
		4060*e*	0·479	304·2	343·3	+17·1	13	54	
		4060*f*	0·477	306·8	342·5	+18·1	12	63	
		4062	0·403	351·2	322·8	+25·1	0	2	
		4057	0·376	21·8	310·3	+22·0	0	2	
		4057	0·361	25·3	309·4	+20·7	1	6	
		4057*a*	0·373	24·3	309·4	+21·5	23	89	
		4057	0·392	24·7	308·7	+22·4	0	5	
		4057	0·339	33·2	307·7	+18·1	0	1	
		4057	0·354	31·2	307·7	+19·2	0	2	
		4058*b*	0·467	36·1	301·5	+23·7	5	17	
		4061*a*	0·774	123·6	274·1	−24·1	23	96	169*f*
		4063	0·943	72·1	250·0	+16·2	6	26	
		4063*a*	0·951	72·7	248·4	+15·9	28	102	883*c*
		4063	0·960	72·5	246·6	+16·3	0	13	
			0·960	78·2	246·0	+10·9			202
			0·981	85·0	240·5	+ 4·6			106
June 18		Centre			(318·9)	(+1·7)	(266)	(1416)	(2505)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4062. June 18. A very small faint spot.
Group 4063. June 18–29. A large irregular composite spot, *a*, with some small companions on June 18. It has become the leader of a fine irregular stream by June 21. The group undergoes constant change, the following spots rapidly diminishing, and *a* breaking up after June 26. *a* is measured in two parts, *b* and *c*, after June 26.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895.									
169d·144	AW, FT		0·844	287·1	6·2	+15·4			317
I.		4055	0·711	281·1	354·4	+ 9·1	3	11	
		4055	0·684	281·1	352·2	+ 8·9	0	5	
		4055	0·673	279·6	351·5	+ 7·8	0	8	
		4055	0·674	287·0	350·8	+12·7	0	3	
		4055	0·656	280·5	350·1	+ 8·2	2	13	
		4055*d*	0·641	284·5	348·6	+10·6	155	539	
		4060*a*	0·682	289·5	351·0	+14·5	81	361	
		4060	0·681	293·1	350·3	+16·8	0	8	
		4060	0·662	292·6	348·9	+16·1	0	2	
		4060	0·652	295·2	347·7	+17·5	4	16	790*c*
		4060	0·642	296·1	346·7	+17·8	0	4	
		4060*c*	0·629	294·6	346·1	+16·6	22	93	
		4060*d*	0·619	296·6	344·9	+17·5	9	53	
		4060	0·624	298·8	344·8	+18·9	1	8	
		4060	0·604	292·7	344·7	+14·9	0	5	
		4060	0·613	298·7	344·0	+18·6	0	2	
		4060	0·581	291·5	343·3	+13·8	1	8	
		4060*e*	0·597	297·3	343·2	+17·4	16	48	
		4060*f*	0·586	299·1	342·1	+18·1	10	62	
		4057*a*	0·342	0·4	309·4	+21·7	28	97	
		4057	0·355	2·6	308·6	+22·5	0	4	
		4058*b*	0·397	18·7	301·6	+23·8	3	11	
		4064	0·437	30·0	295·8	+23·9	3	13	
		4064	0·466	32·4	293·7	+24·9	1	8	
		4064	0·505	34·9	290·9	+26·1	0	15	
		4061	0·697	130·7	273·9	−25·5	0	4	195*c*
		4061*a*	0·686	128·3	273·8	−23·6	24	105	
		4063*a*	0·887	71·7	248·1	+17·1	58	249	1218*f*
		4063	0·903	70·8	246·1	+18·1	0	9	
			0·938	85·7	240·0	+ 4·7			154
June 19		Centre			(309·6)	(+1·8)	(421)	(1764)	(2674)
			0·956	285·1	5·5	+15·0			273
170·412	CL, FT	4055	0·887	279·6	355·1	+ 9·4	2	11	
		4055	0·868	279·1	352·8	+ 8·9	0	8	
		4055*d*	0·823	281·2	347·8	+10·3	69	424	
		4060*a*	0·857	285·1	351·1	+13·9	51	411	
		4060	0·849	287·1	350·0	+15·5	0	10	
		4060	0·847	288·1	349·7	+16·3	0	11	2029*c*
		4060	0·834	289·6	348·1	+17·3	0	8	
		4060	0·821	287·4	347·0	+15·3	0	5	
		4060	0·821	290·2	346·6	+17·6	12	43	
1895.									
170d·412	CL, FT	4060	0·809	288·7	345·7	+16·2	0	6	
		4060	0·796	290·4	344·1	+17·3	19	64	
		4060	0·771	291·1	341·6	+17·4	7	53	
		4057*a*	0·429	322·6	309·1	+21·7	27	109	
		4057	0·396	327·6	306·0	+21·3	0	7	
		4057	0·379	325·7	306·0	+20·1	0	6	
		4061*a*	0·523	144·3	273·6	−23·3	20	85	
		4063*a*	0·712	68·8	249·3	+16·3	40	265	
		4063	0·749	67·3	246·5	+18·1	0	4	
		4063	0·791	69·5	242·2	+17·2	11	33	351*c*
		4063	0·794	68·2	242·2	+18·3	2	6	
		4065	0·718	76·1	247·8	+11·3	2	11	
			0·835	77·3	236·9	+11·6			124
			0·840	85·9	235·9	+ 4·5			82
			0·867	68·4	234·3	+19·6			700
June 20		Centre			(292·9)	(+1·9)	(262)	(1580)	(3559)
			0·938	262·0	348·8	− 6·8			83
171·402	AR, FT	4055	0·937	278·5	349·0	+ 8·6	0	25	
		4055*d*	0·933	280·6	348·4	+10·6	72	381	1058*c*
		4060*a*	0·955	284·0	352·2	+14·0	65	445	
		4060	0·918	288·9	345·5	+18·1	7	94	
		4060	0·901	288·3	343·1	+17·3	4	64	1087*c*
		4060	0·889	288·9	341·5	+17·7	0	16	
		4057*a*	0·570	306·8	309·0	+21·7	30	147	
		4066	0·451	322·0	297·1	+22·7	0	7	
		4066	0·462	325·5	296·3	+24·2	0	2	
		4061*a*	0·439	166·6	273·4	−23·2	19	68	
		4063*a*	0·541	62·8	249·8	+16·0	54	304	
		4063	0·585	62·2	247·0	+17·5	5	20	
		4063	0·617	64·6	244·2	+17·0	0	5	
		4063	0·630	63·2	243·6	+18·1	0	5	
		4063	0·640	65·1	242·4	+17·2	0	4	
		4063	0·659	65·4	241·0	+17·4	9	40	
		4063	0·673	63·4	240·3	+19·0	3	14	
			0·781	64·7	230·8	+20·8			487
June 21		Centre			(279·7)	(+2·0)	(268)	(1641)	(2715)
172·252	CL, AW		0·972	261·0	344·2	− 8·2			143
I.			0·911	286·1	333·5	+15·5			164

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4064, June 19. A few small spots, seen on a single day, *nf* Group 4060.
Group 4065. June 20. A small spot.
Group 4066. June 21. Two very small spots nearly in the same place as Group 4059.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
172d.252	CL,AW	4055	0·988	277·9	349·7	+ 8·2	0	108	
		4055*d*	0·984	279·6	348·3	+ 9·9	62	411	
I.		4060*a*	0·994	283·8	352·4	+14·0	0	450	
		4060	0·979	286·5	346·6	+16·6	0	30	1426*c*
		4060	0·976	285·3	345·7	+15·4	0	41	
		4060	0·974	287·2	345·2	+17·2	0	42	
		4060	0·969	286·9	343·9	+16·9	0	10	
		4057*a*	0·694	298·7	309·0	+21·0	28	147	
		4067	0·435	278·3	294·0	+ 5·5	0	4	
		4061*a*	0·438	189·2	272·9	−23·4	6	38	
		4063*a*	0·399	51·8	249·5	+16·3	52	285	
		4063	0·428	52·9	247·7	+16·9	5	19	
		4063	0·441	53·3	246·9	+17·2	2	7	
		4063	0·452	52·9	246·4	+17·7	2	10	
		4063	0·473	54·0	244·9	+18·0	0	1	
		4063	0·484	54·1	244·2	+18·4	3	8	
		4063	0·485	57·1	243·4	+17·1	0	2	
		4063	0·483	57·4	243·4	+16·9	4	11	
		4063	0·521	55·2	241·7	+19·1	3	7	
		4063	0·516	57·8	241·3	+17·8	0	3	
		4063	0·518	59·1	240·9	+17·2	9	27	
		4063	0·543	56·8	239·9	+19·1	1	7	
		4063	0·581	55·2	237·9	+21·1	0	6	
			0·909	127·4	209·9	−32·4			95
			0·918	113·3	204·7	−20·3			256
			0·932	103·3	200·9	−11·6			155
June 22		Centre			(268·5)	(+2·1)	(177)	(1674)	(2239)
173·445	AR, FT		0·920	293·4	318·4	+22·4			134
			0·858	232·7	304·5	−29·9			308
			0·822	243·6	304·1	−20·0			296
			0·744	303·5	296·1	+25·8			237
		4057*a*	0·851	294·0	309·1	+21·4	19	147	359*f*
		4061*a*	0·534	216·4	272·8	−23·3	7	25	
		4061	0·536	213·6	271·6	−24·3	0	4	
		4061	0·545	211·2	270·9	−25·6	0	6	
		4068	0·332	214·2	263·7	−13·7	0	3	
		4068	0·326	206·5	261·3	−14·7	0	3	
		4068	0·306	203·7	260·0	−14·0	0	6	
		4068	0·325	201·4	259·8	−16·8	0	3	
		4068	0·322	198·3	258·7	−15·6	1	5	
		4068	0·296	196·3	257·6	−14·3	0	7	
		4069	0·166	20·1	249·4	+11·1	1	5	
1895.				°	°	°			
173d.445	AR, FT	4069	0·161	28·4	248·3	+10·3	1	7	
		4069	0·198	33·1	246·4	+11·7	4	12	
		4063	0·258	5·2	251·3	+17·1	0	8	
		4063*a*	0·251	12·3	249·5	+16·3	50	340	
		4063	0·210	16·3	249·2	+13·8	0	3	
		4063	0·277	13·8	248·7	+17·8	0	12	
		4063	0·280	19·8	247·0	+17·4	1	6	
		4063	0·293	19·1	246·9	+18·2	5	39	
		4063	0·307	25·4	244·8	+18·3	6	12	
		4063	0·309	27·2	244·2	+18·1	0	3	
		4063	0·324	26·5	243·9	+19·0	0	5	
		4063	0·302	30·5	243·5	+17·2	8	28	
		4063	0·333	30·5	242·5	+18·7	0	7	
		4063	0·316	33·6	242·2	+17·4	1	15	
		4063	0·327	35·6	241·2	+17·5	2	7	
		4063	0·339	34·6	241·1	+18·3	6	61	
		4063	0·350	33·3	241·0	+19·1	2	5	
		4063	0·324	37·3	240·9	+17·0	6	13	
		4063	0·344	38·2	239·8	+17·8	0	5	
		4063	0·360	40·4	238·6	+18·0	0	6	
		4063	0·396	37·1	238·0	+20·4	0	6	
		4070	0·330	53·1	237·0	+13·5	0	3	
		4070	0·347	49·6	236·9	+15·1	0	5	
		4070	0·342	55·3	236·0	+13·3	0	10	
		4071	0·445	42·4	234·0	+21·2	2	17	
		4071	0·435	44·2	233·9	+20·2	0	4	
		4071	0·450	44·0	233·2	+20·9	0	7	
		4071	0·464	48·3	231·2	+20·0	0	4	
		4072*a*	0·981	78·7	173·9	+11·6	19	85	291*c*
			0·827	133·8	207·3	−33·3			150
			0·819	111·8	200·5	−16·3			138
			0·858	121·2	198·8	−25·0			154
			0·950	99·6	181·7	− 8·4			250
June 23		Centre			(252·7)	(+2·2)	(141)	(949)	(2317)
174·621	CL,FT		0·902	285·0	301·0	+14·5			225
			0·931	232·8	299·2	−33·1			396
			0·888	246·7	296·7	−19·3			371
			0·865	297·9	294·4	+25·0			441
			0·787	269·0	288·8	+ 0·7			90
			0·784	310·2	281·8	+32·0			340
		4057*a*	0·954	291·8	308·9	+21·4	16	110	336*f*
		4061*a*	0·684	231·4	272·5	−23·3	6	20	76*s*

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4067. June 22. A very small spot.
Group 4068, June 23–26. A few very small spots irregularly scattered.
Group 4069, June 23–26. A few very small unstable spots irregularly scattered *s* of Group 4063.
Group 4070. June 23. A few very small spots irregularly scattered *sf* Group 4063.
Group 4071. June 23. A few very small spots irregularly scattered *nf* Group 4063.
Group 4072. June 23–30. A regular spot. *a*, with a pair of very small companions on June 29.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
174d·621	CL,FT	4068	0·488	236·9	261·8	−13·3	4	16	
		4068	0·481	235·1	261·0	−13·8	0	3	
		4068	0·467	236·0	260·4	−13·0	0	4	
		4068	0·480	230·7	259·7	−15·6	0	9	
		4069	0·266	305·4	249·8	+11·1	0	6	
		4069	0·249	310·0	248·3	+11·4	1	7	
		4069	0·231	306·1	248·0	+10·0	0	6	
		4069	0·234	316·0	246·6	+11·9	0	6	
		4063*a*	0·324	319·3	249·8	+16·4	40	259	
		4063	0·332	324·9	248·6	+18·0	3	13	
		4063	0·280	317·7	248·3	+14·2	0	5	
		4063	0·311	324·2	248·0	+16·8	3	41	
		4063	0·320	328·4	247·2	+18·0	5	38	
		4063	0·302	334·2	245·0	+18·0	2	6	
		4063	0·305	336·5	244·4	+18·4	1	2	
		4063	0·288	338·0	243·6	+17·7	0	4	
		4063	0·299	340·3	243·2	+18·6	0	7	
		4063	0·277	344·0	241·7	+17·7	4	18	
		4063	0·263	345·3	241·1	+17·0	1	6	
		4063	0·279	346·6	241·0	+18·0	3	23	
		4063	0·286	348·4	240·6	+18·5	0	8	
		4063	0·310	356·3	238·3	+20·3	0	7	
		4072*a*	0·894	78·8	174·0	+11·0	26	89	274*c*
		4073*a*	0·955	102·0	165·4	−10·7	0	18	622*c*
		4073	0·963	101·8	163·8	−10·7	0	8	
			0·860	102·0	178·9	− 9·1			299
June 24		Centre			(237·1)	(+2·3)	(115)	(739)	(3470)
175·427	CL,FT		0·975	235·0	299·2	−33·3			187
			0·954	284·4	298·9	+14·5			95
			0·938	296·0	294·9	+25·2			338
			0·937	247·2	293·3	−20·3			224
			0·916	270·9	292·6	+ 1·8			138
			0·872	306·2	282·7	+32·3			301
		4057*a*	0·991	291·4	308·7	+21·5	11	72	284*f*
		4061*a*	0·785	237·9	272·6	−23·0	3	14	93*s*
		4068	0·650	245·7	263·9	−13·6	2	10	
		4068	0·604	243·2	260·1	−13·8	0	2	
		4068	0·578	240·4	257·6	−14·5	1	5	
		4069	0·428	291·5	250·3	+11·2	0	4	
		4069	0·411	293·3	249·1	+11·6	1	8	
		4069	0·381	291·5	247·5	+10·3	0	3	
		4063*a*	0·457	303·4	249·9	+16·7	39	257	
1895.				°	°	°			
175d·427	CL,FT	4063	0·456	307·5	248·8	+18·3	0	10	
		4063	0·442	308·5	247·8	+18·2	7	34	
		4063	0·365	315·8	241·9	+17·4	2	12	
		4063	0·374	320·5	241·0	+19·0	1	7	
		4072*a*	0·792	77·6	174·6	+11·3	20	91	155*f*
		4073	0·884	104·1	165·8	−11·3	0	2	759*c*
		4073*a*	0·887	102·8	165·2	−10·2	15	61	
		4073	0·911	103·8	162·2	−11·6	3	8	
		4073	0·926	103·5	160·0	−11·6	10	39	
			0·781	104·2	176·6	− 9·5			97
June 25		Centre			(226·5)	(+2·4)	(115)	(639)	(2671)
176·386	AR,FT		0·961	295·6	287·0	+25·3			170
			0·923	305·1	278·0	+33·2			612
			0·885	305·7	271·9	+32·4			158
			0·873	237·5	269·9	−26·5			172
			0·778	249·7	262·4	−13·9			100
		4068	0·795	250·0	264·0	−14·1	0	7	
		4069	0·610	283·3	250·7	+10·2	0	5	
		4069	0·599	285·4	249·7	+11·2	2	7	
		4063*a*	0·622	294·1	250·0	+16·8	23	288	
		4063	0·616	296·9	249·0	+18·3	0	5	
		4063	0·602	296·9	248·0	+17·9	5	70	
		4063	0·582	295·5	246·9	+16·6	0	8	
		4063	0·564	299·2	244·9	+18·2	0	13	
		4063	0·549	301·2	243·4	+18·7	0	8	
		4063	0·537	299·7	243·0	+17·7	0	3	
		4063	0·514	299·9	241·5	+17·1	0	7	
		4074	0·473	316·9	234·2	+22·6	0	5	
		4074	0·445	320·0	231·7	+22·4	0	6	
		4075	0·594	110·0	187·2	− 9·5	0	5	129*c*
		4075	0·547	111·2	182·8	− 9·2	0	6	
		4072*a*	0·635	75·6	175·2	+11·1	12	92	83*c*
		4072	0·683	74·6	171·6	+12·4	0	4	
		4073	0·762	107·0	166·0	−11·1	0	5	886*c*
		4073*a*	0·762	105·6	165·8	−10·1	10	51	
		4073	0·769	104·7	165·0	− 9·5	0	16	
		4073	0·783	105·4	163·9	−10·3	0	9	
		4073	0·800	107·1	162·6	−12·0	1	8	
		4073	0·820	106·9	160·6	−12·3	3	17	
		4073	0·830	105·8	159·4	−11·6	7	30	
June 26		Centre			(213·8)	(+2·6)	(63)	(675)	(2310)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4073, June 24–July 2. A number of spots, mostly unstable and small, in a short irregular stream. *a*, the leader on June 24, is the largest and most stable.
Group 4074, June 26–July 1. A few very small spots on June 26 *nf* Group 4063, and nearly in the place of Group 4071. The group rapidly increases in size, and becomes a considerable stream. The last spot on June 28, *a*, is the most stable and becomes eventually a large regular spot. The group on June 29 and 30 consists chiefly of *a* and two smaller spots, *b* and *c*.
Group 4075, June 26–July 3. Several unstable spots, mostly small, irregularly scattered, and undergoing constant change. The group precedes Group 4073.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
177d.609	CL,FT		0·979	302·9	275·3	+32·8			343
			0·958	240·7	267·2	−27·0			218
			0·892	252·4	258·8	−14·4			183
		4063*b*	0·808	288·3	250·6	+16·3	12	105	
		4063*c*	0·795	289·5	249·1	+17·1	15	67	618*c*
		4063	0·782	286·9	248·2	+14·8	0	19	
		4063	0·786	290·6	248·1	+17·8	4	27	
		4074	0·667	298·7	236·3	+20·8	0	6	
		4074	0·646	298·8	234·7	+20·3	3	8	
		4074	0·645	302·5	233·6	+22·4	0	3	252*f*
		4074	0·634	305·0	232·0	+23·5	1	5	
		4074	0·621	302·3	231·9	+21·5	0	6	
		4074	0·623	303·5	231·7	+22·3	3	19	
		4075	0·327	131·0	183·3	− 9·7	2	17	
		4075	0·337	124·6	181·5	− 8·4	0	7	
		4075	0·369	132·0	181·5	−11·7	0	2	
		4072*a*	0·397	67·4	175·9	+11·3	14	66	
		4073	0·571	114·8	165·9	−11·5	1	10	
		4073*a*	0·564	112·2	165·8	−10·0	6	31	
		4073	0·575	113·6	165·4	−11·0	0	8	315*f*
		4073	0·578	111·9	164·8	−10·2	0	16	
		4073	0·651	113·1	160·0	−12·6	3	8	
		4073	0·662	112·3	159·0	−12·4	5	11	
			0·928	71·3	130·1	+18·4			476
June 27		Centre			(197·7)	(+2·7)	(69)	(441)	(2405)
178·434	CL,FT		0·963	254·8	259·7	−13·8			243
		4063*b*	0·898	286·7	250·2	+16·2	12	90	
		4063*c*	0·896	288·0	249·8	+17·4	8	109	
		4063	0·888	288·7	248·7	+17·9	0	31	
		4063	0·883	285·8	248·3	+15·3	0	15	514*c*
		4074	0·790	296·2	236·5	+22·2	3	15	
		4074	0·781	293·5	236·3	+22·0	0	7	
		4074	0·756	297·3	233·1	+22·2	0	6	349*c*
		4074*a*	0·742	299·0	231·5	+23·0	5	21	
		4075	0·203	158·7	182·5	− 8·1	0	15	
		4075	0·202	154·0	181·7	− 7·7	0	3	
		4075	0·233	149·7	180·0	− 8·8	3	15	
		4072*a*	0·234	49·6	176·4	+11·5	7	52	
		4073*a*	0·420	121·9	165·7	−10·2	9	52	
		4073	0·432	124·9	165·7	−11·7	0	6	
		4073	0·436	122·1	164·8	−10·7	0	8	
		4076*a*	0·829	104·5	132·3	−10·4	0	9	
1895.				°	°	°			
178d.434	CL,FT		0·900	71·5	123·3	+17·8			325
			0·988	94·5	106·1	− 4·0			133
June 28		Centre			(186·8)	(+2·8)	(47)	(454)	(1564)
179·380	AW, CL		0·860	276·6	233·5	+ 7·1			167
		4063*b*	0·975	285·8	251·5	+16·0	10	91	432*f*
I.		4063*c*	0·967	286·8	249·6	+17·0	11	179	
		4074*b*	0·910	292·5	238·8	+21·6	12	58	
		4074	0·884	291·1	235·4	+20·0	0	10	
		4074*c*	0·876	294·1	234·0	+22·4	15	93	749*c*
		4074	0·873	296·0	233·2	+24·0	0	9	
		4074*a*	0·861	295·3	231·9	+23·2	35	103	
		4075	0·250	219·7	183·5	− 8·2	0	3	
		4075	0·241	221·2	183·5	− 7·5	8	27	
		4075	0·263	215·8	183·2	− 9·4	0	1	
		4075	0·282	212·1	183·0	−10·9	0	5	
		4075	0·231	219·2	182·7	− 7·4	4	19	
		4075	0·231	210·4	181·1	− 8·6	0	2	
		4075	0·216	212·1	180·9	− 7·7	0	2	
		4075	0·233	205·5	180·1	− 9·2	0	1	
		4075	0·220	204·5	179·6	− 8·6	18	32	
		4072	0·111	329·8	177·5	+ 8·4	0	1	
		4072	0·121	333·8	177·4	+ 9·1	1	2	
		4072*a*	0·158	343·2	177·0	+11·6	8	24	
		4073	0·260	155·8	168·1	−10·8	0	2	
		4073	0·272	156·8	168·1	−11·5	0	1	
		4073	0·235	143·9	166·3	− 8·1	0	5	
		4073*a*	0·259	147·7	166·3	− 9·8	13	41	
		4073	0·285	149·6	165·9	−11·3	0	3	
		4073	0·295	150·2	165·7	−12·0	0	3	
		4073	0·278	146·1	165·3	−10·4	0	1	
		4073	0·293	146·5	164·9	−11·3	2	8	
		4076	0·662	109·4	135·1	−10·4	12	28	
		4076	0·663	108·2	134·7	− 9·7	0	3	129*c*
		4076	0·683	109·5	133·5	−11·0	0	6	
		4076*a*	0·697	107·7	132·1	−10·1	16	38	
			0·776	65·9	125·4	+20·4			139
			0·913	118·8	112·8	−24·7			97
			0·903	73·3	110·2	+16·3			230
			0·929	108·4	108·1	−15·9			220
			0·929	98·9	106·9	− 7·1			145
June 29		Centre			(174·3)	(+2·9)	(165)	(801)	(2308)

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4076, June 28–July 5. A small spot, *a*, on June 28. Several other spots, mostly small and unstable, are seen preceding *a* on the succeeding days, and forming with it a short stream. *a* becomes a regular spot and increases in size up to June 30, after which it diminishes again.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895.									
180d.514	CL,FT		0·896	284·8	220·0	+14·6			113
		4074b	0·977	290·6	237·0	+20·8	5	34	
		4074c	0·964	292·3	233·5	+22·3	6	26	
		4074	0·962	293·3	233·1	+23·3	0	15	604c
		4074	0·960	290·6	232·7	+20·6	0	17	
		4074a	0·950	293·5	230·5	+23·3	20	147	
		4075	0·457	247·7	184·3	− 7·3	3	12	
		4075	0·450	248·6	184·0	− 6·7	0	2	
		4075	0·449	246·7	183·7	− 7·5	0	2	
		4075	0·440	250·0	183·7	− 5·9	0	4	
		4075	0·467	239·8	183·4	−10·9	1	5	
		4075	0·453	239·3	182·4	−10·6	0	3	
		4075	0·423	247·7	182·6	− 6·5	0	4	
		4075	0·441	238·3	181·5	−10·6	0	2	
		4075	0·421	239·2	180·6	− 9·6	0	2	
		4075	0·439	234·5	180·5	−12·0	0	3	
		4075	0·404	238·9	179·6	− 9·2	2	9	
		4075	0·396	240·0	179·4	− 8·6	0	7	
		4072a	0·342	294·8	177·6	+11·1	4	11	
		4073a	0·248	207·6	165·9	− 9·7	6	16	
		4073	0·273	197·3	163·9	−12·1	0	3	
		4076	0·435	120·3	136·9	− 9·9	4	9	
		4076	0·440	118·8	136·3	− 9·5	0	9	
		4076	0·461	117·2	134·7	− 9·5	2	5	
		4076a	0·503	115·5	131·9	− 9·8	15	68	
		4077a	0·993	118·9	77·6	−18·4	0	43	
			0·783	117·3	112·0	−19·0			114
			0·802	69·4	107·2	+18·2			132
			0·822	100·8	105·0	− 7·1			120
			0·880	82·3	97·6	+ 8·2			127
			0·925	105·5	93·2	−13·1			269
June 30		Centre			(159·2)	(+3·0)	(68)	(458)	(1479)
181·406	CL,FT		0·935	284·3	216·5	+14·4			189
			0·889	243·6	206·2	−21·7			132
			0·876	251·0	206·2	−15·0			169
		4074a	0·991	293·1	229·9	+23·3	15	103	309c
		4075	0·635	254·1	185·3	− 7·5	18	69	
		4075	0·613	251·6	183·3	− 8·6	4	13	
		4075	0·614	247·3	182·5	−11·1	1	9	
		4075	0·596	245·3	180·8	−11·8	0	7	
		4075	0·578	250·1	180·6	− 8·8	0	5	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895.									
181d.406	CL,FT	4075	0·581	248·6	180·5	− 9·6	0	5	
		4073a	0·385	235·4	166·1	− 9·6	5	11	
		4073	0·394	227·4	164·6	−12·4	0	6	
		4078	0·261	206·7	154·2	−10·4	2	6	
		4078	0·282	203·9	154·1	−11·8	0	1	
		4078	0·265	199·8	152·6	−11·3	0	4	
		4076	0·276	145·7	138·3	−10·1	3	8	
		4076	0·276	143·7	137·9	− 9·8	0	6	
		4076	0·301	137·1	135·5	− 9·6	1	6	
		4076	0·356	139·8	133·8	−12·7	1	3	
		4076	0·328	132·4	133·2	− 9·8	3	9	
		4076a	0·343	130·2	132·0	− 9·8	12	52	
		4077a	0·954	110·6	77·2	−18·6	14	41	175c
			0·855	111·4	91·5	−16·5			259
			0·944	103·4	78·0	−11·6			205
			0·963	82·9	73·0	+ 7·7			204
July 1		Centre			(147·4)	(+3·1)	(79)	(364)	(1642)
182·407	CL,FT		0·846	228·8	182·5	−31·7			74
		4075	0·804	257·8	186·5	− 7·8	11	53	
		4075	0·780	257·7	184·2	− 7·5	0	8	285c
		4075	0·774	256·4	183·5	− 8·4	4	29	
		4073a	0·565	248·6	166·3	− 9·2	3	6	
		4076	0·233	184·9	135·4	−10·2	0	3	
		4076	0·229	177·6	133·6	−10·0	3	11	
		4076a	0·223	172·1	132·4	− 9·6	9	36	
		4077a	0·867	113·7	77·5	−18·6	13	42	169f
		4079a	0·988	77·4	52·9	+13·0	13	80	
		4080a	0·995	107·0	51·5	−16·5	0	268	
			0·794	118·1	86·3	−19·8			125
			0·891	80·5	71·3	+10·0			237
			0·909	105·8	70·6	−13·0			466
			0·956	69·9	61·4	+20·2			293
July 2		Centre			(134·2)	(+3·2)	(56)	(536)	(1649)
183·391	AW, FT		0·856	282·0	179·2	+12·0			82
		4075	0·926	259·7	187·3	− 8·2	14	67	
		4075	0·913	259·2	185·4	− 8·4	0	3	539c
		4075	0·898	259·0	183·4	− 8·4	4	24	
		4076	0·346	222·3	134·3	−11·6	0	1	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.

The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4077, June 30–July 11. A small regular spot, *a*. A number of very small companions are seen near it on July 6 and 7.

Group 4078, July 1. Three very small spots between Groups 4073 and 4076.

Group 4079, July 2–9. A composite spot, *a*, with its major axis inclined at a considerable angle to the equator. It has begun to break up by July 5 into a short straight stream of small spots, of which *b* is the leader.

Group 4080, July 2–9. A large composite spot, *a*, which rapidly diminishes in size, and has broken up by July 7 into a few small unstable spots in a straight stream.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
183d·391	AW,FT	4076	0·332	223·3	133·9	−10·7	1	7	
		4076	0·312	221·2	132·6	−10·3	0	4	
		4076*a*	0·302	223·1	132·6	− 9·5	8	20	
		4081	0·218	129·9	111·0	− 4·8	0	2	
		4077*a*	0·746	119·0	77·2	−18·8	15	51	84*f*
		4079*a*	0·931	77·6	52·1	+12·7	16	105	325*c*
		4080*a*	0·955	108·7	50·0	−16·8	33	172	388*f*
		4082	0·965	76·4	45·7	+14·0	3	8	
			0·780	79·8	69·6	+10·0			71
			0·848	111·9	65·6	−16·5			264
			0·886	68·5	59·1	+20·6			170
			0·937	122·7	56·4	−29·0			105
July 3		Centre			(120·6)	(+3·3)	(84)	(464)	(2028)
184·645	AW,FT		0·977	259·6	181·3	− 9·4			400
			0·926	283·7	172·4	+14·0			181
			0·861	255·2	162·4	−10·9			404
		4076	0·566	246·7	136·3	−10·0	2	18	
		4076	0·537	248·3	134·8	− 8·5	0	15	
		4076*a*	0·520	244·6	133·0	− 9·9	4	22	
		4077*a*	0·573	130·1	77·2	−18·6	10	33	
		4079*a*	0·795	76·4	52·4	+12·8	11	78	307*p*
		4080*a*	0·848	112·1	49·7	−16·6	21	143	729*p*
July 4		Centre			(104·6)	(+3·4)	(48)	(309)	(2021)
185·381	AW,FT		0·953	283·3	167·3	+13·8			99
			0·896	256·1	156·9	−10·8			640
		4076	0·692	251·6	136·4	−10·0	1	8	
		4076	0·653	249·4	133·1	−10·6	0	8	
		4076	0·647	251·6	133·1	− 9·0	0	4	100*c*
		4076*a*	0·645	250·4	132·7	− 9·7	4	10	
		4077*a*	0·472	142·0	77·0	−18·4	11	31	
		4079*b*	0·685	74·8	52·3	+13·0	7	49	
		4079	0·690	76·1	51·7	+12·1	3	10	106*f*
		4080	0·756	118·1	50·4	−18·3	0	4	
		4080*a*	0·757	115·8	49·6	−16·8	23	145	129*f*
			0·855	110·1	38·7	−15·1			436
			0·864	102·2	36·3	− 8·7			89
			0·923	117·9	31·8	−24·0			122
July 5		Centre			(94·8)	(+3·5)	(49)	(269)	(1721)
1895.				°	°	°			
186d·384	CL,FT		0·957	256·4	153·2	−11·9			242
			0·829	254·9	135·7	−10·4			269
		4077*a*	0·381	168·3	76·9	−18·3	5	19	
		4077	0·434	163·6	74·0	−20·9	0	1	
		4077	0·431	158·6	71·9	−20·0	1	4	
		4079*b*	0·508	70·1	52·3	+13·1	2	12	
		4079	0·512	71·3	51·8	+12·6	0	4	
		4079	0·515	72·7	51·5	+11·9	1	6	
		4079	0·520	71·1	51·3	+12·8	0	2	
		4079	0·520	74·0	51·0	+11·3	0	2	
		4080*a*	0·613	124·0	49·5	−16·9	23	131	
		4082	0·588	70·0	46·8	+14·6	0	3	
			0·828	115·3	29·6	−18·5			160
			0·961	78·3	7·4	+12·3			548
July 6		Centre			(81·5)	(+3·6)	(32)	(184)	(1219)
187·532	AW,FT		0·940	256·5	134·8	−11·4			214
			0·888	290·1	128·3	+19·5			296
			0·747	264·9	114·2	+ 1·3			47
			0·815	235·8	114·0	−24·7			91
		4083*a*	0·881	250·9	125·6	−14·9	4	13	
		4083	0·849	251·9	122·1	−13·3	0	2	160*c*
		4083*b*	0·852	249·1	121·8	−15·6	12	38	
		4077*a*	0·411	204·8	76·7	−18·2	6	26	
		4079	0·274	54·5	53·1	+12·7	0	2	
		4079*b*	0·287	54·9	52·4	+13·1	0	4	
		4079	0·290	61·4	51·3	+11·6	3	7	
		4079	0·297	61·1	51·0	+11·9	0	2	
		4079	0·314	58·1	50·5	+13·1	0	3	
		4079	0·328	55·6	50·2	+14·2	0	2	
		4080	0·451	142·9	49·8	−17·5	6	34	
		4080	0·451	141·0	49·1	−16·9	8	35	
		4080	0·458	141·7	49·1	−17·5	0	3	
		4080	0·479	138·5	46·9	−17·5	0	2	
		4084	0·918	99·1	0·6	− 6·9	9	32	
		4084	0·925	99·1	359·6	− 7·0	12	66	
		4084	0·944	100·4	356·7	− 8·5	0	8	508*c*
		4084	0·953	100·1	355·0	− 8·5	10	32	
		4085*a*	0·950	77·1	354·4	+13·4	23	130	
		4085	0·966	80·7	351·1	+10·0	0	16	761*sp*
		4086	0·967	73·0	350·8	+17·4	0	39	377*c*
			0·871	74·2	6·1	+15·6			300
July 7		Centre			(66·3)	(+3·7)	(93)	(496)	(2754)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4081, July 3. A very small faint spot.
Group 4082, July 3–6. A very small spot, *f* Group 4079; not seen on July 4 and 5.
Group 4083, July 7–9. Two spots *a* and *b*. *a* has disappeared at the west limb by July 9. A very small spot is seen between *a* and *b* on July 7.
Group 4084, July 7–18. Two very close pairs of spots on July 7. These have become two spots, *a* and *b*, by July 8, and a few very small companions are seen with them. *a* increases in size, and has become a large regular spot by July 9; *b* has broken up by that day, and the group consists of *a* followed by a number of small spots in a straggling stream. The small spots rapidly disappear and *a* remains alone, save occasionally for two or three very small companions after July 10.
Group 4085, July 7–14. A large spot, *a*, with one or two small companions. *a* has suddenly broken up into a number of small unstable spots by July 11. It has revived again by July 12, but diminishes rapidly afterwards.
Group 4086, July 7–16. A few small unstable spots *nf* Group 4085. The group is not seen on July 12.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
188d·426	CL,FT		0·987	257·6	134·0	−11·6			160
			0·889	286·7	117·0	+16·6			149
			0·863	262·4	113·4	− 4·6			31
			0·803	253·5	105·9	−10·8			123
		4083*a*	0·949	253·4	124·1	−14·4	0	7	263*c*
		4083*b*	0·935	251·5	121·4	−15·8	12	47	
		4077*a*	0·514	223·9	76·4	−18·1	6	17	
		4079*b*	0·167	9·2	52·9	+13·3	2	7	
		4079	0·171	21·3	50·8	+15·3	0	3	
		4080	0·369	166·6	49·5	−17·2	5	17	
		4080	0·386	159·9	46·5	−17·4	4	32	
		4087	0·239	164·9	48·6	− 8·7	3	13	
		4087	0·257	154·1	48·0	− 9·6	2	8	
		4087	0·245	149·2	47·2	− 8·4	0	4	
		4087	0·241	156·4	46·8	− 7·8	1	3	
		4087	0·274	148·7	46·2	− 9·8	2	7	
		4087	0·250	144·0	46·0	− 7·9	1	3	
		4087	0·292	147·9	45·5	−10·6	1	7	
		4087	0·297	145·2	44·6	−10·3	7	29	
		4088	0·668	75·9	13·2	+12·2	0	6	
		4084*a*	0·816	100·2	0·8	− 6·0	22	129	630*c*
		4084	0·828	100·5	359·7	− 6·5	0	6	
		4084	0·856	101·9	356·9	− 8·2	0	4	725*c*
		4084*b*	0·881	101·9	354·0	− 8·6	9	80	
		4085*a*	0·868	76·7	354·5	+13·4	14	117	
		4085	0·873	79·3	353·7	+11·2	0	8	
		4085	0·895	80·5	351·0	+10·2	5	17	907*c*
		4086	0·898	72·1	352·8	+17·8	2	19	
		4086	0·913	70·0	349·0	+19·8	0	10	
			0·772	71·5	4·1	+ 9·0			170
			0·795	83·7	1·9	+ 7·3			357
July 8		Centre			(54·5)	(+3·8)	(98)	(600)	(3515)
189·419	AW, CL		0·899	283·7	105·4	+14·0			138
			0·902	292·1	105·2	+21·6			237
			0·890	256·5	102·7	−10·2			207
			0·852	244·0	95·6	−19·7			241
		4083*b*	0·991	253·7	122·1	−15·6	0	61	344*c*
		4077*a*	0·661	236·5	76·7	−18·2	6	18	
		4079*b*	0·251	312·0	52·4	+13·5	0	5	
		4079	0·211	306·1	51·4	+11·0	0	6	
		4080	0·384	200·1	49·3	−17·2	0	6	
		4080	0·383	194·0	47·0	−17·8	0	15	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
189d·419	AW, CL	4080	0·368	193·5	46·5	−17·1	0	5	
		4087*a*	0·256	222·0	51·3	− 7·1	28	174	
		4087*b*	0·260	212·2	49·4	− 8·8	0	10	
		4087	0·264	209·0	48·8	− 9·6	0	7	
		4087*c*	0·230	211·1	48·3	− 7·5	0	27	
		4087	0·268	205·5	48·1	−10·0	0	4	
		4087	0·225	201·9	46·2	− 8·1	0	11	
		4087	0·239	197·5	45·6	− 9·2	0	4	
		4087*d*	0·252	194·5	45·1	−10·2	34	171	
		4087	0·230	194·3	44·7	− 8·9	0	14	
		4089	0·606	80·7	4·3	+ 8·7	0	9	
		4090	0·658	76·3	0·8	+11·9	0	9	123*c*
		4090	0·668	75·2	0·1	+12·8	1	5	
		4084*a*	0·659	102·9	1·4	− 5·5	28	159	
		4084	0·668	106·3	1·2	− 7·8	0	9	
		4084	0·670	104·6	0·8	− 6·7	0	21	
		4084	0·705	105·6	358·3	− 8·1	8	32	
		4084	0·711	102·1	357·3	− 5·8	0	3	298*c*
		4084	0·717	104·9	357·2	− 7·8	0	3	
		4084	0·752	104·9	354·3	− 8·5	0	23	
		4084	0·763	105·4	353·4	− 9·1	10	31	
		4085*a*	0·738	75·5	354·4	+13·3	16	115	290*c*
		4086	0·782	70·8	350·9	+17·4	0	9	
		4086	0·795	67·0	350·2	+20·5	0	5	
		4091*a*	0·928	77·3	333·2	+13·3	7	46	192*c*
		4091*b*	0·949	76·1	329·6	+14·4	0	31	
			0·806	82·6	347·7	+ 8·2			168
			0·845	71·2	344·4	+18·0			680
July 9		Centre			(41·4)	(+3·9)	(138)	(1048)	(2918)
190·430	CL,FT		0·962	282·8	102·3	+13·4			96
			0·937	245·8	93·9	−20·9			209
		4092*a*	0·884	285·6	89·8	+15·7	3	9	129*c*
		4092*b*	0·847	287·7	85·2	+17·1	5	12	
		4077*a*	0·798	243·5	76·5	−18·2	4	10	
		4087*a*	0·452	246·8	52·5	− 6·6	44	292	
		4087	0·422	246·5	50·7	− 6·0	0	7	
		4087*b*	0·424	238·8	49·3	− 8·9	15	60	
		4087*c*	0·407	243·0	49·2	− 6·9	8	48	
		4087	0·392	238·6	47·6	− 8·0	0	2	
		4087*d*	0·377	231·4	45·2	− 9·8	51	345	
		4084	0·476	113·8	2·0	− 7·5	0	5	
		4084*a*	0·475	110·3	1·4	− 5·9	29	154	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4087, July 8–15. A number of small spots very irregularly scattered, suddenly appearing on July 8. The group has greatly developed by July 9, and forms a straight stream, consisting chiefly of four spots, *a*, *b*, *c* and *d*, of which *a* and *d* are large composite spots. The group continues to increase and shows an extension on July 11, a short compact stream following the main stream, but inclined to it at a considerable angle. This extension is reduced by July 12 to little more than one composite spot, *e*. The group diminishes after July 12, and *d* is measured in two parts on that day.
Group 4088, July 8. A very small faint spot *p* Group 4085.
Group 4089, July 9. A small faint spot *sp* Group 4085.
Group 4090, July 9. A pair of small faint spots *p* Group 4085.
Group 4091, July 9–11. Two spots, *a* and *b*. They are followed by a third, *c*, on July 10, but all are then small. Only *a* remains by July 11.
Group 4092, July 10–11. Two small spots, *a* and *b*, on July 10. Only *b* remains on July 11.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
190d.430	CL,FT	4084	0·482	112·2	1·3	− 6·9	1	5	
		4084	0·491	111·0	0·5	− 6·6	1	6	
		4084	0·534	112·5	358·1	− 8·3	4	21	
		4084	0·547	111·2	357·0	− 8·0	0	3	
		4084	0·605	111·0	353·1	− 9·2	5	18	
		4085*a*	0·570	72·4	354·1	+13·2	15	73	112*f*
		4086	0·655	67·0	348·8	+17·9	5	15	
		4091*a*	0·810	76·8	334·1	+13·0	5	21	
		4091*b*	0·853	75·8	329·6	+14·2	0	9	162*c*
		4091*c*	0·865	76·3	328·2	+13·8	0	11	
			0·702	80·2	343·5	+ 9·8			189
			0·978	72·6	309·6	+17·8			137
July 10		Centre			(27·9)	(+4·0)	(195)	(1126)	(1034)
191·471	AW, FT		0·965	249·5	86·5	−18·6			199
			0·933	239·5	78·0	−26·5			58
			0·852	280·1	72·6	+10·8			201
			0·833	234·9	63·3	−25·9			67
			0·800	241·6	62·4	−19·7			127
		4092*b*	0·941	286·7	84·5	+17·1	3	14	197*c*
		4077*a*	0·907	247·9	76·1	−18·1	0	4	188*f*
		4087*u*	0·648	255·1	53·1	− 6·4	57	328	
		4087	0·607	254·2	50·0	− 6·2	3	14	
		4087	0·607	251·6	49·6	− 7·7	0	3	
		4087*c*	0·602	253·2	49·5	− 6·7	0	8	
		4087*b*	0·610	249·6	49·4	− 8·9	6	38	
		4087	0·605	248·3	48·8	− 9·5	0	2	
		4087	0·569	247·8	46·3	− 8·9	0	6	
		4087	0·581	244·2	46·3	−11·1	0	5	
		4087*d*	0·558	245·0	45·0	−10·1	45	333	
		4087	0·522	242·3	42·1	−10·4	5	20	
		4087	0·512	243·0	41·7	− 9·8	0	6	
		4087	0·507	242·1	41·1	−10·0	0	6	
		4087	0·495	243·1	40·7	− 9·3	5	24	
		4087	0·480	241·2	39·3	− 9·6	1	8	
		4087	0·465	240·9	38·4	− 9·3	2	13	
		4087	0·458	241·7	38·2	− 8·8	3	14	
		4084*a*	0·283	128·0	1·3	− 6·0	26	152	
		4084	0·280	123·3	0·7	− 4·8	0	3	
		4084	0·357	124·7	357·0	− 7·8	0	2	
		4084	0·417	122·5	353·4	− 9·1	0	2	
		4085	0·345	64·6	355·7	+12·4	2	16	
		4085	0·361	63·6	354·9	+13·1	0	7	
1895.				°	°	°			
191d.471	AW, FT	4085	0·371	63·2	354·4	+13·4	14	37	
		4085	0·362	68·4	354·2	+11·5	0	8	
		4093	0·386	50·6	356·0	+18·0	0	3	
		4093	0·403	51·2	355·0	+18·4	0	3	
		4093	0·415	50·1	354·6	+19·2	0	1	
		4086	0·478	59·4	348·7	+17·8	0	10	
		4086	0·538	62·2	344·3	+18·0	0	3	
		4091*a*	0·647	74·8	334·5	+13·0	6	11	
		4094*a*	0·962	64·1	300·1	+26·1	6	23	482*c*
		4094*b*	0·984	65·6	293·9	+24·7	12	46	
			0·908	73·0	309·2	+17·1			131
			0·955	122·6	307·0	−29·4			88
			0·967	112·8	301·9	−20·8			102
July 11		Centre			(14·2)	(+4·1)	(196)	(1173)	(1840)
192·423	M, FT		0·935	277·5	70·9	+ 8·5			185
			0·914	248·1	64·4	−18·0			266
			0·893	239·9	59·3	−24·4			146
			0·831	293·4	56·4	+21·7			113
			0·747	287·5	49·1	+15·8			261
			0·741	239·3	43·7	−19·1			345
		4087*a*	0·805	259·1	54·0	− 6·2	46	393	
		4087	0·775	259·5	51·2	− 5·4	10	32	
		4087	0·769	258·3	50·5	− 6·2	0	2	
		4087*c*	0·758	258·3	49·6	− 6·0	0	3	
		4087*b*	0·761	254·9	49·3	− 8·6	3	36	
		4087	0·746	258·7	48·6	− 5·5	0	2	
		4087	0·741	255·6	47·7	− 7·7	12	68	1022*c*
		4087	0·730	253·3	46·4	− 9·1	0	5	
		4087*d*	0·719	251·3	45·1	−10·3	45	219	
		4087*d*	0·698	250·7	43·3	−10·2	19	103	
		4087	0·679	250·6	41·9	− 9·8	0	3	
		4087	0·639	249·0	38·6	− 9·9	0	2	
		4087*e*	0·628	250·6	38·2	− 8·6	12	52	
		4084*a*	0·176	179·5	1·4	− 5·9	31	164	
		4085	0·132	19·8	358·9	+11·3	0	3	
		4085	0·164	29·5	356·8	+12·4	4	18	
		4085	0·177	33·8	355·7	+12·6	0	8	
		4085	0·183	39·1	354·7	+12·3	1	5	
		4085*a*	0·201	35·3	354·7	+13·6	10	43	
		4085	0·189	42·8	354·0	+12·1	0	14	
		4085	0·183	47·0	353·7	+11·3	4	23	
		4093	0·263	22·6	355·4	+18·2	0	3	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north. south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4093, July 11–18. A few very small unstable spots *p* Group 4086. On July 15 the two largest spots, *a* and *b*, are dark and distinct. The group is not seen on July 17.
Group 4094, July 11–16. Two spots, *a* and *b*. Only *a* remains after July 13.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895.									
192d·423	M, FT	4094*a*	0·891	62·8	299·8	+26·1	6	24	683*c*
		4094*b*	0·928	65·1	293·9	+24·7	7	80	
			0·797	70·1	309·6	+18·3			183
			0·879	116·6	304·4	−20·9			140
			0·894	114·5	302·0	−19·7			191
July 12		Centre			(1·5)	(+4·2)	(210)	(1305)	(3535)
193·397	CL, AW		0·892	289·3	51·4	+19·1			418
			0·852	244·5	42·8	−19·0			583
		4087*a*	0·919	261·0	54·4	− 6·5	48	370	
		4087	0·901	261·7	52·0	− 5·5	0	13	
		4087	0·894	260·5	50·9	− 6·5	4	12	
		4087*b*	0·883	257·8	49·2	− 8·7	4	21	
		4087	0·870	259·0	47·8	− 7·4	6	94	1061*c*
		4087*d*	0·848	255·4	44·8	−10·0	25	205	
		4087	0·821	255·4	42·0	− 9·4	0	6	
		4087	0·799	254·8	39·8	− 9·4	2	8	
		4087*e*	0·779	255·3	38·1	− 8·6	18	128	
		4084*a*	0·288	232·6	1·8	− 5·9	21	143	
		4084	0·294	228·7	1·4	− 7·0	0	4	
		4084	0·261	228·4	359·9	− 5·8	0	2	
		4085	0·208	315·0	357·2	+12·7	0	1	
		4085	0·208	319·1	356·6	+13·3	0	9	
		4085	0·174	318·5	355·3	+11·7	0	2	
		4085	0·187	323·1	355·2	+12·9	0	1	
		4085*a*	0·192	326·5	354·8	+13·5	5	21	
		4085	0·174	325·4	354·4	+12·5	1	7	
		4085	0·148	317·4	354·4	+10·5	0	2	
		4093	0·287	328·8	357·6	+18·4	0	3	
		4093	0·276	328·3	357·3	+17·8	0	1	
		4093	0·277	332·0	356·4	+18·4	0	2	
		4093	0·244	341·7	353·2	+17·7	0	3	
		4086	0·226	359·3	348·8	+17·3	0	2	
		4094*a*	0·786	59·4	299·7	+26·4	9	16	361*c*
		4094*b*	0·831	63·1	294·2	+24·6	6	26	
		4095*a*	0·831	113·1	296·0	−16·4	7	41	
		4095	0·853	111·1	293·1	−15·5	2	12	199*c*
		4095*b*	0·862	112·1	292·4	−16·6	6	23	
		4096	0·980	102·7	271·5	−11·6	10	57	459*f*
			0·797	121·2	301·7	−21·4			122
			0·854	130·4	299·5	−30·8			182
			0·948	113·0	280·4	−20·2			82
			0·960	58·5	275·3	+31·4			280
July 13		Centre			(348·6)	(+4·3)	(~~174~~ 130)	(1235)	(3747)
1895.									
194d·488	AW, FT		0·970	284·8	50·7	+15·4			291
			0·931	247·2	39·5	−19·3			446
		4087*a*	0·989	262·5	55·0	− 6·7	59	358	
		4087	0·965	260·8	48·1	− 7·7	0	50	
		4087	0·961	259·3	47·1	− 9·0	0	72	787*c*
		4087*d*	0·952	258·3	45·1	− 9·7	24	179	
		4087*e*	0·905	258·3	37·8	− 8·6	20	132	
		4084	0·513	247·0	2·6	− 7·7	0	2	
		4084*a*	0·494	250·1	2·0	− 5·8	24	143	
		4084	0·470	248·1	0·2	− 6·1	0	3	
		4085	0·394	289·2	356·5	+11·6	0	10	
		4085	0·377	291·2	355·3	+11·9	0	8	
		4085*a*	0·380	295·2	354·9	+13·4	0	7	
		4085	0·369	293·6	354·5	+12·6	0	7	
		4085	0·359	293·7	353·9	+12·4	0	3	
		4085	0·349	290·3	353·7	+11·1	0	11	
		4093	0·477	299·5	0·0	+17·5	1	6	
		4093	0·450	295·4	359·1	+15·1	0	4	
		4086	0·326	312·6	348·8	+17·0	6	31	
		4094*a*	0·642	52·2	299·8	+26·8	6	14	
		4095*a*	0·684	120·0	296·3	−16·5	17	117	
		4095	0·719	117·5	292·9	−16·0	0	10	91*c*
		4095*b*	0·731	118·3	292·2	−16·9	11	31	
		4096	0·903	104·8	271·6	−11·4	12	59	553*f*
			0·855	135·2	287·6	−34·3			122
			0·871	125·9	281·4	−28·1			91
			0·858	116·8	279·8	−20·2			108
			0·896	54·4	273·5	+33·6			379
			0·965	121·3	264·6	−28·6			80
			0·983	113·9	257·9	−22·5			56
July 14		Centre			(334·3)	(+4·4)	(180)	(1257)	(3004)
195·679	AW, CL		0·951	246·2	26·0	−20·9			260
		4087*d*	0·998	260·8	43·9	− 8·9	0	86	
		4087*e*	0·985	260·9	37·5	− 8·1	12	57	417*c*
		4084	0·776	256·8	7·9	− 7·3	0	4	
		4084*a*	0·703	257·3	1·9	− 5·6	20	128	
		4084	0·708	254·4	1·8	− 7·7	0	2	
		4084	0·693	262·1	1·7	− 2·2	0	4	
		4084	0·678	256·4	359·8	− 5·8	0	7	
		4084	0·684	252·3	359·6	− 8·6	0	3	
		4093	0·710	291·4	2·4	+18·2	0	3	
		4093*a*	0·679	291·9	359·8	+18·1	6	26	121*c*
		4093*b*	0·645	294·2	356·8	+18·9	3	10	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4095, July 13–23. A short stream consisting mainly of two regular spots, *a* and *b*, and a few small companions between them. *a* is the largest member of the group, and remains alone after July 20.
Group 4096, July 13–20. A regular spot, which diminishes from day to day. The group is not seen on July 19.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
195d·679	AW, CL	4086	0·531	294·7	348·6	+16·7	3	12	34c
		4094a*	0·490	36·6	299·4	+27·3	7	17	
		4095a	0·505	133·4	296·1	−16·1	20	98	
		4095	0·526	133·3	295·0	−16·9	3	10	
		4095	0·538	130·1	293·2	−16·2	0	6	109c
		4095	0·547	128·8	292·3	−15·9	2	9	
		4095b	0·557	129·8	292·1	−16·8	9	29	
		4096	0·757	109·4	271·9	−11·5	8	35	597f
			0·831	52·9	266·5	+32·9			157
			0·905	129·8	262·8	−32·9			191
			0·916	72·7	252·1	+17·7			651
			0·918	84·2	241·8	+ 7·1			99
July 15		Centre			(318·5)	(+4·5)	(93)	(546)	(2636)
196·373	AW, FT		0·871	282·3	9·9	+13·0			341
			0·783	279·0	0·8	+ 9·9			501
I.		4084a	0·809	259·5	2·2	− 5·8	33	135	158f
		4093a	0·796	288·8	1·4	+17·7	1	14	239c
		4093b	0·756	291·1	357·3	+18·9	2	5	
		4086	0·656	290·5	349·1	+16·8	2	6	
		4086	0·660	294·0	348·8	+19·1	0	2	155c
		4086	0·647	292·1	348·1	+17·7	0	2	
		4086	0·639	299·7	346·0	+22·2	0	1	
		4094a	0·425	20·9	299·5	+27·9	3	11	
		4095a	0·412	147·7	296·1	−15·9	23	94	
		4095	0·428	148·0	295·7	−16·7	3	11	
		4095	0·450	141·5	292·4	−16·2	0	6	
		4095b	0·459	141·5	292·0	−16·6	10	28	
		4095	0·490	139·6	289·9	−17·5	0	1	
		4096	0·653	113·2	271·7	−11·3	8	18	367f
			0·855	70·7	251·0	+18·9			526
			0·855	80·3	250·5	+10·7			345
			0·858	131·8	260·6	−31·9			160
			0·943	66·3	238·9	+23·8			270
July 16		Centre			(309·3)	(+4·6)	(85)	(334)	(3062)
197·450	AW, CL		0·903	283·0	359·7	+13·8			1251
			0·858	256·3	352·4	− 9·2			133
			0·789	291·7	346·1	+20·0			542
		4084a	0·926	262·0	1·9	− 5·6	21	128	223c
		4097	0·404	277·1	318·7	+ 7·2	1	4	
		4095a	0·345	183·1	296·1	−15·4	19	98	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
197d·450	AW, CL	4095	0·360	181·8	295·7	−16·3	2	8	
		4095	0·346	177·4	294·1	−15·4	0	10	
		4095	0·361	176·9	293·8	−16·4	0	10	
		4095b	0·369	172·5	292·1	−16·7	3	15	
		4098	0·441	30·8	280·4	+26·8	0	4	
		4096	0·465	125·1	272·3	−11·1	4	10	
		4099	0·538	120·9	267·0	−11·9	0	9	
			0·743	66·5	248·6	+20·4			446
			0·908	78·7	229·6	+12·3			175
			0·929	66·7	226·8	+23·4			778
July 17		Centre			(295·0)	(+4·7)	(50)	(296)	(3548)
198·433	AW, CL		0·931	279·1	350·9	+10·3			698
			0·902	291·1	346·3	+21·1			510
		4084a	0·987	263·4	2·0	− 5·7	22	128	386sf
		4093a	0·979	287·0	1·0	+17·6	0	9	245f
		4095a	0·417	215·8	296·7	−15·1	20	118	
		4095	0·424	212·8	295·9	−16·2	0	2	
		4095	0·448	209·6	295·5	−18·2	0	5	
		4095	0·416	208·6	294·0	−16·6	0	1	
		4095b	0·404	205·3	292·4	−16·6	1	6	
		4096	0·323	150·2	272·7	−11·5	0	5	
			0·854	64·7	224·6	+24·0			556
			0·948	109·9	213·5	−17·1			98
July 18		Centre			(282·1)	(+4·8)	(43)	(274)	(2493)
199·417	AW, FT		0·973	279·2	346·2	+10·1			484
			0·954	290·6	342·0	+21·1			690
		4095a	0·560	234·1	297·0	−14·8	16	124	
		4095	0·520	228·8	293·0	−15·5	0	6	
			0·773	59·2	221·4	+26·6			224
			0·916	113·4	206·5	−19·1			171
			0·972	100·2	193·9	− 8·7			343
July 19		Centre			(269·1)	(+4·9)	(16)	(130)	(1912)
200·530	AR, FT		0·960	283·8	328·6	+14·7			112
			0·954	292·5	327·2	+23·0			190
			0·904	274·6	319·1	+ 6·3			159

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4097, July 17. A very small spot.
Group 4098, July 17. A very small spot.
Group 4099, July 17. A very small spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
200d.530	AR, FT		0·822	286·8	309·3	+16·6			111
			0·845	239·5	306·0	−22·3			177
			0·852	230·2	303·1	−29·8			181
		4100	0·769	295·6	302·8	+22·7	1	5	
		4100	0·766	296·1	302·5	+23·0	0	2	
		4100	0·744	293·1	301·0	+20·4	4	11	
		4100	0·745	295·4	300·7	+22·0	0	4	157c
		4100	0·728	294·7	299·3	+21·2	1	5	
		4100	0·723	297·5	298·3	+23·0	1	4	
		4100	0·711	296·2	297·6	+21·9	1	5	
		4100	0·712	298·6	297·1	+23·6	0	6	
		4095a	0·731	245·0	297·3	−14·3	27	126	
		4095	0·743	240·8	297·0	−17·5	0	1	
		4095	0·715	245·8	296·2	−13·3	0	2	158sf
		4095	0·719	243·2	295·8	−15·1	1	3	
		4095	0·714	243·2	295·4	−15·0	0	3	
		4096	0·411	224·9	271·5	−12·1	0	2	
		4101	0·293	18·2	248·7	+21·1	0	13	
			0·864	120·0	200·3	−22·7			214
			0·894	107·0	193·3	−12·8			269
			0·942	131·2	193·3	−36·0			54
			0·923	97·2	187·8	− 4·7			68
			0·948	101·3	184·2	− 9·1			451
July 20		Centre			(254·3)	(+5·0)	(36)	(192)	(2301)
201·217	CL, FT		0·963	273·5	319·6	+ 4·7			62
			0·894	285·5	306·4	+11·4			145
I.			0·913	238·7	305·0	−25·8			139
			0·827	269·7	300·8	+ 2·7			116
			0·758	298·5	292·0	+24·7			251
		4100	0·868	293·2	304·7	+22·6	9	34	
		4100	0·845	293·5	301·9	+22·5	7	23	
		4100	0·827	291·9	300·1	+20·9	13	26	
		4100	0·811	293·8	298·1	+22·2	3	13	260c
		4100	0·810	295·0	297·9	+23·1	2	10	
		4100	0·798	293·9	296·8	+22·0	0	3	
		4100	0·789	294·3	295·8	+22·2	0	2	
		4095a	0·832	248·9	298·2	−14·4	27	91	274sf
			0·795	106·2	194·6	− 9·6			112
			0·897	103·1	183·0	− 9·3			275
			0·975	104·1	169·7	−12·5			176
July 21		Centre			(245·1)	(+5·1)	(61)	(202)	(1810)
1895.				°	°	°			
202d.409	AW, CL		0·922	232·7	288·3	−31·3			95
		4100	0·966	292·2	305·1	+22·8	18	105	
		4100	0·951	292·8	301·8	+23·3	17	45 ~~457~~	
		4100	0·941	292·0	299·9	+22·5	0	9	655nf
		4100	0·939	290·6	299·6	+21·2	0	14	
		4100	0·936	292·8	299·0	+23·2	6	40	
		4095a	0·950	253·7	299·0	−13·7	13	73	325sf
			0·782	107·0	180·2	− 9·8			135
			0·857	74·3	170·5	+16·1			36
			0·933	106·3	162·7	−13·1			540
July 22		Centre			(229·4)	(+5·2)	(54)	(~~695~~ 256)	(1786)
203·382	AW, FT		0·924	271·4	289·3	+15·1			115
			0·965	247·8	288·0	−19·8			108
			0·962	231·3	282·6	−34·9			49
			0·944	236·4	280·6	−29·2			172
			0·917	251·6	280·3	−14·6			85
			0·889	299·1	278·1	+28·2			136
			0·842	304·9	270·7	+31·9			145
			0·810	249·1	267·4	−13·5			303
			0·822	312·6	265·8	+37·3			220
		4100	0·987	292·6	298·4	+23·1	4	25	499f
		4095a	0·996	255·8	299·7	−13·6	0	59	413s
		4102	0·227	9·7	214·2	+18·2	0	1	
		4102	0·219	13·2	213·5	+17·5	0	1	
		4102	0·230	19·0	212·0	+17·8	1	3	
		4103	0·367	47·3	199·9	+19·5	0	1	
		4103	0·358	50·1	199·8	+18·3	2	8	
		4103	0·389	44·6	199·6	+21·1	0	5	
		4103	0·390	54·2	197·1	+18·1	7	13	
			0·769	116·1	170·7	−16·1			130
			0·817	109·5	164·6	−12·6			258
			0·847	104·7	160·5	− 9·5			267
			0·888	97·2	154·7	− 3·9			43
			0·972	76·8	139·4	+14·1			72
July 23		Centre			(216·5)	(+5·3)	(14)	(116)	(3015)
204·483	AW, FT		0·994	240·2	281·4	−28·8			266
			0·915	298·7	267·5	+28·4			271
			0·920	253·1	266·4	−13·3			451
			0·909	307·0	265·0	+35·7			311
			0·822	276·8	257·3	+ 8·6			147

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4100, July 20–23. A number of small spots appearing suddenly near the west limb, and scattered irregularly over a considerable area.
Group 4101, July 20. A small faint spot.
Group 4102. July 23. Three very small spots.
Group 4103, July 23–24. Several very small unstable spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
204d·483	AW, FT		0·770	291·9	251·2	+20·1			359
			0·903	207·6	241·4	−49·0			61
		4103	0·230	359·7	202·0	+18·6	0	4	
		4103	0·257	0·0	201·9	+20·1	0	4	
		4103	0·234	4·4	200·8	+18·7	0	3	
		4103	0·229	5·6	200·6	+18·4	3	14	
		4103	0·238	15·8	198·0	+18·5	4	12	
		4104	0·960	103·2	129·9	−11·1	13	36	517*c*
			0·763	109·8	155·0	−11·4			153
			0·896	76·8	138·0	+14·1			41
			0·960	71·2	127·5	+19·5			110
July 24		Centre			(201·9)	(+5·3)	(20)	(73)	(2682)
205·195	AW, CL		0·863	288·9	252·0	+19·0			572
M.		4104	0·908	104·5	129·3	−10·7	0	18	486*s*
July 25		Centre			(192·5)	(+5·4)	(0)	(18)	(1058)
206·497	CL, FT		0·941	290·6	245·9	+21·2			474
			0·787	297·5	225·4	+24·9			220
		4105	0·231	37·3	167·0	+16·0	1	4	
		4105	0·247	38·0	166·2	+16·6	1	4	
		4105	0·247	44·2	165·0	+15·6	1	2	
		4105	0·258	44·7	164·5	+16·0	0	3	
		4104	0·745	109·9	130·0	−10·9	5	16	
		4104	0·773	110·2	127·7	−11·8	2	7	
		4104	0·776	109·3	127·2	−11·2	0	7	338*sf*
		4104*a*	0·793	111·0	126·1	−12·9	2	9	
			0·931	104·7	108·7	−11·6			234
			0·950	114·5	107·5	−21·2			223
			0·931	68·9	106·5	+21·6			128
			0·940	96·1	106·0	− 3·8			401
			0·951	79·1	102·8	+12·1			109
July 26		Centre			(175·3)	(+5·5)	(12)	(52)	(2127)
207·207	FT, AW		0·956	291·1	239·5	+21·8			348
			0·919	307·0	230·8	+36·0			315
M.			0·835	287·5	224·4	+17·7			123
			0·825	298·7	219·7	+26·6			418
		4105	0·186	344·7	168·8	+15·9	1	3	
		4105	0·195	348·8	168·2	+16·6	0	2	
		4105	0·182	6·2	167·1	+16·0	2	16	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1894.				°	°	°			
207d·207	FT, AW	4105	0·143	7·6	167·0	+13·7	0	2	
		4105	0·195	356·3	166·7	+16·8	0	8	
M.		4104	0·633	115·1	130·3	−11·0	3	12	
		4104	0·654	114·2	128·6	−11·1	0	9	
		4104	0·662	115·1	128·3	−11·9	1	2	
		4104	0·657	113·1	128·1	−10·5	4	13	
		4104	0·666	114·2	127·7	−11·4	4	17	
		4104	0·677	114·3	127·0	−11·8	0	9	
		4104*a*	0·689	115·6	126·4	−13·0	22	77	
			0·896	117·5	107·4	−21·5			153
			0·869	96·9	106·4	− 3·2			378
			0·914	108·1	102·6	−14·0			313
			0·911	84·3	100·1	+ 7·5			52
			0·930	75·7	97·1	+15·3			323
July 27		Centre			(165·9)	(+5·6)	(37)	(170)	(2423)
208·203	CL, JW		0·959	287·4	227·1	+18·3			181
			0·932	295·4	221·6	+25·7			320
M.		4105	0·331	302·8	169·5	+15·8	1	6	
		4105	0·264	310·8	164·7	+15·5	3	11	
		4105	0·271	315·5	164·2	+16·7	2	10	
		4104	0·464	123·8	129·9	− 9·7	0	4	
		4104	0·481	123·8	128·9	−10·3	9	32	
		4104	0·511	123·7	127·2	−11·3	0	7	
		4104*a*	0·532	123·9	126·1	−12·1	18	59	
		4104	0·582	127·6	124·3	−15·7	0	7	
		4104	0·599	126·9	123·0	−16·1	0	6	
			0·888	120·9	96·5	−24·0			182
			0·887	112·3	94·0	−16·8			240
			0·864	73·4	93·0	+17·2			263
July 28		Centre			(152·8)	(+5·7)	(33)	(142)	(1186)
209·628	CL, FT		0·926	250·1	198·7	−16·0			179
			0·901	287·4	198·5	+18·1			120
			0·906	259·1	197·6	− 7·4			67
			0·801	251·2	184·5	−11·3			135
		4105	0·629	287·7	172·3	+15·5	3	7	
		4105	0·602	290·6	169·9	+16·8	0	4	
		4105	0·593	288·5	169·6	+15·5	0	3	
		4105	0·595	291·6	169·3	+17·3	0	7	
		4104	0·278	171·4	131·6	−10·2	2	13	
		4104	0·289	168·8	130·7	−10·7	4	22	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4104, July ~~23~~ 24–August 3. An irregular group, undergoing constant change, composed of spots, mostly small and unstable, and forming a stream sharply inclined to the equator. The last spot, *a*, is the most stable.
Group 4105, July 26–31. Two close pairs of small spots on July 26. The group undergoes continual change on the succeeding days, but always consists of a few small unstable spots irregularly distributed. The group is not seen on July 30.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
209d·628	CL, FT	4104	0·382	161·4	126·8	−15·5	0	3	
		4104	0·379	160·2	126·4	−15·1	1	6	
		4104	0·391	160·5	126·2	−15·9	0	3	
		4104*a*	0·345	157·0	126·1	−12·8	19	90	
		4104	0·420	156·6	124·0	−17·0	3	11	
		4104	0·421	155·1	123·4	−16·8	3	13	
		4104	0·414	152·8	122·7	−16·0	14	44	
		4104	0·428	150·7	122·6	−16·9	3	21	
		4106*a*	0·957	99·2	62·1	− 7·1	32	141	227*c*
			0·699	119·5	95·0	−15·7			146
			0·685	68·8	91·8	+18·6			89
			0·917	151·1	91·4	−49·2			78
			0·875	123·0	80·0	−25·2			124
			0·822	83·9	78·5	+ 8·3			133
			0·919	107·4	69·8	−13·5			152
			0·958	103·3	62·5	−11·0			117
July 29		Centre			(134·0)	(+5·7)	(84)	(388)	(1567)
210·235	AW, FT		0·965	288·2	201·6	+19·1			200
			0·949	253·5	195·1	−13·7			132
I.		4104	0·295	201·9	132·3	−10·0	0	2	
		4104	0·290	197·4	130·9	−10·2	1	7	
		4104	0·314	180·6	127·8	−12·4	14	60	
		4104	0·343	184·9	127·6	−14·1	0	2	
		4104	0·354	182·4	126·8	−14·8	0	10	
		4104	0·360	174·9	124·0	−15·1	0	3	
		4104	0·370	171·9	122·8	−15·6	2	16	
		4104	0·383	171·7	122·6	−16·4	0	4	
		4107	0·804	104·4	74·2	− 8·0	0	9	92*f*
		4106*a*	0·910	99·9	61·7	− 6·5	22	129	565*f*
			0·964	72·3	50·6	+18·6			156
July 30		Centre			(125·9)	(+5·8)	(39)	(242)	(1145)
211·533	AW, AR		0·859	251·4	165·2	−12·7			325
		4105	0·863	285·0	168·6	+15·9	0	6	193*c*
		4105	0·838	286·1	165·8	+16·7	4	32	
		4104	0·464	228·3	129·5	−12·4	2	6	
		4104	0·466	223·4	128·0	−14·2	2	6	
		4104	0·444	226·5	128·0	−12·2	0	3	
		4104	0·450	224·2	127·5	−13·2	4	21	
		4104	0·432	222·2	126·1	−13·0	5	30	
		4104	0·444	219·7	125·7	−14·3	0	5	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
211d·533	AW, AR	4104	0·447	215·0	124·2	−15·7	4	15	
		4107*a*	0·559	114·7	78·0	− 8·4	36	147	
		4107	0·585	114·2	76·2	− 8·9	8	55	
		4107	0·595	112·3	75·2	− 8·1	0	5	
		4107	0·606	114·6	74·9	− 9·7	0	5	144*c*
		4107	0·602	110·7	74·3	− 7·4	1	9	
		4107	0·613	110·5	73·5	− 7·6	7	30	
		4107	0·631	111·1	72·4	− 8·4	1	12	
		4107	0·648	110·7	71·2	− 8·5	21	75	
		4106*a*	0·753	104·6	61·8	− 6·9	19	127	319*f*
		4106	0·779	102·8	59·2	− 6·1	0	3	
			0·851	120·3	56·6	−21·9			149
			0·887	70·1	46·2	+20·4			236
			0·927	114·2	45·0	−19·8			222
			0·926	103·8	42·9	−10·4			317
July 31		Centre			(108·8)	(+5·9)	(114)	(592)	(1905)
212·527	CL, M		0·962	260·1	168·4	− 7·8			59
			0·946	285·0	167·3	+16·1			332
			0·922	254·0	160·4	−12·3			227
		4104	0·598	238·0	126·9	−13·4	0	3	
		4104	0·578	236·9	125·3	−13·3	3	14	
		4104	0·574	231·2	123·2	−15·9	0	3	
		4108	0·298	239·9	110·5	− 2·9	0	2	
		4108	0·287	234·0	109·0	− 3·9	0	3	
		4109	0·385	189·9	99·5	−16·3	1	7	
		4109	0·384	183·9	97·2	−16·6	1	5	
		4107	0·373	134·9	80·1	− 9·6	0	3	
		4107*a*	0·383	131·1	78·7	− 8·9	47	225	
		4107	0·402	127·6	76·9	− 8·6	5	25	
		4107	0·413	128·9	76·7	− 9·4	1	6	
		4107	0·405	125·6	76·3	− 8·1	0	5	
		4107	0·418	126·8	75·9	− 8·9	3	13	
		4107	0·417	124·4	75·4	− 8·0	2	10	
		4107	0·439	125·4	74·4	− 9·2	0	3	
		4107	0·430	121·2	73·9	− 7·4	0	4	
		4107	0·451	119·5	72·4	− 7·4	15	114	
		4107	0·473	120·6	71·4	− 8·5	5	43	
		4107	0·498	120·0	69·8	− 9·2	23	136	
		4106*a*	0·600	110·1	61·2	− 7·0	19	133	
		4110	0·967	81·9	19·9	+ 9·3	36	188	502*c*
		4110	0·991	78·8	12·4	+11·9	0	83	
			0·711	129·2	59·3	−21·9			133

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4106, July 29–August 9. A large regular spot, *a*, with a very small companion on July 31 and August 2.
Group 4107, July 30–August 9. A small spot *p* Group 4106. The group increases in size very rapidly during the two succeeding days, and becomes a fine stream, consisting chiefly of two large composite spots, *a* and *b*, and a few small spots between them.
Group 4108, August 1. A pair of very small faint spots.
Group 4109, August 1–4. A pair of very small faint spots on August 1. The group is not seen on August 2. A very small spot is seen near the place of the group on August 3, and is joined by a second on August 4.
Group 4110, August 1–13. A great number of spots forming a fine irregular stream of great complexity. The leader, *a*, becomes a very large spot. The group increases in size up to August 8, after which it diminishes, first by the disappearance of the smaller spots, rendering the group much more simple in appearance. The principal following spots are lettered on August 6 *b*, *c*, *d* and *e*; *e* has divided into three parts, *f*, *g*, and *h*, by the succeeding day.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
212d·527	CL, M		0·712	101·7	51·4	− 4·2			138
			0·842	121·2	44·7	−22·2			132
			0·843	104·7	40·2	− 9·0			220
			0·911	129·7	39·7	−32·4			34
			0·897	114·2	36·1	−18·6			216
Aug. 1		Centre			(95·6)	(+5·9)	(161)	(1028)	(1993)
213·535	AW, FT		0·979	285·2	161·5	+16·1			139
			0·969	259·8	156·5	− 8·3			121
		4104	0·733	245·0	125·2	−13·7	0	4	159*np*
		4107*a*	0·262	171·3	79·9	− 8·9	63	327	
		4107	0·231	165·1	78·8	− 6·9	0	3	
		4107	0·278	165·0	78·0	− 9·6	0	4	
		4107	0·267	162·3	77·5	− 8·7	2	9	
		4107	0·267	160·5	77·1	− 8·5	0	3	
		4107	0·257	157·9	76·6	− 7·8	0	1	
		4107	0·264	155·5	75·9	− 7·9	2	5	
		4107	0·298	152·4	74·2	− 9·3	0	4	
		4107	0·276	146·5	73·4	− 7·3	0	16	
		4107	0·301	143·7	71·9	− 8·1	50	252	
		4107	0·331	141·2	70·1	− 9·0	24	123	
		4106	0·416	128·0	62·9	− 9·2	0	2	
		4106*a*	0·411	122·6	61·9	− 7·1	19	127	
		4111	0·618	107·8	46·1	− 6·0	0	4	
		4111	0·632	109·6	45·5	− 7·4	9	55	
		4111	0·644	106·7	44·0	− 5·9	3	20	
		4110	0·873	82·7	21·1	+ 9·3	23	142	
		4110	0·889	82·8	19·1	+ 9·2	0	8	
		4110	0·918	79·0	15·1	+12·5	0	5	696*c*
		4110	0·931	80·5	13·1	+11·1	9	100	
		4110	0·934	82·1	12·7	+ 9·6	6	28	
		4112*a*	0·985	97·4	3·2	− 6·2	12	97	133*c*
			0·959	73·4	7·9	+17·6			573
Aug. 2		Centre			(82·2)	(+6·0)	(222)	(1339)	(1821)
214·205	CL, AW	4104	0·856	252·4	129·6	−11·7	0	8	417*c*
M.		4104	0·840	248·3	127·0	−14·6	0	16	
		4109	0·565	231·8	100·7	−15·1	1	6	
		4107*a*	0·289	204·9	80·4	− 9·2	51	332	
		4107	0·267	197·4	78·0	− 8·7	3	27	
		4107	0·249	193·5	76·7	− 8·0	0	12	
		4107	0·268	184·6	74·6	− 9·4	1	8	
1895.				°	°	°			
214d·205	CL, AW	4107	0·230	171·8	71·5	− 7·1	0	38	
		4107*b*	0·260	170·2	70·8	− 8·8	44	364	
M.		4106*a*	0·304	139·0	61·9	− 7·3	17	119	
		4111	0·493	112·6	46·3	− 5·6	2	9	
		4111	0·508	115·8	46·1	− 7·4	24	142	
		4111	0·512	113·8	45·4	− 6·6	0	5	
		4111	0·515	112·8	45·0	− 6·2	0	4	
		4111	0·527	113·6	44·4	− 6·9	1	8	
		4111	0·535	111·3	43·5	− 6·0	4	36	
		4111	0·553	111·6	42·4	− 6·6	2	12	
		4110	0·773	82·1	22·6	+ 9·9	15	90	
		4110	0·791	82·5	20·9	+ 9·6	4	58	
		4110	0·801	81·6	20·0	+10·3	0	24	
		4110	0·802	80·4	19·9	+11·3	0	6	
		4110	0·810	83·8	19·1	+ 8·6	2	11	
		4110	0·811	83·1	19·0	+ 9·1	0	8	
		4110	0·816	81·2	18·5	+10·7	4	27	429*c*
		4110	0·826	84·5	17·5	+ 8·0	2	8	
		4110	0·826	80·3	17·5	+11·4	0	12	
		4110	0·849	78·3	15·0	+13·1	3	29	
		4110	0·860	80·3	13·8	+11·4	4	18	
		4110	0·869	82·3	12·7	+ 9·7	3	14	
		4110	0·873	81·4	12·3	+10·4	0	36	
		4112*a*	0·948	98·6	3·1	− 6·2	25	98	198*c*
		4112	0·950	99·3	2·8	− 6·9	0	10	
			0·938	73·5	3·1	+17·5			435
Aug. 3		Centre			(73·4)	(+6·0)	(212)	(1595)	(1479)
215·439	CL, FT		0·953	253·8	127·0	−13·4			793
			0·802	260·5	109·4	− 3·9			166
		4109	0·781	243·6	103·7	−16·1	0	6	120*c*
		4109	0·752	243·2	101·1	−15·4	2	8	
		4107*a*	0·477	237·4	81·0	− 9·3	52	319	
		4107	0·445	235·0	78·7	− 9·1	15	56	
		4107	0·431	231·8	77·1	− 9·7	1	5	
		4107	0·416	229·3	75·7	− 9·9	2	7	
		4107	0·379	227·5	73·5	− 9·0	0	4	
		4107	0·367	228·5	73·2	− 8·2	6	29	
		4107*b*	0·354	223·3	71·3	− 9·0	55	326	
		4106*a*	0·254	201·0	62·3	− 7·6	19	107	
		4111	0·248	139·6	47·9	− 4·8	0	2	
		4111	0·268	142·8	47·8	− 6·3	24	124	
		4111	0·283	140·1	46·6	− 6·5	2	46	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4111, August 2–10. A short compact wedge-shaped stream of spots, the point coming last, following Groups 4107 and 4106, and forming with them one superb straight stream. The group undergoes continual change; in particular it has greatly increased by August 6, but along a line inclined at a wide angle to the general axis of the three groups. *a*, *b* and *c* are the three principal spots.
Group 4112, August 2–14. A regular spot, *a*, usually with one or two small companions.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
215d·439	CL,FT	4111	0·288	136·1	45·6	− 5·9	0	4	
		4111	0·308	132·5	44·0	− 6·0	10	49	
		4110*a*	0·524	77·8	25·7	+11·6	18	89	
		4110	0·548	82·1	23·8	+ 9·5	0	6	
		4110	0·552	80·3	23·7	+10·4	7	32	
		4110*b*	0·557	77·0	23·5	+12·3	6	30	
		4110	0·565	82·7	22·7	+ 9·2	0	3	
		4110	0·573	83·2	22·1	+ 8·9	0	2	
		4110	0·579	81·5	21·7	+ 9·9	0	6	
		4110	0·585	79·9	21·3	+10·9	0	3	
		4110	0·585	83·3	21·2	+ 8·9	0	5	
		4110	0·595	78·2	20·7	+12·0	0	2	
		4110	0·598	82·3	20·3	+ 9·5	0	3	
		4110	0·606	82·4	19·7	+ 9·5	2	7	
		4110	0·610	79·5	19·6	+11·2	2	13	
		4110	0·624	78·6	18·6	+11·9	0	3	
		4110	0·633	80·3	17·8	+10·8	8	42	
		4110	0·634	82·8	17·7	+ 9·3	1	5	
		4110	0·636	81·5	17·6	+10·1	0	3	
		4110	0·645	82·5	16·9	+ 9·5	0	7	
		4110	0·646	84·1	16·8	+ 8·5	3	13	
		4110	0·649	81·2	16·6	+10·3	0	12	
		4110	0·667	80·1	15·2	+11·1	1	7	
		4110	0·672	77·2	15·0	+13·1	8	45	
		4110	0·672	81·6	14·8	+10·2	13	44	
		4110	0·677	74·8	14·8	+14·7	0	4	
		4110	0·682	79·0	14·1	+12·0	6	16	
		4110	0·689	80·4	13·6	+11·0	0	3	
		4110	0·699	81·7	12·6	+10·2	3	57	
		4110	0·701	80·2	12·5	+11·2	1	15	
		4113	0·800	113·1	7·9	−14·3	0	3	
		4113*a*	0·807	114·2	7·5	−15·4	3	13	131*c*
		4113	0·823	114·2	6·0	−15·9	0	7	
		4113	0·819	112·3	5·8	−14·3	0	5	
		4112*a*	0·824	101·6	3·1	− 5·9	24	105	64*c*
		4114*a*	0·972	74·1	339·8	+16·8	31	208	
		4114	0·974	72·4	339·0	+18·6	0	63	504*c*
		4114	0·992	72·7	333·0	+17·9	0	44	
			0·810	73·2	3·1	+17·2			730
			0·880	105·3	357·7	−10·3			55
			0·925	111·4	356·3	− 9·8			143
			0·906	82·7	351·8	+ 9·2			141
			0·919	68·5	350·0	+22·1			290
Aug. 4		Centre			(57·1)	(+6·1)	(325)	(2017)	(3137)

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
216d·263	AW,FT		0·987	253·4	124·5	−15·2			300
			0·897	262·9	109·0	− 3·7			259
I.			0·871	287·2	106·9	+18·0			228
			0·893	248·2	105·6	−16·3			149
			0·881	234·1	99·5	−27·5			153
		4107	0·640	244·8	82·1	−10·8	0	3	
		4107*a*	0·617	246·2	80·8	− 9·3	63	297	
		4107	0·601	243·8	79·2	−10·2	0	8	
		4107	0·593	244·8	78·9	− 9·4	11	47	
		4107	0·581	244·4	78·0	− 9·3	2	8	
		4107	0·558	241·2	75·8	−10·2	0	3	
		4107	0·517	241·3	73·3	− 8·8	0	3	
		4107	0·505	243·5	73·1	− 7·5	0	10	
		4107	0·516	240·4	73·0	− 9·2	0	5	
		4107	0·506	241·1	72·6	− 8·6	1	3	
		4107	0·484	242·6	71·7	− 7·3	0	1	
		4107	0·488	240·4	71·4	− 8·4	17	63	
		4107*b*	0·488	237·4	70·6	− 9·6	60	237	
		4107	0·472	240·9	70·6	− 7·6	0	3	
		4106*a*	0·367	229·0	62·3	− 7·9	22	102	
		4111	0·217	196·0	49·5	− 5·9	1	3	
		4111	0·204	192·7	48·7	− 5·2	26	105	
		4111	0·229	188·9	48·1	− 6·9	15	48	
		4111	0·210	185·1	47·2	− 5·8	8	32	
		4111	0·210	180·0	46·1	− 5·9	1	17	
		4111	0·194	179·5	46·0	− 5·0	0	4	
		4111	0·215	171·2	44·2	− 6·0	4	15	
		4111	0·233	168·9	43·5	− 7·0	0	4	
		4111	0·216	167·7	43·5	− 6·0	0	3	
		4110*a*	0·336	71·3	27·2	+12·1	40	126	
		4110	0·333	74·5	27·1	+11·0	2	7	
		4110	0·361	80·2	25·1	+ 9·3	2	8	
		4110	0·374	70·5	25·0	+13·0	1	16	
		4110	0·367	77·8	24·8	+10·3	0	3	
		4110	0·384	71·7	24·3	+12·7	0	3	
		4110	0·374	80·2	24·3	+ 9·4	0	2	
		4110	0·387	84·1	23·3	+ 7·9	0	4	
		4110*b*	0·399	74·2	23·1	+12·0	7	18	
		4110	0·394	81·6	23·0	+ 9·0	2	9	
		4110	0·420	75·8	21·7	+11·6	0	6	
		4110	0·440	80·7	20·1	+ 9·6	0	30	
		4110	0·445	77·7	19·9	+11·0	1	11	
		4110	0·457	78·0	19·1	+11·0	2	8	
		4110	0·468	75·9	18·4	+12·1	0	3	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4113, August 4–9. A few small unstable spots in a short stream. *a*, a small regular spot seen on August 4 and 5, and *b*, a similar spot seen after August 5, are the most stable members of the group.
Group 4114, August 4–16. A large regular spot, *a*, with a very variable accompaniment of small spots. Up to August 6 the companions lie mostly to the *n* of *a*. From August 7 to 11 they principally constitute a straight stream *s* of *a*. On August 12 they form a ring *p a*, after which they rapidly diminish.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
216d·263	AW,FT	4110	0·470	81·6	18·1	+ 9·4	0	19	
I.		4110	0·474	78·6	18·0	+10·9	13	58	
		4110	0·482	82·6	17·3	+ 9·0	0	3	
		4110	0·483	83·9	17·2	+ 8·4	0	3	
		4110	0·487	79·7	17·1	+10·4	2	8	
		4110	0·501	79·7	16·1	+10·6	1	21	
		4110	0·517	78·3	15·1	+11·4	4	17	
		4110	0·523	74·6	15·0	+13·3	8	43	
		4110	0·526	80·4	14·4	+10·3	16	68	
		4110	0·548	75·0	13·3	+13·4	0	2	
		4110	0·552	79·3	12·7	+11·1	0	6	
		4110	0·552	81·2	12·6	+10·0	0	22	
		4113*a*	0·684	120·7	8·6	−15·5	5	18	80*f*
		4115	0·641	106·4	8·1	− 5·5	0	6	
		4115	0·651	103·8	6·9	− 4·2	0	9	
		4112*a*	0·709	105·2	2·8	− 6·2	25	100	
		4114*a*	0·921	73·6	338·4	+17·5	49	289	1071*c*
		4114	0·957	73·3	332·1	+17·8	0	29	
			0·725	71·1	0·2	+18·0			295
			0·790	112·9	357·8	−13·8			114
			0·841	81·7	348·6	+10·3			176
			0·864	68·4	346·4	+21·8			455
Aug. 5		Centre			(46·1)	(+6·2)	(411)	(1999)	(3280)
217·603	AW,AR		0·943	288·7	99·7	+19·7			450
			0·950	251·5	97·3	−15·4			165
			0·945	240·9	93·7	−24·9			378
		4107*a*	0·811	253·6	80·3	− 9·4	51	347	
		4107	0·715	251·4	71·5	− 8·6	8	28	
		4107*b*	0·716	249·6	71·2	− 9·9	21	149	350*c*
		4107	0·700	250·2	70·1	− 9·1	0	39	
		4106*a*	0·602	247·7	62·5	− 8·1	12	95	
		4111	0·518	246·1	56·8	− 6·6	0	5	
		4111	0·509	243·3	55·6	− 7·7	0	8	
		4111	0·416	249·6	51·3	− 2·7	0	3	
		4111*a*	0·415	245·1	50·5	− 4·3	45	244	
		4111	0·405	238·8	48·7	− 6·3	3	35	
		4111	0·389	240·2	48·1	− 5·2	0	3	
		4111	0·379	242·3	48·0	− 4·3	0	2	
		4111	0·379	240·5	47·7	− 4·9	0	2	
		4111	0·383	235·3	46·8	− 6·7	0	10	
		4111*b*	0·375	236·8	46·7	− 5·9	10	66	
1895.				°	°	°			
217d·603	AW,AR	4111*c*	0·386	228·5	45·3	− 8·8	28	137	
		4111	0·347	236·4	45·2	− 5·1	0	2	
		4111	0·341	231·6	43·9	− 6·2	1	11	
		4111	0·346	229·2	43·6	− 7·1	0	3	
		4111	0·316	232·7	43·0	− 5·0	0	7	
		4110*a*	0·083	3·1	28·1	+11·0	82	431	
		4110	0·125	12·7	27·1	+13·2	1	5	
		4110	0·140	9·7	27·0	+14·1	0	2	
		4110*c*	0·115	23·8	25·7	+12·2	0	3	
		4110	0·107	27·6	25·6	+10·3	0	1	
		4110	0·092	36·5	25·2	+10·4	6	17	
		4110*d*	0·079	53·8	24·7	+ 8·9	15	56	
		4110	0·100	49·6	24·0	+ 9·9	2	7	
		4110*b*	0·124	39·0	23·8	+11·7	17	85	
		4110	0·099	73·6	22·9	+ 7·8	0	3	
		4110	0·110	64·1	22·7	+ 8·9	1	6	
		4110	0·115	63·0	22·5	+ 9·2	1	6	
		4110	0·156	48·3	21·6	+12·1	0	2	
		4110	0·148	53·0	21·5	+11·3	0	1	
		4110	0·133	65·4	21·4	+ 9·3	2	7	
		4110	0·166	54·0	20·5	+11·8	0	1	
		4110*e*	0·173	64·9	19·3	+10·3	37	390	
		4110	0·250	62·2	15·4	+12·7	5	18	
		4110	0·238	72·2	15·1	+10·2	8	63	
		4113	0·474	140·0	10·1	−15·4	1	6	
		4113	0·483	141·2	10·1	−16·2	4	17	
		4113	0·499	139·0	8·6	−16·2	1	8	
		4113*b*	0·533	135·8	5·7	−16·6	7	31	
		4113	0·522	133·4	5·4	−15·3	0	4	
		4115	0·377	119·9	9·3	− 5·0	1	6	
		4115	0·401	115·5	6·7	− 4·2	4	9	
		4112*a*	0·472	116·7	3·4	− 6·6	17	80	
		4114*a*	0·763	73·0	338·9	+16·9	30	168	
		4114	0·765	77·6	338·4	+13·5	1	14	
		4114	0·771	70·7	338·4	+18·8	7	74	
		4114	0·776	77·2	337·4	+13·8	0	8	
		4114	0·779	76·3	337·1	+14·6	1	10	
		4114	0·787	78·0	336·3	+13·3	3	14	837*c*
		4114	0·804	76·0	334·7	+15·0	1	5	
		4114	0·817	72·5	333·7	+17·9	0	4	
		4114	0·822	75·8	333·0	+15·2	0	5	
		4114	0·836	71·9	331·7	+18·6	0	11	
			0·940	74·7	317·7	+16·5			106
Aug. 6		Centre			(28·4)	(+6·2)	(434)	(2774)	(2286)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4115, August 5–8. A few very small unstable spots *p* Group 4112.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
218d.412	AW,CL		0·909	279·4	83·6	+11·1			423
			0·939	241·9	82·3	−23·7			158
			0·853	247·4	72·4	−15·5			145
			0·861	234·7	69·0	−25·9			122
		4107*a*	0·901	256·4	80·1	− 9·3	49	293	
		4107	0·828	254·8	71·5	− 8·8	2	24	814*c*
		4107*b*	0·828	253·4	71·3	−10·0	30	153	
		4106*a*	0·736	252·8	62·9	− 8·1	11	85	89*c*
		4111	0·614	257·5	54·5	− 2·6	1	5	
		4111*a*	0·585	255·4	52·2	− 3·3	24	117	
		4111	0·587	252·4	51·8	− 5·0	2	7	
		4111	0·574	254·1	51·3	− 3·8	1	6	
		4111	0·574	252·0	50·9	− 5·0	9	33	
		4111	0·566	250·2	50·0	− 5·7	0	6	
		4111	0·555	251·2	49·5	− 5·0	0	3	
		4111	0·554	248·7	48·9	− 6·2	0	3	192*c*
		4111	0·530	250·2	47·7	− 4·9	2	10	
		4111*b*	0·533	248·1	47·5	− 6·0	9	49	
		4111*c*	0·533	243·2	46·4	− 8·4	13	65	
		4111	0·518	243·9	45·7	− 7·6	0	1	
		4111	0·511	241·1	44·6	− 8·7	1	2	
		4111	0·486	246·3	44·2	− 5·6	0	2	
		4111	0·519	237·6	44·1	−10·4	0	3	
		4110	0·241	295·8	30·5	+12·2	0	3	
		4110*a*	0·199	294·0	28·4	+10·9	127	619	
		4110	0·195	309·3	26·7	+13·3	0	3	
		4110*c*	0·172	304·8	26·1	+11·9	3	12	
		4110*d*	0·141	287·4	25·6	+ 8·7	8	48	
		4110	0·126	290·7	24·6	+ 8·8	10	21	
		4110	0·129	298·9	24·4	+ 9·9	3	8	
		4110*b*	0·145	316·5	23·6	+12·3	41	147	
		4110	0·102	290·6	23·3	+ 8·4	0	4	
		4110	0·094	298·8	22·6	+ 8·9	0	2	
		4110	0·076	311·4	21·1	+ 9·2	2	20	
		4110*f*	0·090	331·3	20·3	+10·8	21	118	
		4110*g*	0·056	343·7	18·7	+ 9·4	7	70	
		4110	0·107	351·3	18·7	+12·4	0	3	
		4110*h*	0·082	352·1	18·5	+10·9	21	93	
		4110	0·081	9·3	17·0	+10·9	3	9	
		4110	0·097	13·6	16·5	+11·7	0	4	
		4110	0·083	23·4	15·9	+10·6	0	8	
		4110	0·101	22·8	15·5	+11·6	0	5	
		4110	0·114	20·2	15·5	+12·4	0	11	
		4110	0·074	35·2	15·3	+ 9·8	0	6	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
218d.412	AW,CL	4110	0·090	34·0	14·9	+10·6	1	10	
		4116	0·150	72·1	9·5	+ 8·9	0	5	
		4116	0·179	72·8	7·9	+ 9·2	0	2	
		4113	0·397	164·8	11·6	−16·2	0	6	
		4113	0·403	162·5	10·6	−16·3	3	15	
		4113	0·411	160·1	9·4	−16·5	1	15	
		4113	0·405	158·0	8·8	−15·8	0	6	
		4113	0·393	152·2	7·0	−14·1	1	4	
		4113	0·413	151·3	6·0	−15·0	0	7	
		4113	0·452	153·5	5·6	−17·6	0	2	
		4113*b*	0·437	152·0	5·5	−16·5	6	29	
		4115	0·234	144·5	10·0	− 4·7	0	2	
		4112*a*	0·329	132·2	3·7	− 6·6	15	75	
		4114	0·527	68·7	347·1	+16·5	0	3	
		4114	0·529	79·3	346·0	+11·0	0	5	
		4114	0·594	71·7	342·1	+15·9	1	8	
		4114	0·620	67·3	340·8	+18·9	0	4	
		4114	0·620	69·2	340·5	+17·7	0	2	
		4114	0·624	75·8	339·4	+13·8	0	32	
		4114*a*	0·640	70·6	338·8	+17·2	33	185	476*c*
		4114	0·652	67·7	338·3	+19·2	6	38	
		4114	0·651	75·2	337·4	+14·4	0	3	
		4114	0·664	75·5	336·4	+14·3	3	16	
		4114	0·678	74·9	335·4	+14·9	0	6	
		4114	0·720	70·4	332·4	+18·4	0	3	
			0·781	59·3	328·7	+27·7			125
			0·957	68·3	303·8	+22·5			249
Aug. 7		Centre			(17·8)	(+6·3)	(470)	(2564)	(2793)
219·388	AR,FT		0·913	240·4	64·8	−23·7			127
			0·807	253·3	56·3	− 9·5			336
			0·779	237·2	49·1	−20·4			192
		4107*a*	0·971	258·4	79·4	− 9·6	32	296	
		4107	0·943	256·7	73·5	−10·3	2	9	
		4107	0·942	257·1	73·4	− 9·9	0	5	509*c*
		4107	0·934	257·7	72·2	− 9·1	0	6	
		4107*b*	0·929	256·3	71·2	−10·2	31	159	
		4106*a*	0·864	256·5	62·8	− 8·3	16	77	52*c*
		4111*a*	0·760	259·2	53·2	− 4·0	14	125	
		4111	0·744	257·8	51·6	− 4·7	5	21	
		4111	0·737	256·2	50·7	− 5·8	0	2	136*c*
		4111*b*	0·707	254·9	48·1	− 6·0	7	37	
		4111*c*	0·705	251·2	47·2	− 8·5	10	32	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4116, August 7. Two very small faint spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
219d.388	AR, FT	4117	0·515	220·1	25·1	−17·2	0	4	
		4110*a*	0·404	281·2	28·6	+10·3	160	678	
		4110	0·391	289·7	27·0	+13·4	3	7	
		4110	0·360	274·8	26·0	+ 7·6	0	12	
		4110*b*	0·366	286·7	25·8	+11·9	8	79	
		4110	0·369	289·3	25·7	+12·9	0	2	
		4110*c*	0·350	276·9	25·4	+ 8·4	7	77	
		4110	0·346	280·0	25·0	+ 9·3	1	13	
		4110	0·340	274·8	24·8	+ 7·5	0	7	
		4110	0·352	289·4	24·7	+12·7	11	54	
		4110	0·344	284·4	24·6	+10·9	3	19	
		4110*d*	0·335	287·3	23·9	+11·7	18	89	
		4110	0·320	277·0	23·5	+ 8·2	0	3	
		4110	0·318	279·9	23·3	+ 9·1	12	46	
		4110	0·298	285·7	21·8	+10·7	1	8	
		4110	0·291	280·7	21·7	+ 9·1	0	6	
		4110	0·293	290·0	21·2	+11·8	0	2	
		4110	0·281	279·4	21·1	+ 8·6	3	25	
		4110	0·273	277·2	20·7	+ 8·1	1	5	
		4110	0·273	283·1	20·5	+ 9·6	0	3	
		4110*f*	0·275	287·6	20·3	+10·9	17	97	
		4110*g*	0·265	281·8	20·1	+ 9·2	8	44	
		4110	0·248	281·8	19·1	+ 9·0	0	10	
		4110	0·254	295·1	18·5	+12·3	0	2	
		4110	0·236	283·0	18·3	+ 9·2	4	12	
		4110*h*	0·240	290·1	18·1	+10·9	27	106	
		4110	0·222	284·0	17·4	+ 9·2	4	46	
		4110	0·224	299·0	16·4	+12·4	0	2	
		4110	0·219	296·8	16·4	+11·9	0	4	
		4110	0·205	293·1	15·9	+10·9	4	40	
		4110	0·188	291·3	15·1	+10·2	0	4	
		4110	0·184	296·4	14·5	−10·9	0	3	
		4113	0·398	193·3	10·4	−16·4	0	8	
		4113	0·405	190·8	9·4	−17·1	1	7	
		4113	0·365	183·1	6·1	−15·0	0	3	
		4113*b*	0·394	180·6	5·2	−16·8	5	21	
		4115	0·219	197·4	8·7	− 5·8	0	3	
		4112*a*	0·236	174·7	3·6	− 7·3	12	70	
		4114	0·403	69·3	342·1	+14·0	0	9	
		4114	0·428	69·6	340·6	+14·3	5	14	
		4114	0·475	60·2	339·1	+19·3	3	7	
		4114	0·451	71·3	338·9	+14·0	0	3	
		4114*a*	0·470	65·5	338·5	+16·9	35	167	
		4114	0·491	61·4	337·9	+19·2	0	11	
1895.				°	°	°			
219d.388	AR, FT	4114	0·485	63·8	337·8	+18·0	1	4	
		4114	0·486	70·1	336·8	+15·1	0	4	
		4114	0·490	72·2	336·3	+14·1	0	2	
		4114	0·536	70·3	333·4	+15·8	0	4	
		4114	0·549	70·4	332·5	+15·9	0	3	
			0·810	71·8	310·9	+18·4			62
			0·929	65·2	296·2	+25·4			267
Aug. 8		Centre			(4·9)	(+6·3)	(471)	(2618)	(1681)
220·425	CL, FT		0·923	256·1	56·4	−10·2			363
			0·847	243·7	44·0	−18·2			206
		4107*b*	0·991	258·9	71·9	−10·1	15	174	
		4106*a*	0·959	259·1	63·1	− 8·5	15	80	231*c*
		4111*a*	0·900	261·9	54·2	− 4·4	25	120	
		4111*b*	0·852	258·9	48·1	− 6·0	4	33	352*c*
		4111*c*	0·855	256·6	48·0	− 8·0	0	28	
		4111	0·840	258·4	46·7	− 6·1	0	9	
		4110*a*	0·600	278·4	28·0	+10·2	144	814	
		4110	0·594	274·8	27·7	+ 8·0	0	12	
		4110	0·577	282·8	26·1	+12·5	0	6	
		4110*b*	0·569	281·8	25·6	+12·0	7	35	
		4110*c*	0·564	275·0	25·5	+ 8·1	0	29	
		4110	0·568	283·8	25·4	+13·1	3	20	
		4110	0·554	277·1	24·8	+ 9·3	1	5	
		4110	0·552	283·6	24·3	+12·8	0	3	
		4110*d*	0·542	280·9	23·8	+11·3	11	58	
		4110	0·538	275·9	23·7	+ 8·6	4	18	
		4110	0·532	277·1	23·3	+ 9·2	2	7	
		4110	0·521	280·0	22·4	+10·7	2	8	
		4110	0·514	277·5	22·1	+ 9·3	5	16	
		4110	0·504	277·4	21·4	+ 9·2	0	5	
		4110	0·503	281·3	21·2	+11·2	0	11	
		4110	0·497	277·9	20·9	+ 9·5	0	13	
		4110	0·496	280·8	20·7	+10·9	2	6	
		4110	0·490	279·9	20·4	+10·4	1	5	
		4110	0·482	280·2	19·8	+10·5	4	9	
		4110	0·475	281·1	19·3	+10·9	0	4	
		4110*g*	0·468	278·1	19·0	+ 9·5	12	104	
		4110*h*	0·450	281·0	17·7	+10·7	30	123	
		4110	0·439	279·0	17·1	+ 9·7	5	22	
		4110	0·422	280·9	15·9	+10·4	11	39	
		4110	0·419	277·9	15·8	+ 9·1	2	7	
		4110	0·420	283·7	15·6	+11·5	0	13	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4117, August 8. A very small faint spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
220d·425	CL,FT	4110	0·410	283·6	15·0	+11·4	0	3	
		4110	0·406	281·4	14·9	+10·4	0	4	
		4113	0·494	217·3	9·3	−17·0	4	9	
		4113*b*	0·453	211·0	5·1	−16·6	0	4	
		4113	0·467	207·5	4·2	−18·1	2	10	
		4112*a*	0·323	222·3	3·7	− 7·5	12	69	
		4118	0·295	309·2	4·9	+17·0	0	2	
		4118	0·283	309·8	4·2	+16·6	0	3	
		4114	0·193	44·0	343·2	+14·3	0	9	
		4114	0·184	47·3	343·1	+13·5	0	2	
		4114	0·193	51·6	342·2	+13·2	0	3	
		4114	0·218	52·1	340·9	+14·0	12	34	
		4114	0·206	59·2	340·7	+12·3	0	3	
		4114	0·243	55·1	339·3	+14·3	13	58	
		4114*a*	0·283	50·0	338·1	+16·7	29	159	
		4114	0·254	61·0	338·0	+13·3	0	8	
		4114	0·275	60·3	336·9	+14·0	0	10	
		4114	0·371	55·3	332·5	+18·3	0	4	
		4114	0·357	64·8	331·7	+14·7	0	4	
		4114	0·380	58·6	331·3	+17·4	0	6	
		4119	0·422	44·0	332·5	+23·7	0	5	
			0·879	129·6	299·7	−30·1			87
			0·861	114·7	296·2	−17·5			118
			0·836	64·7	295·1	+24·6			242
Aug. 9		Centre			(351·1)	(+6·4)	(377)	(2245)	(1599)
221·474	AW,M		0·933	246·9	42·0	−18·8			185
			0·832	236·6	26·0	−23·0			94
		4111	0·979	263·9	54·6	− 4·6	18	116	580*s*
		4111	0·961	261·9	50·0	− 5·9	4	33	
		4110*a*	0·772	277·8	28·0	+10·2	131	707	
		4110*b*	0·747	279·6	25·7	+11·5	0	59	
		4110	0·731	279·9	24·3	+11·7	0	14	
		4110	0·724	275·6	23·8	+ 8·5	0	4	
		4110*d*	0·724	277·3	23·8	+ 9·8	10	124	
		4110	0·714	279·1	22·9	+11·1	3	12	
		4110	0·700	279·1	21·8	+11·0	2	9	790*c*
		4110	0·685	277·4	20·6	+ 9·8	2	33	
		4110	0·664	280·2	18·9	+11·6	0	7	
		4110*h*	0·641	278·3	17·2	+10·3	22	248	
		4110	0·634	275·5	16·7	+ 8·5	0	5	
		4110	0·620	280·9	15·5	+11·9	1	9	
		4110	0·610	279·0	14·8	+10·6	0	3	
		4112*a*	0·497	242·4	3·5	− 7·5	9	54	
1895.				°	°	°			
221d·474	AW,M	4118	0·490	294·8	4·9	+17·6	0	1	
		4118	0·439	300·2	0·7	+18·7	2	11	
		4118	0·430	299·5	0·3	+18·1	0	2	
		4118	0·408	302·4	358·4	+18·7	0	2	
		4114	0·143	325·6	341·9	+13·3	9	79	
		4114	0·118	326·2	341·0	+12·1	0	8	
		4114	0·167	337·2	341·0	+15·3	0	12	
		4114	0·141	334·6	340·8	+13·8	3	33	
		4114	0·193	341·6	340·8	+17·0	0	12	
		4114	0·149	340·2	340·2	+14·6	0	3	
		4114	0·216	348·2	339·9	+18·7	0	2	
		4114	0·117	342·2	339·3	+12·8	0	1	
		4114	0·140	345·2	339·3	+14·3	9	64	
		4114	0·100	345·3	338·7	+12·1	0	2	
		4114	0·104	350·3	338·2	+12·4	0	3	
		4114*a*	0·175	355·7	338·0	+16·6	34	156	
		4114	0·131	355·1	337·9	+14·0	0	3	
		4114	0·110	355·5	337·7	+12·8	4	11	
		4114	0·119	0·8	337·1	+13·3	4	13	
		4114	0·166	12·3	335·1	+15·8	0	3	
		4114	0·155	23·2	333·6	+14·7	0	4	
		4114	0·208	24·2	332·1	+17·4	0	5	
			0·786	121·3	291·9	−19·6			85
			0·916	123·8	278·4	−27·3			110
			0·924	108·4	272·7	−14·2			141
			0·952	61·2	264·3	+29·4			128
			0·973	80·5	259·9	+10·7			187
Aug. 10		Centre			(337·2)	(+6·5)	(267)	(1867)	(2300)
222·513	AW, FT		0·903	239·5	21·6	−23·8			175
			0·720	287·3	9·3	+17·0			257
			0·769	242·4	8·5	−16·2			179
		4110*a*	0·895	278·0	27·5	+10·2	136	715	
		4110	0·882	281·1	25·9	+12·9	0	2	
		4110	0·874	278·7	24·9	+10·8	0	13	
		4110*d*	0·867	277·6	24·0	+ 9·9	11	161	
		4110	0·861	276·6	23·3	+ 9·1	0	14	1172*c*
		4110	0·830	278·0	19·9	+10·3	0	2	
		4110	0·814	276·9	18·3	+ 9·5	2	29	
		4110*h*	0·804	278·4	17·3	+10·7	15	103	
		4110	0·799	276·5	16·8	+ 9·2	1	14	
		4110	0·797	277·3	16·6	+ 9·8	6	39	
		4112*a*	0·671	250·9	3·1	− 7·6	8	48	42*c*
		4118	0·671	291·1	4·8	+18·9	0	2	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4118, August 9–14. A pair of very small spots on August 9. A short stream has formed by August 10. The group has greatly increased by August 11, and consists of an irregular stream, of which the first and last spots, *a* and *b*, are the largest. *a* is a large composite spot. *b* is a pear-shaped spot, which has divided into two portions by August 12.
Group 4119, August 9. A very small spot *nf* Group 4114.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
222d·513	AW, FT	4118*a*	0·648	290·1	3·1	+18·0	21	103	
		4118	0·628	289·4	1·7	+17·3	0	1	
		4118	0·626	291·9	1·2	+18·7	1	4	
		4118	0·619	290·0	0·9	+17·5	1	9	
		4118	0·621	294·1	0·4	+20·0	0	3	
		4118	0·616	292·2	0·4	+18·7	0	7	
		4118	0·609	292·7	359·8	+18·9	0	1	
		4118	0·595	293·7	358·6	+19·3	0	1	
		4118	0·587	292·5	358·2	+18·4	2	5	
		4118	0·594	295·6	358·2	+20·3	5	14	
		4118	0·577	292·4	357·5	+18·2	3	9	
		4118	0·582	296·5	357·2	+20·6	0	2	
		4118*b*	0·574	295·3	356·8	+19·7	9	56	
		4118	0·575	297·3	356·5	+20·8	0	6	
		4114	0·367	290·9	344·1	+13·7	4	12	
		4114	0·356	291·8	343·3	+13·8	4	15	
		4114	0·345	291·3	342·7	+13·4	0	2	
		4114	0·339	292·7	342·2	+13·7	2	7	
		4114	0·349	298·8	342·0	+15·9	0	1	
		4114	0·330	290·6	341·9	+13·0	0	2	
		4114	0·343	299·8	341·5	+16·1	0	2	
		4114	0·320	293·6	341·0	+13·7	7	57	
		4114	0·330	299·9	340·7	+15·8	0	3	
		4114	0 340	308·1	339·8	+18·4	1	2	
		4114	0·287	294·9	338·9	+13·3	2	9	
		4114	0·292	298·2	338·8	+14·3	5	31	
		4114	0·272	288·4	338·7	+11·3	0	2	
		4114*a*	0·298	305·0	338·2	+16·2	31	149	
		4114	0·261	292·4	337·7	+12·1	1	5	
		4114	0·273	300·1	337·5	+14·3	3	12	
		4114	0·260	297·9	337·1	+13·4	4	12	
		4114	0·253	295·7	337·0	+12·7	3	9	
		4114	0·314	316·0	336·8	+19·4	0	3	
		4114	0·251	301·4	336·2	+13·9	0	1	
		4114	0·241	304·8	335·2	+14·4	0	2	
		4120*a*	0·874	109·7	265·8	−13·7	5	17	97*c*
		4120	0·899	108·6	262·5	−13·5	1	7	
			0·894	127·3	269·3	−29·0			110
			0·882	80·6	261·1	+11·4			155
			0·908	92·5	258·6	+ 0·6			81
			0·914	57·8	257·9	+32·0			141
			0·932	71·6	254·0	+19·5			366
			0·949	49·9	252·4	+40·0			131
Aug. 11		Centre			(323·5)	(+6·6)	(294)	(1725)	(2906)

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
223d·423	AW, FT		0·957	244·4	19·9	−22·1			160
			0·869	246·6	7·6	−16·6			231
			0·825	274·5	7·3	+ 7·4			171
		4110*a*	0·962	278·8	26·3	+10·3	136	790	
		4110	0·920	278·9	19·0	+10·8	3	16	1497*c*
		4110	0·911	277·3	17·6	+ 9·4	1	48	
		4110*h*	0·908	278·5	17·2	+10·5	26	125	
		4112*a*	0·801	255·3	2·7	− 7·6	10	30	52*c*
		4118*a*	0·805	287·6	5·1	+18·1	21	160	
		4118	0·782	286·6	2·9	+17·1	0	22	
		4118	0·776	287·8	2·3	+18·0	0	5	
		4118	0·760	288·8	0·7	+18·6	0	5	
		4118	0·753	288·1	0·1	+18·0	3	12	
		4118	0·747	289·7	359·4	+19·0	0	5	
		4118	0·742	291·3	358·7	+20·1	0	6	
		4118	0·736	290·2	358·3	+19·3	3	10	859*c*
		4118	0·731	289·1	358·0	+18·4	4	37	
		4118	0·733	292·3	357·8	+20·7	8	35	
		4118	0·726	288·0	357·7	+17·5	0	2	
		4118	0·716	292·3	356·3	+20·5	0	3	
		4118	0·712	291·5	356·1	+19·8	9	39	
		4118	0·714	293·4	356·0	+21·2	0	7	
		4118	0·708	290·6	355·9	+19·2	7	21	
		4114	0·560	283·3	345·3	+12·9	0	4	
		4114	0·547	285·6	344·2	+14·0	0	3	
		4114	0·537	286·7	343·5	+14·5	8	18	
		4114	0·531	285·2	343·2	+13·7	3	7	
		4114	0·527	289·1	342·5	+15·6	6	22	
		4114	0·511	285·3	341·8	+13·5	10	41	
		4114	0·499	283·7	341·1	+12·6	0	3	
		4114	0·506	290·9	340·8	+16·2	6	23	
		4114	0·494	285·4	340·7	+13·3	0	8	
		4114	0·484	285·6	340·0	+13·3	0	3	
		4114	0·489	290·6	339·8	+15·7	1	5	
		4114	0·481	287·3	339·6	+14·1	0	3	
		4114	0·481	288·8	339·5	+14·7	0	2	
		4114	0·473	284·8	339·3	+12·8	0	4	
		4114	0·472	288·0	339·0	+14·3	4	9	
		4114	0·485	298·4	338·2	+19·2	3	11	
		4114*a*	0·468	292·1	338·2	+16·0	27	134	
		4114	0·484	299·4	338·0	+19·7	0	2	
		4114	0·448	284·5	337·7	+12·4	0	2	
		4114	0·450	288·2	337·5	+14·0	0	1	
		4114	0·431	286·9	336·4	+13·2	1	3	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4120, August 11–14. A small regular spot, *a*, usually followed by one or two very small companions.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
223d.423	AW, FT	4120a	0.748	114.9	267.4	−13.6	8	21	
		4120	0.758	113.8	266.3	−13.2	0	3	74c
		4120	0.795	113.0	262.8	−13.8	0	3	
		4121	0.774	83.7	260.5	+ 9.1	4	17	134c
			0.828	136.4	269.3	−32.0			93
			0.837	55.8	257.0	+32.0			239
			0.839	71.3	254.4	+19.3			346
			0.947	130.8	250.3	−35.3			144
			0.903	57.8	247.7	+31.8			363
			0.949	65.4	239.0	+25.4			164
Aug. 12		Centre			(311.5)	(+6.6)	(312)	(1730)	(4527)
224.323	CL, FT		0.921	250.6	3.4	−14.9			215
		4110a	0.995	279.4	24.6	+10.0	0	318	
M.		4110	0.983	280.1	19.8	+11.1	0	55	
		4110h	0.971	279.3	16.5	+10.6	13	108	344c
		4112a	0.904	258.1	2.6	− 7.8	5	27	88c
		4118a	0.917	286.2	6.8	+17.5	38	203	
		4118	0.898	287.7	4.1	+18.9	0	5	
		4118	0.871	287.9	0.5	+18.9	3	13	
		4118	0.870	286.7	0.4	+17.8	0	8	
		4118	0.864	287.3	359.7	+18.3	2	10	
		4118	0.859	289.5	358.9	+20.1	0	5	316c
		4118	0.846	287.9	357.6	+18.7	5	30	
		4118	0.845	288.8	357.4	+19.5	3	22	
		4118	0.845	289.8	357.3	+20.3	0	6	
		4118	0.840	290.9	356.7	+21.2	0	12	
		4118	0.834	289.4	356.1	+19.8	2	16	
		4114	0.708	284.1	344.6	+14.7	2	18	
		4114	0.704	285.8	344.2	+15.9	1	6	
		4114	0.688	283.0	343.1	+13.8	3	15	
		4114	0.689	285.6	343.0	+15.6	0	10	
		4114	0.674	285.9	341.7	+15.6	5	21	
		4114	0.651	282.1	340.2	+13.0	0	12	
		4114	0.637	284.9	338.9	+14.6	0	5	
		4114	0.535	284.1	338.8	+14.1	1	6	
		4114	0.639	291.2	338.4	+18.6	0	3	
		4114a	0.630	286.8	338.2	+15.7	23	112	
		4120a	0.600	123.5	268.8	−13.6	3	10	
		4120	0.613	122.4	267.6	−13.5	0	3	
		4121	0.612	84.2	261.7	+ 8.8	0	6	
			0.950	67.7	226.8	+23.3			181
Aug. 13		Centre			(299.6)	(+6.7)	(109)	(1065)	(1144)
1895.				°	°	°			
225d.407	AW, FT		0.974	253.6	359.6	−14.3			113
			0.927	276.7	353.6	+ 8.7			229
			0.762	296.8	333.4	+24.6			157
		4112a	0.979	260.6	2.1	− 7.8	0	10	88c
		4118a	0.988	286.8	7.7	+17.6	39	224	
		4118	0.957	287.6	359.3	+18.7	14	66	1218c
		4118	0.941	288.1	356.3	+19.3	8	52	
		4118	0.941	290.1	356.3	+21.2	0	5	
		4114	0.863	283.4	345.3	+14.9	4	10	
		4114	0.855	282.8	344.4	+14.4	4	21	718c
		4114a	0.797	284.7	338.2	+15.7	29	134	
		4120a	0.434	143.5	269.8	−13.9	1	7	
		4122	0.917	83.9	218.3	+ 8.3	4	23	
		4122	0.918	83.9	218.2	+ 8.3	8	24	428c
		4122	0.957	84.3	211.7	+ 7.4	0	7	
		4123a	0.991	73.2	201.5	+17.5	45	485	284c
			0.897	65.9	221.3	+24.5			458
			0.967	111.8	213.7	−19.0			132
Aug. 14		Centre			(285.2)	(+6.7)	(156)	(1068)	(3825)
226.486	CL, AW		0.954	290.3	344.5	+21.3			215
			0.857	288.3	330.3	+19.2			147
M.		4114a	0.917	283.7	338.2	+15.2	20	75	540p
		4122	0.777	84.6	219.8	+ 8.4	4	15	
		4122	0.783	83.9	219.2	+ 8.9	9	21	239f
		4122	0.806	84.3	217.0	+ 8.5	0	7	
		4122	0.866	84.7	210.7	+ 8.0	0	11	
		4123a	0.942	73.4	199.7	+17.9	80	711	
		4123	0.980	72.2	195.3	+15.9	38	190	
		4123	0.973	74.0	193.3	+17.1	0	39	726c
		4123	0.973	72.9	193.2	+18.1	0	23	
Aug. 15		Centre			(271.0)	(+6.7)	(151)	(1092)	(1867)
227.215	CL, AW		0.942	294.7	332.5	+25.5			233
			0.908	287.7	327.1	+18.9			232
M.		4114a	0.971	284.3	338.5	+15.5	20	67	371s
		4122	0.660	85.1	219.8	+ 8.4	3	12	
		4122	0.665	83.8	219.4	+ 9.2	6	17	
		4122	0.673	84.6	218.8	+ 8.7	1	5	
		4122	0.676	85.0	218.6	+ 8.4	0	2	
		4122	0.676	83.5	218.6	+ 9.5	0	4	130c
		4122	0.678	84.4	218.4	+ 8.8	0	2	
		4122	0.687	84.1	217.7	+ 9.0	3	17	

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4121, August 12–13. A small spot.
Group 4122, August 14–24. A few small spots on August 14 and 15. The group increases rapidly on the succeeding days, and becomes a fine complex stream, which changes its shape continually. Two large composite spots, *a* and *b*, are the chief features of the group on August 17, but these break up at once. The group diminishes after August 19, especially in the following portion; two spots, *c* and *d*, fragments of *a*, alone showing much stability.
Group 4123, August 14–27. A number of spots in a fine stream. The two principal spots are *a*, the leader, a very large spot, and *b*, the last, a large spot. Both have become regular by August 22, by throwing off the extensions lying towards the centre of the group. *a* has divided, by August 25, into two parts, though it is still measured as one. A companion of considerable size has formed close to *b* by August 24, and is measured with it on August 25. The group diminishes in size after August 17, the smaller spots disappearing.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
227d·215	CL, AW	4122	0·713	85·1	215·6	+ 8·2	2	6	
		4122	0·717	84·1	215·3	+ 9·0	3	11	
M.		4124	0·865	118·4	207·2	−20·4	2	8	136*np*
		4123*a*	0·876	72·8	199·7	+18·4	81	594	
		4123	0·898	72·6	196·8	+18·6	0	5	
		4123	0·924	74·3	193·0	+17·1	0	25	459*c*
		4123	0·925	73·5	192·9	+17·8	0	8	
		4123*b*	0·938	73·1	190·7	+18·2	34	233	
Aug. 16		Centre			(261·3)	(+6·8)	(155)	(1016)	(1561)
228·403	AW, CL		0·945	286·0	317·5	+17·3			134
			0·931	276·4	314·8	+ 8·5			64
			0·886	245·8	303·6	−17·8			140
			0·842	296·7	302·3	+26·1			111
		4125	0·797	237·4	291·4	−20·7	7	20	
		4125	0·767	236·2	288·3	−20·3	3	22	92*c*
		4126	0·508	124·0	220·5	−10·3	3	10	
		4122*a*	0·440	83·9	219·5	+ 8·8	40	236	
		4122	0·464	82·0	218·0	+ 9·8	1	10	
		4122	0·466	84·0	217·9	+ 8·8	0	2	
		4122	0·467	86·3	217·8	+ 7·8	0	2	
		4122	0·482	85·6	216·8	+ 8·1	1	12	
		4122	0·486	83·8	216·5	+ 9·0	0	6	
		4122*b*	0·507	84·3	215·1	+ 8·8	24	108	
		4122	0·509	86·2	215·0	+ 7·8	2	9	
		4122	0·525	83·8	213·9	+ 9·1	0	2	
		4122	0·535	83·9	213·3	+ 9·0	1	8	
		4124	0·699	131·7	211·6	−22·0	1	3	
		4124	0·716	127·0	208·3	−20·1	0	3	86*c*
		4124	0·730	126·8	207·2	−20·6	0	5	
		4123*a*	0·726	70·2	199·7	+19·0	83	623	
		4123	0·743	67·7	198·5	+21·1	1	6	
		4123	0·765	72·0	196·0	+18·1	0	8	779*c*
		4123	0·773	71·5	195·2	+18·6	3	25	
		4123*b*	0·820	72·3	190·5	+18·4	29	235	
			0·932	107·8	179·9	−13·8			172
			0·951	75·4	172·8	+16·0			217
Aug. 17		Centre			(245·7)	(+6·8)	(199)	(1355)	(1795)
229·460	M, FT		0·914	293·9	298·2	+24·6			227
			0·894	251·0	291·9	−13·6			87
			0·893	242·6	289·4	−20·6			300

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
229d·460	M, FT		0·840	298·6	287·9	+27·7			149
		4126	0·335	150·8	222·2	−10·2	1	3	
		4122	0·204	83·5	219·9	+ 8·1	26	134	
		4122	0·210	76·7	219·8	+ 9·6	15	86	
		4122	0·230	80·7	218·5	+ 8·9	4	38	
		4122	0·252	81·2	217·2	+ 8·9	3	11	
		4122	0·265	83·0	216·3	+ 8·5	0	4	
		4122	0·270	85·6	216·0	+ 7·8	2	8	
		4122	0·292	82·3	214·7	+ 8·9	20	75	
		4122	0·291	85·5	213·9	+ 8·0	8	51	
		4122	0·313	82·5	213·5	+ 8·9	1	9	
		4122	0·331	82·5	212·4	+ 9·0	0	2	
		4127	0·452	128·0	210·6	− 9·7	1	5	
		4123	0·517	64·4	202·3	+18·9	0	2	
		4123*a*	0·555	64·3	199·7	+19·8	107	524	
		4123	0·562	68·2	198·6	+17·8	5	37	
		4123	0·578	67·8	197·5	+18·3	0	6	
		4123	0·606	66·9	195·7	+19·3	0	5	
		4123	0·619	68·1	194·5	+18·9	1	9	
		4123	0·623	70·7	193·8	+17·4	0	5	
		4123	0·632	67·6	193·6	+19·3	0	5	
		4123	0·640	68·5	192·8	+19·0	0	8	
		4123*b*	0·669	70·4	190·3	+18·2	36	218	
			0·810	74·5	177·4	+16·6			182
			0·904	111·3	170·8	−15·9			326
			0·911	104·6	168·3	−10·3			260
			0·913	74·1	165·1	+17·3			312
			0·943	94·6	161·8	− 2·0			138
Aug. 18		Centre			(231·7)	(+6·9)	(230)	(1245)	(1981)
230·387	AR, AW		0·935	295·1	289·4	+25·9			154
			0·933	250·9	286·2	−15·0			231
			0·814	246·8	269·9	−14·3			234
		4128	0·316	334·6	227·9	+23·3	0	4	
		4122	0·047	346·9	220·1	+ 9·5	17	89	
		4122	0·024	337·9	220·0	+ 8·2	14	93	
		4122	0·038	31·8	218·3	+ 8·8	26	171	
		4122	0·064	37·4	217·2	+ 9·8	1	4	
		4122	0·075	37·9	216·8	+10·3	1	6	
		4122	0·073	54·7	216·1	+ 9·3	1	8	
		4122	0·069	74·1	215·7	+ 8·0	12	67	
		4122	0·087	69·1	214·8	+ 8·7	21	68	
		4122	0·099	82·7	213·8	+ 7·6	11	50	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4124, August 16–17. A very small spot on August 16. Two very small companions precede it on August 17.
Group 4125, August 17. A pair of small spots.
Group 4126, August 17–18. A small spot.
Group 4127, August 18. A very small spot.
Group 4128, August 19. A very small spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
230d·387	AR, AW	4122	0·105	73·0	213·7	+ 8·6	2	12	
		4122	0·115	67·0	213·4	+ 9·4	0	1	
		4122	0·121	78·2	212·7	+ 8·2	0	6	
		4122	0·150	80·8	210·9	+ 8·2	0	3	
		4122	0·200	63·9	209·0	+11·9	0	2	
		4123	0·406	49·4	200·2	+21·8	0	2	
		4123*a*	0·392	53·6	200·0	+20·0	86	579	
		4123	0·392	60·4	198·6	+17·6	2	16	
		4123	0·412	59·8	197·6	+18·4	0	5	
		4123	0·445	56·1	196·3	+20·7	0	4	
		4123	0·443	63·0	195·1	+17·9	0	6	
		4123	0·439	65·1	195·0	+16·9	0	1	
		4123	0·443	66·6	194·5	+16·4	0	2	
		4123	0·465	61·0	194·1	+19·3	3	19	
		4123	0·480	59·0	193·6	+20·5	0	2	
		4123	0·493	67·0	191·3	+17·2	0	5	
		4123*b*	0·513	65·6	190·2	+18·3	35	190	
		4123	0·510	67·9	190·0	+17·1	2	5	
			0·778	72·9	168·3	+17·8			75
			0·902	77·0	154·5	+14·7			163
			0·929	109·8	154·6	−15·5			464
Aug. 19		Centre			(219·5)	(+6·9)	(234)	(1420)	(1321)
231·487	AW, FT		0·936	252·0	271·4	−14·1			219
			0·934	234·6	265·9	−29·6			122
			0·864	283·0	265·3	+14·7			390
		4122*c*	0·271	281·7	220·6	+ 9·8	7	74	
		4122*d*	0·245	278·4	219·1	+ 8·8	27	184	
		4122	0·233	285·5	218·1	+10·3	0	4	
		4122	0·223	288·5	217·4	+10·8	1	4	
		4122	0·219	281·7	217·5	+ 9·3	1	4	
		4122	0·197	279·0	216·3	+ 8·5	6	41	
		4122	0·175	279·1	215·0	+ 8·4	8	51	
		4122	0·163	272·5	214·4	+ 7·3	5	40	
		4122	0·157	277·8	214·0	+ 8·1	3	9	
		4123*a*	0·246	18·8	200·2	+20·3	81	478	
		4123	0·249	30·1	197·4	+19·2	2	21	
		4123	0·261	34·1	196·1	+19·3	0	2	
		4123	0·268	36·6	195·3	+19·2	0	2	
		4123	0·270	39·8	194·5	+18·7	1	3	
		4123	0·300	52·8	190·6	+17·1	0	16	
		4123*b*	0·316	49·9	190·3	+18·4	38	137	
			0·786	76·7	152·9	+14·7			104
1895.				°	°	°			
231d·487	AW, FT		0·861	114·7	150·3	−17·1			416
			0·946	105·0	136·3	−11·8			450
			0·945	75·6	133·2	+15·9			149
Aug. 20		Centre			(205·0)	(+6·9)	(180)	(1070)	(1850)
232·382	M, AR		0·856	289·8	252·2	+20·5			560
			0·851	309·0	248·2	+36·5			167
			0·874	225·6	241·1	−33·1			59
		4122*c*	0·463	278·0	220·7	+ 9·9	13	94	
		4122*d*	0·441	275·7	219·3	+ 8·8	29	142	
		4122	0·436	279·2	218·9	+10·3	0	23	
		4122	0·414	276·3	217·6	+ 9·0	0	17	
		4122	0·389	275·0	216·1	+ 8·4	0	11	
		4122	0·367	273·9	214·7	+ 8·0	9	113	
		4123*a*	0·275	328·6	201·9	+20·4	72	306	
		4123	0·225	323·7	201·1	+17·4	0	7	
		4123	0·258	334·0	200·0	+20·3	0	9	
		4123	0·220	328·8	199·9	+17·8	0	4	
		4123	0·258	337·1	199·2	+20·7	17	88	
		4123	0·205	337·8	197·7	+17·9	0	5	
		4123	0·161	342·9	195·9	+15·8	0	4	
		4123	0·215	348·3	195·7	+19·1	0	6	
		4123	0·203	351·5	194·9	+18·5	0	25	
		4123	0·183	4·3	192·3	+17·5	0	3	
		4123	0·174	11·7	191·0	+16·8	0	8	
		4123	0·231	11·2	190·4	+20·1	0	3	
		4123*b*	0·201	13·6	190·3	+18·2	23	169	
			0·759	120·8	150·1	−17·8			445
			0·879	108·5	134·7	−12·6			605
			0·971	96·2	117·3	− 5·8			85
Aug. 21		Centre			(193·1)	(−7·0)	(163)	(1037)	(1921)
233·508	AW, CL		0·941	288·9	249·5	+20·1			288
			0·940	304·7	248·5	+34·9			105
			0·848	335·7	216·9	+56·1			88
		4122*c*	0·672	276·7	220·8	+ 9·8	16	62	
		4122*d*	0·653	275·2	219·3	+ 8·8	20	108	
		4122	0·648	277·1	218·9	+ 9·9	0	14	
		4122	0·617	274·4	216·6	+ 8·2	0	3	
		4122	0·597	273·9	215·1	+ 8·0	0	4	
		4122	0·588	272·6	214·4	+ 7·2	3	9	
		4123*a*	0·450	301·9	202·2	+20·1	66	298	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
33d.508	AW, CL	4123	0·430	304·7	200·4	+20·6	3	16	
		4123	0·416	304·5	199·6	+20·1	0	3	
		4123	0·413	308·8	198·4	+21·5	0	3	
		4123	0·374	311·8	195·6	+21·1	1	7	
		4123	0·364	315·5	194·2	+21·8	0	2	
		4123	0·362	319·2	193·1	+22·7	0	7	
		4123	0·318	314·7	192·1	+19·7	1	2	
		4123	0·286	313·4	190·9	+18·1	4	11	
		4123*b*	0·268	313·7	190·0	+17·5	21	97	
			0·916	97·2	112·9	− 3·7			122
			0·943	75·8	106·9	+15·7			385
			0·953	85·7	105·6	+ 6·2			119
			0·963	65·9	102·6	+25·0			85
ug. 22		Centre			(178·3)	(+7·0)	(135)	(646)	(1192)
34·416	AW, AR		0·949	295·4	238·9	+26·2			211
			0·905	314·2	228·1	+42·7			315
			0·869	255·7	224·5	− 8·7			52
			0·833	295·6	222·2	+25·2			281
			0·916	217·5	214·9	−42·1			90
			0·745	305·7	210·9	+30·9			124
		4122*c*	0·811	277·0	220·9	+ 9·9	8	59	
		4122*d*	0·798	276·1	219·6	+ 9·2	7	101	484*c*
		4122	0·779	277·5	217·8	+10·3	2	18	
		4129	0·772	233·4	208·1	−22·1	1	5	230*np*
		4123	0·624	291·7	204·0	+19·0	0	6	
		4123*a*	0·614	294·2	202·8	+20·3	68	320	
		4123	0·543	295·1	197·6	+19·4	0	4	91*c*
		4123	0·518	294·8	195·9	+18·7	0	21	
		4123	0·465	299·7	191·6	+19·8	2	19	
		4123	0·445	297·8	190·7	+18·4	0	4	
		4123	0·440	295·9	190·7	+17·5	0	5	
		4123	0·425	294·8	190·0	+16·8	0	6	78*c*
		4123	0·438	300·5	189·8	+19·3	0	5	
		4123*b*	0·427	297·5	189·6	+17·9	14	66	
		4130*a*	0·536	240·0	194·2	− 9·2	1	2	
		4130*b*	0·521	237·0	192·5	−10·1	0	2	55*c*
		4131	0·442	162·5	158·3	−17·8	0	10	
		4131	0·427	157·1	156·4	−16·1	0	8	
		4132	0·526	118·8	138·6	− 8·4	1	7	
			0·939	151·0	120·8	−50·4			119
			0·777	102·4	116·9	− 5·0			57

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
234d.416	AW, AR		0·888	112·8	107·9	−16·5			357
			0·879	73·4	104·2	+18·0			162
Aug. 23					(166·3)	(+7·1)	(104)	(668)	(2706)
235·401	CL, AR		0·922	258·5	218·7	− 7·7			80
			0·894	298·5	216·4	+28·6			389
			0·890	294·7	216·3	+25·2			405
			0·888	267·3	215·5	+ 0·9			67
			0·905	247·3	213·8	−17·1			157
			0·769	309·8	198·8	+34·5			89
		4122*d*	0·920	276·9	220·6	+ 9·2	13	92	
		4122*c*	0·914	278·3	219·8	+10·5	0	18	1075*c*
		4122	0·880	274·9	215·2	+ 7·7	0	9	
		4129	0·891	241·2	210·1	−21·6	9	34	
		4129	0·892	239·5	209·7	−23·1	7	49	
		4129	0·882	237·3	207·6	−24·4	9	31	512*c*
		4129	0·875	236·5	206·5	−24·7	0	10	
		4129	0·867	238·6	206·3	−22·7	8	35	
		4123*a*	0·767	290·3	203·0	+20·1	55	325	238*c*
		4123	0·661	292·3	193·6	+20·0	6	17	
		4123	0·647	289·6	192·9	+18·0	0	6	
		4123	0·645	291·3	192·5	+19·1	0	6	
		4123	0·630	293·0	191·1	+19·8	0	7	70*c*
		4123*b*	0·614	291·8	190·1	+18·9	14	82	
		4123*b*	0·605	289·8	189·7	+17·6	14	56	
		4130*a*	0·711	248·2	195·1	−10·0	2	17	
		4130*b*	0·684	247·6	193·0	− 9·7	0	5	
		4133*a*	0·969	101·1	79·2	− 8·9	19	126	319*nf*
			0·827	74·6	97·1	+16·7			124
			0·877	113·8	96·4	−16·9			161
			0·908	124·2	96·0	−27·0			86
Aug. 24		Centre			(153·2)	(+7·1)	(156)	(925)	(3772)
236·511	AW, FT		0·962	277·2	213·4	+ 8·9			496
			0·942	300·1	209·7	+30·7			282
			0·895	243·8	196·9	−19·6			104
			0·648	241·8	174·2	−12·1			122
		4129	0·975	245·3	211·4	−22·1	9	37	
		4129	0·974	246·3	211·3	−21·1	6	25	
		4129	0·963	241·4	207·3	−25·0	8	45	594*c*
		4129	0·953	243·5	205·8	−22·5	0	10	
		4129	0·951	242·2	205·1	−23·7	3	28	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4129, August 23–25. A very small spot on August 23. The group has greatly increased in size by August 24, and has become a large number of spots in an irregular stream.

Group 4130, August 23–25. A pair of very small spots, *a* and *b*, on August 23. *a* has increased by August 24, but diminished again by August 25. *b* has disappeared by August 25.

Group 4131, August 23. A pair of small spots.

Group 4132, August 23. A very small spot.

Group 4133, August 24–September 4. A regular spot, *a*. It throws off a small fragment on August 28. Two very small companions are seen near it on August 30, and a number on September 1. After this date the group rapidly diminishes in size.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
236d.511	AW, FT	4123*a*	0·900	288·9	203·4	+20·1	61	326	
		4123	0·819	288·9	193·7	+19·5	0	8	
		4123	0·809	289·1	192·6	+19·6	0	7	1174*c*
		4123	0·806	288·1	192·4	+18·8	0	10	
		4123	0·796	286·7	191·5	+17·5	0	14	
		4123*b*	0·776	287·5	189·5	+18·0	16	96	
		4130*a*	0·859	253·7	195·3	−10·1	0	4	119*c*
		4134	0·456	155·2	127·1	−17·4	1	6	
		4134	0·457	152·4	125·9	−16·0	0	5	
		4134	0·476	144·2	121·8	−15·9	0	2	
		4134	0·487	143·0	120·9	−16·0	1	6	
		4134*a*	0·508	141·7	119·5	−16·7	8	19	
		4133*a*	0·880	104·1	79·1	− 8·8	31	130	454*f*
		4135*a*	0·987	96·6	58·8	− 5·4	14	53	259*s*
		4135	0·994	96·9	56·0	− 6·0	0	9	
			0·827	126·9	91·9	−25·0			198
			0·820	118·4	89·3	−18·4			117
			0·819	78·0	83·2	+13·9			77
			0·920	123·8	79·5	−27·3			59
Aug. 25		Centre			(138·6)	(+7·1)	(158)	(840)	(4055)
237·213	AW, CL		0·931	255·2	195·6	−11·0			153
		4123*a*	0·962	288·5	204·8	+19·7	28	296	690*c*
I.		4123*b*	0·866	286·3	189·8	+17·7	9	57	
		4136*a*	0·458	230·8	150·4	−10·2	3	13	
		4136	0·414	227·2	147·2	− 9·5	0	4	
		4136	0·404	226·2	146·4	− 9·4	1	6	
		4134	0·416	162·8	122·0	−16·3	0	1	
		4134	0·433	161·2	120·9	−17·1	0	5	
		4134*a*	0·443	158·0	119·3	−17·2	0	5	
		4133*a*	0·799	106·7	78·7	− 8·8	25	131	467*8f*
		4135*a*	0·951	97·9	58·4	− 5·2	7	43	303*c*
Aug. 26		Centre			(129·3)	(+7·1)	(73)	(561)	(1613)
238·490	M,AR		0·979	286·3	192·0	+17·4			1700
			0·916	246·5	174·3	−18·1			315
			0·744	238·1	153·8	−17·8			225
		4123*b*	0·966	286·5	188·7	+17·8	0	6	
		4136*a*	0·663	245·5	150·1	−10·3	4	21	
		4136	0·645	244·5	148·5	−10·3	0	12	82*c*
		4136	0·625	245·6	147·5	− 9·1	0	3	
		4133*a*	0·604	114·7	78·8	− 8·6	20	118	39*c*
1895.				°	°	°			
238d.490	M,AR	4135*a*	0·813	101·7	59·5	− 5·2	4	25	262*sp*
		4137	0·898	94·9	49·1	− 1·2	2	12	222*c*
		4138	0·921	104·3	47·6	−10·2	0	9	508*p*
		4139*a*	0·996	79·6	26·4	+11·0	154	695	390*c*
			0·908	125·6	55·8	−28·1			221
			0·900	57·8	48·7	+32·0			87
			0·936	114·8	47·8	−20·1			201
			0·931	71·5	42·9	+19·8			96
Aug. 27		Centre			(112·4)	(+7·2)	(184)	(901)	(4348)
239·383	AW, FT		0·931	250·0	165·7	−15·6			99
			0·900	287·4	165·5	+18·8			94
			0·840	243·8	152·6	−17·4			342
		4136	0·813	249·7	151·6	−11·9	0	4	
		4136*a*	0·792	251·2	150·0	−10·2	0	3	106*n*
		4136	0·776	250·3	148·4	−10·4	0	3	
		4136	0·771	251·0	148·1	− 9·7	0	2	
		4140	0·232	304·2	112·0	+14·6	0	1	
		4140	0·164	303·5	108·6	+12·3	0	2	
		4140	0·136	291·7	107·9	+10·0	0	3	
		4133*a*	0·446	125·8	79·2	− 8·4	16	99	
		4133	0·459	126·9	78·9	− 9·2	5	14	58*c*
		4135*a*	0·678	106·0	59·9	− 5·4	2	6	
		4135	0·697	108·0	58·9	− 7·1	0	2	
		4137	0·775	97·8	50·6	− 1·4	0	2	52*f*
		4138*a*	0·773	107·2	53·9	− 8·4	10	68	
		4138	0·781	106·9	51·7	− 8·4	5	9	
		4138	0·788	108·7	51·5	− 9·9	0	2	254*f*
		4138	0·807	108·7	49·8	−10·5	4	18	
		4138*b*	0·822	110·7	48·8	−12·5	8	27	
		4139*a*	0·953	80·8	27·5	+11·0	153	712	453*c*
			0·862	117·5	46·7	−19·3			91
			0·892	102·1	39·3	− 7·4			250
Aug. 28		Centre			(100·6)	(+7·2)	(203)	(977)	(1799)
240·382	M,AR		0·942	283·5	158·7	−15·1			61
			0·936	246·7	152·5	−18·8			409
			0·908	255·3	150·3	−10·1			272
			0·787	245·4	134·8	−14·3			301
		4141	0·517	216·8	106·3	−17·6	0	9	
		4142	0·402	204·1	97·1	−14·4	0	3	
		4133*a*	0·303	152·6	79·3	− 8·4	16	105	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4134, August 25–26. A few spots, mostly very small, in a straggling stream. The last spot, *a*, is the largest.
Group 4135, August 25–29. A regular spot, *a*, which rapidly diminishes in size. A very small companion is seen near it on August 25 and 28.
Group 4136, August 26–28. A few small spots, of which *a* is the leader, in a short stream.
Group 4137, August 27–28. A small spot *nf* Group 4135.
Group 4138, August 27–September 6. A small faint spot on August 27. The group has greatly increased in size by the succeeding day, and has become a short broad irregular stream. The two principal spots, *a* and *b*, are stable, but show large proper motion. The other members of the group are mostly unstable, and the group changes in its general appearance, but always remains with its principal axis inclined at a wide angle to the equator. *a* alone remains by September 5.
Group 4139, August 27–September 9. A very large regular spot, *a*. Several small companions are usually seen near it.
Group 4140, August 28. Three very small faint spots.
Group 4141, August 29–30. A small faint spot.
Group 4142, August 29. A very small faint spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
240d·382	M,AR	4133	0·324	152·4	78·7	− 9·5	1	4	
		4133	0·323	149·6	77·9	− 9·0	0	4	
		4143	0·498	54·3	61·4	+23·3	0	4	
		4135*a*	0·499	114·4	60·4	− 5·5	0	4	
		4138*a*	0·607	115·1	53·7	− 8·9	29	148	
		4138	0·626	113·6	52·1	− 8·6	4	23	135*c*
		4138	0·636	115·7	51·9	−10·2	0	7	
		4138*b*	0·666	118·0	50·5	−12·4	12	63	
		4139*a*	0·860	81·6	27·6	+10·9	152	798	1930*nf*
			0·770	99·8	38·1	− 2·9			138
			0·953	118·6	20·8	−24·4			237
Aug. 29		Centre			(87·4)	(+7·2)	(214)	(1172)	(3483)
241·380	M,AR		0·916	253·1	137·9	−12·3	0	17	630
		4144	0·897	238·6	131·1	−24·0	0	7	81*f*
		4145	0·796	243·1	121·8	−16·3	0	8	98*p*
		4145	0·762	244·9	119·4	−13·8	0	3	40*c*
		4141	0·626	229·4	104·1	−17·8	0	3	32*c*
		4146	0·370	211·4	85·6	−11·3	0	5	
		4146	0·343	212·8	85·1	− 9·6	0	2	
		4146	0·341	208·5	83·8	−10·3	16	77	
		4133*a*	0·279	198·0	79·3	− 8·2	0	2	
		4147	0·241	340·8	79·1	+20·3	0	4	
		4147	0·232	342·8	78·5	+20·0	23	137	
		4138*a*	0·427	129·9	55·0	− 9·1	4	43	
		4138	0·455	126·7	52·7	− 9·1	9	34	
		4138*b*	0·492	130·7	52·0	−12·0	1	10	
		4138	0·507	129·4	50·8	−12·1	0	7	
		4138	0·480	123·6	50·5	− 8·8	0	5	
		4148	0·550	126·6	47·5	−12·7	0	10	
		4148	0·564	126·1	46·5	−13·0	0	6	
		4148	0·587	124·2	44·5	−13·0	147	717	
		4139*a*	0·726	81·5	27·5	+11·1	0	6	211*c*
		4139	0·755	78·1	25·0	+13·7			
			0·672	99·0	32·9	− 0·7			63
			0·885	126·1	21·0	−27·2			243
			0·909	73·3	8·1	+18·2			2322
			0·945	101·1	5·1	− 8·0			319
Aug. 30		Centre			(74·3)	(+7·2)	(200)	(1103)	(4039)
242·388	AW, CL		0·977	256·8	136·7	−11·2			84
			0·952	289·5	134·5	+20·8			62
1895.				°	°	°			
242d·388	AW, CL		0·933	249·5	126·3	−16·2			143
			0·882	259·3	121·4	− 5·9			137
		4145	0·857	245·3	115·2	−16·8	0	6	127*c*
		4149	0·752	273·4	110·0	+ 7·3	0	6	
		4149	0·735	275·6	108·6	+ 9·0	0	4	
		4149	0·711	275·0	106·6	+ 8·6	1	5	
		4149	0·710	275·6	106·5	+ 9·1	3	7	
		4149	0·686	273·7	104·5	+ 7·8	0	7	
		4133	0·420	229·3	79·7	− 9·1	0	2	
		4133*a*	0·408	230·3	79·4	− 8·2	13	71	
		4133	0·417	218·9	76·5	−12·0	0	3	
		4138*a*	0·302	162·0	55·6	− 9·5	23	117	
		4138	0·302	157·9	54·4	− 9·1	0	2	
		4138	0·313	157·2	54·0	− 9·6	0	4	
		4138*b*	0·359	157·7	53·0	−12·2	6	19	
		4138	0·320	154·2	52·9	− 9·6	2	8	
		4138	0·390	158·1	52·4	−14·0	0	1	
		4138	0·282	146·7	52·1	− 6·5	0	4	
		4138	0·359	154·4	51·9	−11·7	0	2	
		4138	0·308	148·9	51·8	− 8·2	2	7	
		4138	0·324	148·8	51·3	− 8·9	0	2	
		4138	0·417	156·3	51·0	−15·3	0	1	
		4150	0·403	123·6	41·4	− 6·0	1	2	
		4150	0·392	120·2	41·2	− 4·6	0	3	
		4150	0·428	122·0	39·7	− 6·4	0	2	
		4150	0·417	118·5	39·5	− 4·8	0	3	
		4139*a*	0·553	80·9	27·3	+11·0	144	700	
		4139	0·588	76·3	25·1	+13·9	1	4	
		4139	0·588	82·6	24·8	+10·2	0	2	
			0·695	97·2	17·6	+ 0·3			47
			0·751	65·6	13·2	+23·0			86
			0·843	101·1	5·0	− 5·4			120
			0·888	68·0	358·0	+22·8			496
			0·899	72·8	356·3	+18·6			247
			0·953	76·9	347·6	+14·7			288
Aug. 31		Centre			(61·0)	(+7·2)	(196)	(994)	(1837)
243·438	M,AR		0·922	262·2	113·2	− 4·3			180
			0·895	245·2	105·8	−18·4			219
			0·850	282·9	105·8	+14·7			353
			0·831	229·8	92·6	−27·5			121
			0·844	359·2	48·7	+64·6			58

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4143, August 29. A very small faint spot.
Group 4144, August 30. A small spot.
Group 4145, August 30–31. A pair of very small faint spots on August 30. A single small spot is seen *f* the place of the pair on August 31.
Group 4146, August 30. Three very small spots *p* Group 4133.
Group 4147, August 30. A pair of very small faint spots.
Group 4148, August 30. Three very small faint spots *f* Group 4138.
Group 4149, August 31. A number of very small spots irregularly scattered.
Group 4150, August 31. Four very small spots *f* Group 4138.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
243d·438	M, AR	4133*a*	0·590	245·3	79·8	− 8·2	14	73	
		4133	0·608	240·0	79·5	−11·6	0	6	
		4133	0·574	246·4	79·0	− 7·1	0	7	
		4133	0·574	244·0	78·4	− 8·4	0	5	
		4133	0·552	247·6	77·8	− 5·9	0	7	
		4133	0·569	241·9	77·5	− 9·3	0	5	
		4133	0·553	243·7	77·0	− 7·9	0	10	
		4133	0·503	248·7	75·0	− 4·2	0	11	
		4138*a*	0·338	209·0	56·6	−10·0	31	158	
		4138	0·354	202·2	54·9	−12·0	0	1	
		4138*b*	0·355	199·6	54·1	−12·3	6	21	
		4138	0·349	198·6	53·6	−12·1	0	3	
		4138	0·287	201·0	53·0	− 8·4	0	5	
		4138	0·297	195·9	51·8	− 9·3	0	11	
		4138	0·302	193·5	51·2	− 9·8	0	3	
		4138	0·303	191·3	50·5	−10·0	1	5	
		4139	0·232	70·9	34·2	+11·4	0	11	
		4139	0·288	58·0	32·5	+15·7	1	4	
		4139	0·291	68·8	31·0	+13·0	0	6	
		4139*a*	0·335	77·8	27·7	+10·9	139	630	
		4139	0·369	71·7	26·1	+13·4	0	3	
		4139	0·368	75·4	25·8	+12·1	2	18	
		4139	0·390	70·0	25·0	+14·4	0	5	
		4139	0·414	63·0	24·4	+17·5	0	6	
		4139	0·426	69·9	22·7	+15·0	0	6	
		4139	0·424	73·2	22·5	+13·6	0	3	
		4151*a*	0·881	70·2	344·9	+20·8	0	14	585*s*
			0·719	68·1	1·8	+20·6			373
			0·767	113·7	1·2	−13·0			258
Sept. 1		Centre			(47·1)	(+7·2)	(194)	(1037)	(2147)
244·433	AW, FT		0·994	282·4	119·6	+13·1			104
			0·940	277·8	105·2	+ 9·8			75
			0·956	248·2	103·6	−18·4			209
			0·886	288·0	97·5	+19·3			105
			0·900	233·6	89·7	−28·3			100
		4133*a*	0·742	252·1	79·8	− 8·2	13	39	176*c*
		4138*a*	0·479	232·1	57·0	−10·4	20	125	
		4138	0·462	230·5	55·7	−10·3	3	15	
		4138*b*	0·478	226·0	55·0	−12·6	9	41	
		4138	0·454	226·7	54·1	−11·3	2	5	
		4138	0·412	229·0	52·8	− 8·8	0	3	
		4139	0·151	21·2	31·3	+15·3	0	2	
1895.				°	°	°			
244d·433	AW, FT	4139*a*	0·134	62·3	27·6	+10·7	137	588	
		4139	0·175	62·0	23·1	+11·8	0	3	
		4151*a*	0·769	69·7	344·5	+20·1	1	3	
		4151	0·776	68·7	343·9	+21·0	1	3	79*c*
		4151	0·789	66·9	342·9	+22·5	0	3	
		4151	0·796	66·5	342·2	+23·0	5	15	
		4152*a*	0·961	79·8	319·6	+11·8	30	189	330*c*
		4152	0·963	77·9	319·2	+13·6	8	28	
			0·670	66·3	353·6	+21·1			147
			0·726	75·6	347·9	+15·4			113
			0·850	62·2	337·0	+27·3			137
			0·844	77·4	336·4	+14·5			192
			0·909	71·7	328·3	+19·7			469
			0·938	62·6	323·9	+28·2			104
Sept. 2		Centre			(34·5)	(+7·2)	(229)	(1062)	(2340)
245·516	CL, AR		0·906	287·6	85·3	+19·0			316
		4133*a*	0·885	256·7	79·9	− 8·2	6	40	290*c*
		4138*a*	0·663	244·6	57·0	−10·8	28	128	
		4138	0·668	242·6	56·8	−12·1	0	8	
		4138*b*	0·667	241·2	56·3	−13·0	7	34	145*c*
		4138	0·630	243·0	54·3	−10·8	0	6	
		4138	0·609	242·7	52·8	−10·2	0	9	
		4139	0·199	300·5	29·7	+12·9	0	10	
		4139*a*	0·153	292·7	27·8	+10·5	137	568	
		4139	0·115	279·0	26·2	+ 8·2	0	3	
		4153	0·522	75·1	348·4	+13·9	0	4	22*c*
		4151*a*	0·591	64·5	345·0	+20·7	0	9	92*c*
		4151	0·636	61·5	342·2	+23·4	1	4	
		4152*a*	0·848	81·3	321·1	+11·2	14	69	
		4152	0·849	79·7	321·0	+12·6	0	10	627*c*
		4152*a*	0·859	80·3	319·9	+12·0	9	62	
		4152	0·874	80·7	318·1	+11·6	2	12	
			0·780	65·6	329·0	+23·5			231
			0·950	67·4	306·5	+23·7			98
Sept. 3		Centre			(19·6)	(+7·2)	(204)	(976)	(1821)
246·470	AW, FT		0·871	262·8	66·7	− 2·7			84
			0·863	255·7	64·5	− 8·5			143
			0·712	285·7	52·4	+16·2			192
		4133*a*	0·962	259·7	79·5	− 7·8	0	9	197*f*

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4151, September 1–3. A small faint spot, *a*, on September 1. *a* is followed by a short stream of similar spots on September 2. *a* and one companion alone remain on September 3.
Group 4152, September 2–9. A segmented spot, *a*, and a few small companions. The segments of *a* are sometimes all measured together, sometimes in two or more parts. The group is just perceptible as a very slight notch on the limb on September 1, but it is not measurable.
Group 4153, September 3. A small faint spot *sp* Group 4151.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
246d.470	AW, FT	4138*a*	0·798	250·6	56·9	−11·1	21	86	
		4138*b*	0·804	247·9	56·7	−13·0	4	14	
		4138	0·801	248·5	56·6	−12·5	0	2	200*c*
		4138	0·770	249·6	54·1	−10·7	0	2	
		4138	0·746	251·3	52·5	− 8·8	0	2	
		4139	0·397	284·9	30·0	+12·5	0	6	
		4139	0·394	282·4	30·0	+11·5	1	10	
		4139	0·378	291·7	28·2	+14·7	0	2	
		4139*a*	0·356	281·2	27·7	+10·7	126	572	
		4154	0·242	39·0	357·8	+18·0	0	1	
		4154	0·251	39·3	357·4	+18·3	1	3	
		4154*a*	0·265	43·0	356·1	+18·2	2	11	
		4152*a*	0·714	81·4	321·2	+11·2	9	61	
		4152	0·719	78·7	320·8	+13·1	0	2	
		4152*a*	0·726	80·7	320·2	+11·7	8	26	
		4152*a*	0·735	80·1	319·4	+12·1	2	18	328*c*
		4152	0·747	81·8	318·4	+10·9	2	7	
		4152	0·754	78·6	317·8	+13·3	0	2	
			0·714	63·9	322·8	+23·5			104
			0·942	117·2	302·0	−22·6			221
			0·918	65·6	299·8	+25·2			117
Sept. 4		Centre			(7·0)	(+7·2)	(176)	(836)	(1586)
247·386	AW, FT		0·936	260·1	62·8	− 6·6			161
		4138*a*	0·904	254·4	57·1	−10·8	18	96	318*f*
		4139*a*	0·544	278·4	28·0	+10·6	117	562	
		4139	0·452	281·0	21·7	+11·4	0	2	
		4154*a*	0·193	354·5	356·0	+18·3	6	22	
		4154	0·203	2·7	354·3	+18·9	0	2	
		4154	0·191	9·8	352·9	+18·0	0	13	
		4152	0·554	78·2	321·3	+12·6	2	6	
		4152*a*	0·556	80·1	321·1	+11·5	15	88	
		4152	0·576	77·9	319·8	+12·8	0	3	
		4152	0·605	77·3	317·7	+13·4	0	4	
Sept. 5		Centre			(354·9)	(+7·2)	(158)	(798)	(479)
248·318	CL, FT		0·883	248·1	40·6	−15·4			112
I.		4138*a*	0·974	257·1	57·2	−10·7	12	92	460*c*
		4139	0·737	280·6	30·4	+12·7	4	17	
		4139*a*	0·711	277·8	28·2	+10·7	125	553	257*c*
		4154*a*	0·325	307·8	358·2	+18·5	14	65	
1895.				°	°	°			
248d.318	CL, FT	4154	0·311	307·5	357·6	+18·0	8	16	
I.		4154	0·297	309·8	356·4	+18·0	4	13	
		4154	0·290	311·1	355·8	+18·1	0	4	
		4154	0·295	314·4	355·4	+19·0	1	6	
		4154	0·266	314·1	354·1	+17·8	0	8	
		4154	0·251	313·9	353·5	+17·2	6	12	
		4154	0·246	317·4	352·6	+17·6	1	2	
		4154	0·249	320·1	352·2	+18·2	13	28	
		4155	0·167	326·6	348·0	+15·3	0	4	
		4152*a*	0·358	77·4	321·8	+11·3	10	46	
		4152	0·375	73·1	321·1	+13·1	1	17	
		4152*a*	0·375	76·2	320·8	+11·9	7	37	
		4156*a*	0·968	108·3	270·2	−15·6	4	17	197*f*
		4157	0·967	81·6	266·6	+10·0	4	14	
		4158*a*	0·989	79·6	260·2	+11·3	0	14	236*f*
			0·925	117·9	280·6	−22·4			195
Sept. 6		Centre			(342·6)	(+7·3)	(214)	(965)	(1457)
249·419	AW, CL		0·942	255·2	39·5	+16·3			122
			0·811	291·3	22·2	+21·5			62
			0·884	234·0	21·3	−27·0			105
		4139	0·861	275·6	27·9	+ 8·5	0	8	
		4139*a*	0·860	278·1	27·9	+10·7	95	532	483*c*
		4154	0·550	294·9	359·9	+19·6	0	2	
		4154*a*	0·527	293·1	358·6	+18·2	24	170	
		4154	0·506	294·2	357·1	+18·4	0	1	
		4154	0·492	294·9	356·0	+18·4	0	2	
		4154	0·459	295·3	353·8	+17·9	0	9	
		4154	0·449	293·5	353·5	+16·9	6	30	
		4154	0·429	297·0	351·7	+17·9	6	25	
		4152*a*	0·122	59·4	322·0	+10·8	7	33	
		4152	0·141	53·4	321·5	+12·1	0	1	
		4152*a*	0·137	59·1	321·2	+11·3	5	18	
		4152	0·155	52·6	320·9	+12·7	0	2	
		4152	0·174	54·9	319·7	+13·0	0	6	
		4152	0·188	61·8	318·4	+12·3	0	2	
		4156*a*	0·873	112·6	271·5	−15·7	5	9	
		4156	0·889	110·6	269·0	−14·6	0	6	
		4156	0·903	111·1	267·3	−15·5	0	5	364*c*
		4156	0·908	110·6	266·6	−15·2	1	7	
		4157	0·871	83·4	267·1	+ 9·3	6	17	
		4158	0·918	82·8	260·9	+ 9·5	0	5	
		4158*a*	0·920	81·1	260·5	+11·0	12	87	487*c*
		4158	0·953	81·5	255·0	+10·3	0	8	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4154, September 4–11. A small spot, *a*, on September 4, preceded by two very small companions. The group rapidly increases in size up to September 7, when *a* is a large spot at the head of a considerable stream.
Group 4155, September 6. A very small faint spot *s* of Group 4154.
Group 4156. September 6–10. A few small spots in a straight stream. *a*, the leader, is usually the largest.
Group 4157, September 6–9. A small regular spot *p* Group 4158.
Group 4158, September 6–18. A small spot, *a*, on September 6. Several spots, mostly small, in a straight sparse stream on the succeeding days. The group is quite small from September 11 to September 14. There is a short-lived revival after this, and a short nearly continuous stream of small spots has formed by September 16.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
249d.419	AW, CL	4159	0·927	96·6	261·1	− 3·3	0	4	324*p*
			0·833	121·5	278·7	−21·1			271
			0·867	97·9	269·0	− 3·1			88
			0·932	70·2	258·3	+21·1			376
Sept. 7		Centre			(328·1)	(+7·3)	(167)	(989)	(2682)
250·463	FT, AW		0·827	287·3	10·4	+18·4			607
			0·818	253·2	6·6	− 9·3			143
			0·808	243·7	3·1	−16·2			74
		4139*a*	0·954	279·0	27·6	+10·8	72	527	346*f*
		4154	0·715	286·7	359·9	+17·0	0	11	
		4154*a*	0·704	288·2	358·8	+18·0	28	110	
		4154	0·637	287·9	353·5	+17·0	3	22	197*c*
		4154	0·632	290·5	352·8	+18·6	0	10	
		4154	0·613	290·1	351·4	+18·0	2	7	
		4152*a*	0·152	294·5	322·4	+10·9	7	16	
		4152	0·153	304·6	321·7	+12·3	0	3	
		4152*a*	0·144	299·7	321·6	+11·3	1	8	
		4156*a*	0·744	118·8	271·9	−15·6	5	18	
		4156	0·777	116·0	268·2	−14·9	3	6	
		4156	0·783	115·3	267·5	−14·6	0	3	
		4156	0·789	115·3	266·9	−14·9	0	3	158*c*
		4156	0·795	115·8	266·6	−15·4	4	20	
		4156	0·804	115·1	265·5	−15·2	0	10	
		4157	0·730	84·2	267·1	+ 9·2	5	16	
		4158	0·801	83·6	260·7	+ 9·5	0	6	
		4158*a*	0·802	81·7	260·6	+11·0	15	74	
		4158	0·851	82·1	255·5	+10·6	2	7	605*c*
		4158	0·860	81·7	254·5	+10·9	0	5	
		4158	0·893	81·5	250·5	+10·9	4	23	
			0·834	72·0	257·5	+19·0			122
			0·874	98·0	254·4	− 3·3			276
			0·911	67·3	248·0	+23·7			175
			0·918	56·3	247·9	+33·7			78
Sept. 8		Centre			(314·3)	(+7·3)	(151)	(905)	(2781)
251·413	M, AR		0·922	287·5	9·8	+19·0			1283
			0·919	257·9	6·6	− 8·1			170
			0·899	245·9	1·1	−17·9			188
		4139*a*	0·995	280·1	26·8	+10·7	65	417	211*f*
		4154*a*	0·834	286·6	358·6	+17·9	22	108	
		4154	0·786	285·7	353·7	+16·8	9	10	570*c*
1895.				°	°	°			
251d.413	M, AR	4152*a*	0·355	281·0	322·4	+10·7	3	8	
		4152*a*	0·329	282·3	320·7	+10·9	1	7	
		4152	0·323	289·3	319·9	+13·0	0	15	
		4152	0·314	281·1	319·9	+10·4	0	3	
		4156	0·567	127·4	274·2	−13·6	0	8	
		4156*a*	0·601	127·7	272·3	−15·1	7	20	
		4156	0·618	124·3	270·1	−14·1	0	10	
		4156	0·650	123·7	267·8	−15·1	1	18	
		4156	0·670	122·6	266·0	−15·2	0	1	
		4156	0·682	120·7	264·6	−14·6	0	3	
		4157	0·567	84·9	267·0	+ 8·9	1	7	
		4158	0·624	81·9	262·9	+10·8	2	5	
		4158*a*	0·659	82·1	260·2	+10·7	14	81	
		4158	0·676	83·7	258·9	+ 9·6	0	4	328*c*
		4158	0·718	82·5	255·5	+10·5	4	16	
		4158	0·762	79·8	251·7	+12·6	0	6	
		4158	0·783	82·7	249·8	+10·2	4	10	
		4158	0·786	81·7	249·5	+11·0	0	7	
			0·792	78·8	248·9	+13·3			112
			0·841	64·3	244·8	+25·5			164
			0·907	51·0	238·1	+38·3			128
			0·940	82·5	231·0	+ 9·6			255
Sept. 9		Centre			(301·7)	(+7·3)	(124)	(764)	(3409)
252·223	CL, FT		0·741	290·7	338·5	+20·2			107
		4154*a*	0·922	285·9	359·2	+17·5	17	97	1047*c*
I.		4156*a*	0·482	141·0	272·9	−15·0	9	21	
		4156	0·522	134·1	268·4	−14·5	1	3	
		4156	0·527	134·3	268·2	−14·9	0	2	
		4158*a*	0·505	80·5	260·7	+11·1	17	84	
		4158	0·567	81·5	256·4	+10·9	4	16	
		4158	0·601	79·7	254·1	+12·0	0	1	
		4158	0·635	80·6	251·5	+11·6	0	3	
		4158	0·647	82·1	250·6	+10·7	0	5	
		4158	0·647	83·0	250·5	+10·1	3	7	
		4160	0·643	105·2	252·8	− 4·0	0	6	
		4161	0·982	113·3	216·1	−21·1	0	75	120*p*
			0·807	62·0	238·8	+26·6			183
			0·914	66·3	224·4	−24·6			170
			0·922	83·6	223·4	+ 8·8			298
Sept. 10		Centre			(291·1)	(+7·3)	(51)	(320)	(1925)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4159, September 7. A very small faint spot.
Group 4160, September 10. A very small faint spot.
Group 4161, September 10–14. A regular spot, which diminishes from day to day.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
253d.540	AW, CL		0·960	292·8	348·9	+23·9			179
		4154	0·993	286·2	358·5	+16·9	0	92	323*f*
		4158*a*	0·228	72·6	261·0	+10·9	7	24	
		4158	0·227	76·0	260·8	+10·2	1	9	
		4161	0·899	118·2	215·5	−21·5	9	52	238*sf*
			0·826	65·0	218·5	+24·6			151
			0·909	111·0	212·1	−15·7			105
			0·947	56·6	201·8	+33·9			263
			0·952	69·4	200·3	+21·8			1097
Sept. 11		Centre			(273·7)	(+7·2)	(17)	(177)	(2356)
254·535	AW, FT		0·910	284·6	326·7	+16·2			459
			0·902	284·4	325·7	+16·1			286
		4158	0·051	348·8	261·1	+10·0	1	4	
		4158*a*	0·060	355·6	260·8	+10·6	4	16	
		4158	0·047	7·7	260·1	+ 9·9	0	3	
		4158	0·095	47·0	256·5	+10·9	1	4	
		4158	0·120	50·1	255·1	+11·6	1	7	
		4162	0·345	29·7	249·7	+24·5	0	5	
		4161	0·803	124·0	214·9	−21·7	10	21	509*sf*
			0·828	115·2	209·4	−16·2			106
			0·896	55·3	197·9	+34·1			197
			0·894	68·9	196·6	+22·1			1145
Sept. 12		Centre			(260·5)	(+7·2)	(17)	(60)	(2702)
255·399	M, AR		0·946	296·0	321·3	+26·9			411
			0·945	281·4	320·9	+13·1			366
			0·888	237·2	304·2	−24·7			167
		4163	0·809	292·5	302·8	+22·4	9	53	
		4163	0·796	293·6	301·3	+23·0	4	30	
		4163	0·791	295·5	300·6	+24·5	1	5	184*c*
		4163	0·771	294·2	298·8	+23·2	0	7	
		4163	0·771	296·0	298·5	+24·5	14	41	
		4163	0·756	295·7	297·1	+24·0	0	6	
		4158	0·216	268·5	261·6	+ 6·7	0	5	
		4158	0·216	283·5	261·4	+ 9·9	1	4	
		4158*a*	0·211	286·4	260·9	+10·5	2	10	
		4158	0·182	274·3	259·6	+ 7·8	0	3	
		4158	0·185	288·8	259·3	+10·5	0	2	
		4162	0·295	357·6	249·9	+24·3	0	17	
1895.				°	°	°			
255d.399	M, AR	4162	0·295	2·8	248·2	+24·3	3	9	
		4162	0·314	2·6	248·2	+25·4	0	4	
		4164	0·446	82·9	222·5	+ 9·6	8	19	
		4164	0·460	85·5	221·6	+ 8·5	2	9	
		4164	0·482	85·1	220·2	+ 8·7	0	7	
		4164	0·489	80·0	219·8	+11·2	0	6	
		4164	0·490	83·0	219·7	+ 9·7	5	18	
		4164	0·506	83·1	218·6	+ 9·7	0	3	
		4161	0·704	132·2	214·9	−22·3	4	21	546*f*
			0·849	38·1	199·5	+46·7			205
			0·831	68·5	192·9	+21·8			707
			0·863	52·3	191·9	+35·9			275
			0·959	104·2	177·9	−11·4			271
			0·986	73·6	167·2	+17·3			399
Sept. 13		Centre			(249·1)	(+7·2)	(53)	(279)	(3531)
256·424	CL, AR		0·981	299·7	316·6	+30·5			181
		4163	0·930	290·8	304·9	+22·0	22	143	
		4163	0·914	291·4	302·3	+22·4	6	75	
		4163	0·913	290·4	302·2	+21·5	2	19	
		4163	0·898	292·0	300·1	+22·9	0	5	572*c*
		4163	0·880	294·3	297·4	+24·8	19	61	
		4163	0·874	293·1	296·7	+23·6	6	27	
		4158*a*	0·430	278·6	261·1	+10·2	5	10	
		4158	0·361	280·6	256·7	+10·6	0	16	
		4158	0·322	284·3	254·1	+11·4	0	4	
		4158	0·317	282·9	253·9	+10·9	8	12	
		4158	0·312	285·9	253·4	+11·7	0	2	
		4162	0·357	323·2	249·0	+23·5	0	3	
		4162	0·361	327·9	247·7	+24·8	0	4	
		4164	0·198	78·1	224·3	+ 9·4	9	40	
		4164	0·211	80·5	223·5	+ 9·1	6	24	
		4164	0·225	77·5	222·8	+ 9·8	2	8	
		4164	0·266	75·5	220·5	+10·8	0	3	
		4164	0·269	79·4	220·1	+ 9·8	19	118	
		4161	0·584	144·8	214·4	−21·7	0	9	
			0·753	139·2	201·6	−28·8			275
			0·723	68·2	189·9	+20·7			403
			0·896	125·9	180·7	−27·7			275
			0·877	108·2	177·4	−12·1			350
			0·933	72·3	165·7	+19·1			731
Sept. 14		Centre			(235·6)	(+7·2)	(104)	(583)	(2787)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4162, September 12–15. A few very small unstable spots irregularly scattered.
Group 4163, September 13–16. A number of spots in a straight compact stream, suddenly appearing near the West limb, and rapidly increasing in size.
Group 4164, September 13–19. A few small spots irregularly scattered on September 13. The group has greatly increased in size by September 14, and has become an irregular stream. It undergoes constant change. It consists chiefly of a pair of spots, *a* and *b*, on September 18 and 19.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
257d·235	AW, CL		0·760	241·1	268·6	−16·3			201
		4163	0·979	290·7	304·8	+21·7	40	246	
I.		4163	0·947	293·7	297·3	+24·7	5	51	482c
		4163	0·943	292·3	296·5	+23·4	40	94	
		4165	0·603	265·9	261·8	+ 3·3	0	3	
		4165	0·583	265·8	260·4	+ 3·5	0	3	
		4165	0·573	265·1	259·6	+ 3·2	0	1	
		4158a	0·587	277·4	261·0	+10·2	1	8	
		4158	0·548	278·2	258·2	+10·5	4	15	
		4158	0·535	278·5	257·3	+10·6	5	13	
		4158	0·522	278·7	256·4	+10·7	0	5	
		4158	0·512	280·6	255·7	+11·6	3	7	
		4158	0·491	280·3	254·3	+11·3	0	3	
		4158	0·482	280·6	253·7	+11·4	3	6	
		4158	0·450	286·8	251·1	+14·0	0	10	
		4162	0·478	307·9	249·1	+23·6	1	3	
		4162	0·473	311·8	247·7	+25·0	0	2	
		4164	0·039	8·5	224·6	+ 9·4	8	27	
		4164	0·038	24·3	224·0	+ 9·2	5	10	
		4164	0·050	38·8	223·1	+ 9·4	4	13	
		4164	0·074	51·8	221·5	+ 9·8	0	1	
		4164	0·086	55·7	220·8	+10·0	0	1	
		4164	0·095	47·3	220·8	+10·9	0	2	
		4164	0·107	65·4	219·3	+ 9·8	12	55	
		4164	0·119	56·3	219·1	+11·0	3	9	
		4164	0·119	60·8	218·9	+10·5	0	4	
		4164	0·125	79·6	217·8	+ 8·4	0	3	
			0·773	111·0	177·7	−11·2			144
			0·863	72·7	164·8	+18·6			845
			0·932	113·9	160·6	−19·2			213
			0·963	94·4	151·2	− 2·3			233
Sept. 15		Centre			(224·9)	(+7·2)	(134)	(595)	(2118)
258·444	AW. AR		0·902	248·9	269·6	−15·6			236
			0·786	259·6	259·5	− 3·6			140
		4163	0·995	293·1	295·5	+23·6	0	84	150f
		4166	0·838	242·7	260·4	−18·3	2	12	
		4166	0·833	241·5	259·4	−18·9	0	2	161c
		4166	0·816	240·3	257·3	−19·2	2	9	
		4158	0·777	278·6	260·2	+11·1	0	3	
		4158	0·760	277·1	258·7	+10·0	7	25	
		4158	0·744	278·1	257·3	+10·8	7	34	680c
		4158	0·729	278·3	256·0	+10·9	0	3	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
258d·444	AW, AR	4158	0·721	279·0	255·3	+11·4	4	14	
		4158	0·695	278·7	253·2	+11·1	0	33	
		4167	0·373	234·0	226·5	− 5·9	0	2	
		4167	0·290	237·5	223·0	− 2·1	0	2	
		4164	0·268	277·0	224·4	+ 8·7	9	50	
		4164	0·249	277·2	223·3	+ 8·7	0	1	
		4164	0·247	274·1	223·2	+ 7·9	0	5	
		4164	0·243	279·3	222·9	+ 9·2	0	3	
		4164	0·227	278·8	222·0	+ 8·9	2	10	
		4164	0·188	289·8	219·2	+10·6	0	5	
		4164	0·203	302·0	219·0	+13·1	0	5	
		4164	0·175	284·8	218·7	+ 9·6	5	24	
		4164	0·169	294·2	217·9	+11·0	0	2	
		4164	0·139	299·5	215·9	+11·0	0	10	
		4168	0·233	23·9	203·2	+19·3	0	2	
		4168	0·282	20·3	202·9	+22·4	1	11	
		4168	0·349	18·7	201·8	+26·3	1	7	
		4169	0·390	138·2	193·7	−10·0	0	2	
		4170	0·300	59·5	193·4	+15·6	0	4	
		4170	0·348	57·7	191·0	+17·5	0	1	
		4170	0·368	58·0	189·8	+18·0	0	6	
		4171a	0·988	106·5	130·3	−15·1	51	296	196p
			0·738	69·3	161·8	+20·0			347
			0·872	99·8	149·5	− 5·0			229
Sept. 16		Centre			(208·9)	(+7·1)	(91)	(667)	(2139)
259·540	AW. AR		0·939	249·8	260·9	−16·2			296
			0·904	262·8	258·3	− 3·4			202
			0·842	291·2	251·9	+21·6			425
		4158	0·902	277·6	259·4	+ 9·9	0	26	
		4158	0·892	277·8	258·1	+10·2	0	9	
		4158	0·862	279·1	254·5	+11·4	0	21	548c
		4164	0·506	275·3	225·0	+ 8·8	4	10	
		4164	0·489	276·4	223·9	+ 9·3	0	6	
		4164a	0·482	274·6	223·4	+ 8·4	5	29	
		4164	0·469	276·3	222·6	+ 9·2	0	11	
		4164b	0·455	278·0	221·6	+10·0	4	36	
		4164	0·428	277·5	219·9	+ 9·6	0	9	
		4164	0·408	277·6	218·6	+ 9·6	1	4	
		4172	0·307	314·2	207·9	+18·9	0	10	
		4172	0·266	312·4	206·3	+16·9	0	7	
		4172	0·237	317·2	204·1	+16·6	0	6	
		4168	0·338	339·0	202·2	+25·4	0	16	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4165, September 15. Three very small spots *s* Group 4158.
Group 4166, September 16. A few small spots irregularly scattered.
Group 4167, September 16. A pair of very small faint spots.
Group 4168, September 16–17. A few very small faint spots irregularly scattered.
Group 4169, September 16. A very small faint spot.
Group 4170, September 16–17. Two or three very small faint unstable spots.
Group 4171, September 16–27. A large spot, *a*, with double nucleus. Usually several small unstable companions are seen round and near *a*.
Group 4172, September 17. A few very small faint spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
259d·540	AW, AR	4168	0·353	346·9	199·6	+27·1	0	11	
		4170	0·266	21·2	188·6	+21·4	0	3	
		4170	0·249	28·5	187·3	+19·7	0	3	
		4173	0·450	129·7	174·0	−10·4	0	6	
		4173	0·510	134·3	172·4	−14·6	0	2	
		4171	0·902	110·1	133·6	−14·7	0	5	644c
		4171a	0·925	109·6	130·2	−15·1	46	295	
			0·813	105·2	142·3	− 8·0			127
			0·922	36·8	132·9	+51·2			105
			0·924	75·8	126·2	+15·9			120
Sept. 17		Centre			(194·5)	(+7·1)	(60)	(525)	(2467)
260·398	FT, AW		0·981	248·7	258·3	−19·2			140
			0·952	256·1	253·1	−10·9			83
			0·915	292·5	249·9	+23·4			455
		4158	0·961	278·4	257·7	+10·0	0	7	776c
		4158	0·946	278·8	254·9	+10·6	0	5	
		4164	0·668	277·2	225·2	+10·1	0	5	
		4164	0·664	275·2	224·9	+ 8·8	0	8	
		4164	0·650	273·3	223·8	+ 7·5	0	5	
		4164	0·648	274·7	223·7	+ 8·5	2	15	
		4164a	0·641	275·9	223·2	+ 9·2	12	69	197c
		4164	0·620	278·6	221·6	+10·9	0	2	
		4164b	0·617	277·2	221·4	+10·0	13	56	
		4164	0·613	275·0	221·1	+ 8·7	0	2	
		4164	0·594	274·7	219·7	+ 8·5	0	1	
		4164	0·572	275·5	218·1	+ 9·0	0	8	
		4173	0·256	138·0	173·3	− 3·9	0	5	
		4171a	0·846	113·1	129·5	−15·3	42	284	548f
			0·954	78·3	109·6	+13·3			177
Sept. 18		Centre			(183·1)	(+7·1)	(69)	(472)	(2376)
261·323	AW, CL		0·745	226·4	207·4	−25·2			363
		4164	0·801	276·2	224·5	+ 9·2	0	7	
I.		4164a	0·792	276·0	223·6	+ 9·1	3	30	345c
		4164b	0·763	277·4	220·9	+10·2	5	25	
		4173	0·323	193·2	175·2	−11·2	0	4	
		4171a	0·731	118·3	129·3	−15·0	44	284	589f
			0·863	80·3	110·7	+12·0			162
Sept. 19		Centre			(170·9)	(+7·1)	(52)	(350)	(1459)
1895.				°	°	°			
262d·415	M, AR		0·948	312·5	227·6	+42·5			72
			0·902	276·3	221·4	+ 8·8			496
			0·864	296·4	216·0	+26·3			178
			0·883	236·1	210·6	−25·5			955
			0·809	315·1	204·3	+39·8			87
		4173	0·490	232·1	179·6	−11·0	5	50	
		4173	0·467	227·3	176·9	−11·8	1	11	
		4173	0·443	225·4	175·2	−11·3	2	8	
		4174	0·169	12·9	154·3	+16·6	6	18	
		4174	0·180	21·5	152·6	+16·8	1	7	
		4174	0·183	28·9	151·2	+16·3	0	3	
		4174	0·212	26·6	150·8	+18·0	0	3	
		4171a	0·571	129·9	129·6	−15·1	41	284	
		4171	0·547	125·3	129·4	−12·1	3	14	100c
		4171	0·597	127·2	127·1	−15·0	0	5	
		4175	0·755	120·1	113·6	−17·1	2	24	
		4175	0·788	118·8	110·3	−17·5	0	8	173c
			0·734	78·4	109·1	+13·3			181
Sept. 20		Centre			(156·5)	(+7·1)	(61)	(435)	(2242)
263·450	FT, AW		0·954	277·0	216·0	+ 8·8			438
			0·940	294·9	213·7	+25·7			142
			0·869	293·4	203·3	+23·8			381
			0·923	236·6	202·7	−27·1			543
			0·841	306·3	197·5	+34·0			151
			0·756	298·5	190·3	+25·9			133
			0·728	287·5	189·4	+17·5			231
		4173	0·680	245·5	181·8	−10·9	0	8	
		4173	0·678	244·2	181·3	−11·7	9	70	
		4173	0·665	244·0	180·3	−11·4	1	8	
		4173	0·655	244·0	179·6	−11·1	1	5	
		4173	0·650	242·5	178·8	−11·8	0	4	114c
		4173	0·642	242·1	178·2	−11·7	0	4	
		4173	0·629	242·4	177·4	−11·1	4	13	
		4173	0·623	241·3	176·7	−11·6	5	12	
		4173	0·609	239·8	175·3	−11·9	0	6	
		4174	0·249	310·4	154·2	+16·2	3	11	
		4174	0·226	313·4	152·7	+15·8	2	16	
		4171a	0·438	149·9	129·8	−15·4	49	264	
			0·965	75·5	67·0	+15·8			279
Sept. 21		Centre			(142·9)	(+7·0)	(74)	(421)	(2412)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4173, September 17–24. Two very small faint spots. The group is not seen on September 18, but has revived by the succeeding day, and increased very rapidly, developing into a compact stream, the first and last spots of which, *a* and *b*, are the largest.
Group 4174, September 20–22. A few small spots in a short straight stream.
Group 4175, September 20. A small double spot, with a very small companion.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
264d.448	M,AR		0·947	293·0	202·0	+24·0			316
			0·962	238·5	197·4	−27·7			181
			0·896	305·4	192·2	+34·7			292
			0·847	289·8	187·7	+20·4			403
		4173*a*	0·825	251·4	182·3	−11·1	16	164	
		4173	0·806	251·1	180·4	−10·7	0	25	
		4173	0·799	249·0	179·2	−12·1	0	5	315*c*
		4173	0·783	251·6	178·4	− 9·8	0	13	
		4173*b*	0·774	248·6	176·9	−11·7	10	105	
		4174	0·429	293·7	153·7	+16·3	0	5	
		4174	0·413	294·4	152·7	+16·3	0	3	
		4174	0·407	296·5	152·0	+16·9	0	2	
		4171*a*	0·372	180·4	129·9	−14·8	52	215	
		4171	0·366	175·3	127·9	−14·3	0	3	
		4171	0·348	172·8	127·1	−13·1	0	3	
		4171	0·367	171·5	126·5	−14·3	0	3	
		4176	0·866	78·7	69·2	+13·3	4	23	414*f*
			0·772	114·7	83·6	−14·0			113
			0·928	102·5	63·5	− 8·8			362
Sept. 22		Centre			(129·7)	(+7·0)	(82)	(569)	(2396)
265·435	CL.AR		0·935	289·7	186·8	+20·9			479
			0·912	307·5	181·2	+36·9			273
			0·795	288·4	169·2	+18·8			182
			0·858	323·0	166·7	+47·8			144
		4173*a*	0·929	255·0	182·5	−11·1	12	145	
		4173	0·914	254·9	180·3	−10·7	6	39	
		4173	0·910	254·1	179·6	−11·3	0	15	598*c*
		4173*b*	0·889	252·9	176·6	−11·7	26	193	
		4171	0·465	208·8	130·1	−17·2	0	2	
		4171*a*	0·429	211·1	129·8	−14·7	46	222	
		4171	0·441	208·7	129·3	−15·8	3	7	
		4177	0·109	343·0	118·4	+13·0	0	2	
		4177	0·110	354·7	117·2	+13·3	0	3	
		4178*a*	0·575	98·3	82·1	+ 1·1	6	23	
		4178*b*	0·605	97·4	79·9	+ 1·2	6	15	
		4176	0·731	78·1	69·5	+13·4	0	4	515*f*
			0·771	139·6	81·4	−30·2			40
			0·901	104·9	54·6	−10·2			488
Sept. 23		Centre			(116·6)	(+7·0)	(105)	(670)	(2719)
266·429	M,AR		0·966	303·6	179·9	+34·2			88
			0·933	313·3	170·8	+42·7			143
1895.				°	°	°			
266d.429	M,AR		0·883	289·7	166·0	+20·7			586
			0·894	241·7	161·0	−21·4			89
			0·898	322·7	160·4	+49·6			192
			0·836	259·5	158·9	− 4·8			134
		4173*a*	0·984	257·6	181·5	−10·9	0	48	491*c*
		4173*b*	0·962	256·1	175·5	−11·3	0	28	
		4179	0·737	250·7	148·1	− 9·1	2	6	52*c*
		4179	0·721	251·3	147·0	− 8·3	3	8	
		4171	0·549	233·8	130·4	−12·7	0	2	
		4171*a*	0·560	230·2	129·8	−14·7	45	191	
		4171	0·571	228·0	129·6	−16·2	3	8	
		4171	0·524	227·2	126·8	−14·4	0	4	
		4177	0·290	290·8	119·6	+12·7	0	3	
		4178*a*	0·365	105·7	83·0	+ 0·9	5	13	
		4178	0·381	105·5	82·1	+ 0·7	0	9	
		4178*b*	0·410	104·1	80·2	+ 0·7	3	18	
		4180*a*	0·972	79·1	26·2	+12·2	80	366	368*c*
			0·831	108·6	50·3	−11·2			396
			0·808	76·9	49·3	+14·7			225
			0·900	64·5	39·1	+26·0			76
Sept. 24		Centre			(103·5)	(+7·0)	(141)	(704)	(2840)
267·439	M,AR		0·931	290·0	159·6	+21·1			479
			0·930	242·6	153·2	−22·3			89
			0·920	325·1	150·3	+52·7			156
			0·866	255·7	148·1	+ 8·8			434
		4171	0·732	241·2	131·8	−15·5	0	3	
		4171	0·721	239·6	130·4	−16·1	0	10	196*c*
		4171*a*	0·707	241·2	129·9	−14·6	28	178	
		4177	0·511	279·0	120·9	+10·5	0	6	
		4177	0·506	283·0	120·4	+12·6	0	4	
		4177	0·459	285·2	117·1	+13·1	2	10	
		4181	0·373	176·1	88·7	−14·9	0	8	
		4181	0·342	172·6	87·6	−12·8	0	17	
		4181	0·372	172·6	87·4	−14·7	0	4	
		4178*a*	0·153	133·2	83·8	+ 0·9	4	13	
		4178	0·164	135·1	83·6	+ 0·2	0	4	
		4178	0·165	124·9	82·5	− 1·5	0	4	
		4178	0·201	123·3	80·6	− 0·5	0	9	
		4176	0·394	67·2	68·2	+15·2	0	8	
		4176	0·409	66·8	67·3	+15·6	0	7	
		4182*a*	0·620	73·5	52·3	+15·6	0	7	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4176, September 22–25. A small regular spot on September 22 and 23. The group is not seen on September 24, but a pair of very small spots is seen near its place on September 25.
Group 4177, September 23–25. A few very small faint spots.
Group 4178, September 23–27. A pair of small double spots, *a* and *b*, on September 23. A short straight stream on September 25. *a* alone remains by September 26.
Group 4179, September 24. A pair of very small spots.
Group 4180, September 24–October 6. A large regular spot, *a*, with occasionally a small companion.
Group 4181, September 25. Three small faint spots.
Group 4182, September 25–October 4. A few very small spots on September 25. The group increases in size and has become a short stream, the leader of which, *a*, is a regular spot by September 29. *a* remains alone on September 28, but one or two companions are occasionally seen near it later.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
267d·439	M,AR	4182	0·621	76·5	51·9	+13·7	0	4	
		4182	0·630	74·9	51·4	+14·9	0	6	
		4182	0·647	75·1	50·0	+14·9	0	7	
		4180*a*	0·894	79·8	26·3	+12·2	74	403	600*f*
		4183*a*	0·983	75·8	9·5	+15·2	0	55	402*c*
		4184*a*	0·994	107·7	9·2	−16·6	0	32	295*p*
			0·785	113·2	42·5	−13·4			111
			0·833	69·4	33·8	+20·9			46
			0·967	68·9	13·6	+22·1			306
Sept. 25		Centre			(90·2)	(+6·9)	(108)	(799)	(3114)
268·394	CL,FT		0·939	259·4	145·9	− 7·4			155
			0·813	285·3	132·2	+16·4			83
		4171	0·843	247·5	131·0	−14·7	9	28	271*c*
		4171*a*	0·833	247·3	130·0	−14·6	19	100	
		4178*a*	0·159	230·1	84·6	+ 1·1	0	4	
		4182*a*	0·427	67·5	53·5	+15·7	11	45	
		4182	0·437	65·9	53·1	+16·5	0	3	
		4182	0·450	69·6	51·8	+15·2	0	3	
		4182	0·457	67·3	51·7	+16·3	0	2	
		4182	0·482	70·8	49·6	+15·2	5	13	
		4180*a*	0·777	80·2	26·3	+12·0	72	375	122*c*
		4185	0·831	113·3	25·6	−15·0	0	7	
		4185	0·839	112·3	24·5	−14·4	2	14	
		4185	0·856	113·4	23·0	−15·9	1	4	
		4185	0·864	111·1	21·5	−14·3	1	7	
		4183*a*	0·922	76·0	9·7	+15·6	16	62	
		4183*b*	0·963	75·5	2·2	+15·8	15	83	
		4183	0·963	74·5	2·1	+16·8	17	103	932*c*
		4183*c*	0·976	76·8	359·1	+14·4	37	243	
		4184*a*	0·948	110·6	9·7	−17·0	10	45	228*c*
		4184	0·981	110·3	2·0	−18·3	0	10	
			0·919	66·7	10·2	+24·1			479
Sept. 26		Centre			(77·6)	(+6·9)	(215)	(1151)	(2270)
269·433	AW, FT		0·907	286·3	129·6	+17·6			46
			0·825	281·9	119·9	+13·7			41
			0·859	242·6	117·6	−19·3			100
		4171*a*	0·934	251·4	129·9	−14·6	11	106	325*c*
		4186	0·724	240·2	104·5	−15·9	0	4	
		4186	0·715	237·0	102·7	−17·6	0	1	
		4186	0·711	237·9	102·7	−16·9	0	1	59*c*
1895.				°	°	°			
269d·433	AW, FT	4186	0·704	239·2	102·7	−15·9	0	1	
		4186	0·703	239·5	102·7	−15·6	0	1	
		4178*a*	0·373	255·0	84·9	+ 0·9	1	2	
		4182*a*	0·229	47·9	53·8	+15·5	17	98	
		4182	0·227	55·3	52·9	+14·1	0	4	
		4182	0·277	51·9	50·8	+16·5	0	2	
		4182	0·276	54·1	50·5	+15·9	4	11	
		4182	0·280	57·8	49·7	+15·1	3	12	
		4182	0·282	60·2	49·3	+14·7	0	1	
		4182	0·295	60·1	48·6	+15·0	0	3	
		4180	0·578	79·8	28·6	+11·4	0	1	187*c*
		4180*a*	0·613	79·6	26·0	+11·8	75	372	
		4185*a*	0·683	120·0	26·4	−14·6	32	125	
		4185	0·696	118·6	25·0	−14·2	5	26	
		4185	0·705	117·8	24·1	−14·0	0	5	146*c*
		4185	0·715	116·5	22·9	−13·5	3	8	
		4185*b*	0·729	119·6	22·8	−16·0	16	86	
		4185	0·747	117·2	20·6	−15·0	2	6	
		4183*a*	0·814	75·6	9·2	+15·6	7	23	
		4183	0·838	74·8	6·7	+16·5	0	4	
		4183*b*	0·868	75·4	3·2	+16·0	31	221	
		4183	0·881	74·4	1·6	+16·9	0	14	562*c*
		4183	0·893	74·5	0·1	+16·9	6	23	
		4183	0·904	75·5	358·6	+16·0	10	25	
		4183*c*	0·906	77·4	358·3	+14·3	23	217	
		4184*a*	0·854	114·8	9·9	−17·1	10	57	
		4184	0·860	113·6	8·9	−16·3	0	2	380*c*
		4184	0·918	113·2	1·5	−18·1	0	5	
			0·828	66·3	8·4	+23·4			391
			0·960	76·5	349·2	+14·9			886
Sept. 27		Centre			(63·9)	(+6·8)	(256)	(1467)	(3123)
270·428	CL,FT		0·916	248·4	113·2	−16·6			394
		4182*a*	0·160	341·7	53·7	+15·5	16	61	
		4180*a*	0·419	76·7	26·2	+11·7	75	385	
		4185*a*	0·534	130·9	26·2	−14·3	82	482	
		4185	0·564	128·1	23·6	−14·3	1	10	
		4185	0·553	126·1	23·5	−12·9	5	28	
		4185	0·572	127·4	22·9	−14·3	3	12	
		4185*b*	0·589	129·5	22·6	−16·0	36	236	
		4185*c*	0·578	125·4	21·8	−13·7	21	97	
		4185	0·590	126·5	21·5	−14·6	6	39	
		4185	0·607	127·2	20·7	−15·6	3	9	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4183, September 25–October 8. A fine irregular stream *f* Group 4180. *a*, the leader, on September 26, quickly diminishes, and two large composite spots, *b* and *c*, connected by a chain of small spots, form the chief feature of the group up to October 1, but it undergoes continual change, and *c* has broken up chiefly into two spots, *d* and *e*, by October 3, whilst *b* has disappeared by October 4.
Group 4184, September 25–October 3. A small regular spot, *a*, with occasionally one or two very small companions.
Group 4185, September 26–October 6. A few small spots, *p* Group 4184, on September 26. The group rapidly increases and becomes a very fine complicated stream, principally consisting, on September 28, of three large composite spots, *a*, *b* and *c*, radiating from a common centre. By the succeeding day the group is practically one very large composite spot, the *p* portion tending to be regular, the *f* portion to be exceedingly complex. *a*, *b* and *c* are still recognisable, and new large spots, *d* and *e*, become defined later. The group continues to change, and disintegration sets in after October 2.
Group 4186, September 27. A few very small faint spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
270d.428	CL, FT	4183*a*	0·667	73·8	9·1	+15·8	1	10	
		4183*b*	0·726	73·9	4·3	+16·3	28	188	
		4183	0·752	75·1	1·9	+15·6	0	43	
		4183	0·753	73·6	1·9	+16·8	0	16	296*c*
		4183	0·781	73·2	359·3	+17·4	6	26	
		4183	0·784	74·7	358·9	+16·2	5	20	
		4183*c*	0·790	77·2	358·3	+14·3	34	181	
		4184*a*	0·733	121·7	10·0	−17·5	9	49	
		4184	0·734	120·1	9·4	−16·5	0	3	52*c*
		4187	0·877	75·7	348·9	+15·8	0	12	
		4187	0·896	74·0	346·5	+17·4	0	8	670*c*
		4187	0·904	72·2	345·4	+19·0	0	4	
		4187	0·923	72·4	342·6	+18·9	7	36	
			0·759	60·9	3·2	+26·2			137
			0·802	116·7	2·5	−16·6			214
			0·851	81·7	352·0	+10·7			122
Sept. 28		Centre			(50·7)	(+6·8)	(338)	(1955)	(1885)
271·521	AW, AR		0·964	249·9	107·5	−17·3			247
			0·913	286·2	102·8	+17·5			300
			0·858	241·0	89·4	−20·6			199
			0·870	227·4	85·0	−31·7			176
		4182	0·336	294·4	54·6	+14·3	0	7	
		4182	0·348	302·4	54·1	+17·1	0	8	
		4182*a*	0·332	298·8	53·8	+15·6	15	70	
		4182	0·294	303·2	51·0	+15·7	0	2	
		4180	0·142	58·3	29·3	+11·0	0	4	
		4180	0·179	45·6	28·8	+13·8	0	7	
		4180*a*	0·193	63·7	26·2	+11·6	70	374	
		4180	0·242	51·6	25·0	+15·2	0	4	
		4180	0·239	74·1	22·9	+10·3	0	4	
		4185	0·433	163·7	29·0	−17·8	0	9	
		4185*a*	0·396	155·3	26·5	−14·4	132	646	
		4185	0·401	148·8	24·0	−13·4	3	50	
		4185*b*	0·449	148·6	22·3	−16·0	19	230	
		4185	0·476	147·7	20·9	−17·2	6	43	
		4185*c*	0·444	144·0	20·7	−14·5	46	245	
		4183*a*	0·469	68·9	9·4	+15·7	0	3	
		4183	0·468	70·0	9·3	+15·1	0	4	
		4183	0·473	71·4	8·8	+14·6	0	3	
		4183	0·489	68·4	8·2	+16·3	0	2	
		4183	0·487	73·7	7·7	+13·7	0	4	
1895.				°	°	°			
271d.521	AW, AR	4183	0·499	69·2	7·4	+16·0	0	2	
		4183	0·495	72·4	7·3	+14·5	0	2	
		4183	0·499	71·3	7·1	+15·0	0	6	
		4183*b*	0·527	70·5	5·3	+15·9	35	191	
		4183	0·525	74·3	5·1	+13·9	0	2	139*c*
		4183	0·555	71·6	3·3	+15·7	1	3	
		4183	0·589	71·4	0·9	+16·3	1	14	
		4183	0·597	74·6	0·0	+14·6	0	5	
		4183	0·600	73·0	359·9	+15·6	6	32	
		4183	0·603	71·4	359·9	+16·5	3	9	
		4183	0·615	72·9	358·8	+15·7	4	21	
		4183	0·621	71·3	358·5	+16·8	6	27	
		4183*b*	0·620	75·7	358·2	+14·1	31	144	
		4184*a*	0·582	133·6	10·2	−17·6	10	33	
		4184	0·586	132·6	9·6	−17·3	0	1	
		4187	0·736	74·1	349·0	+16·2	0	3	
		4187	0·757	75·6	347·0	+15·3	0	2	
		4187	0·764	73·1	346·6	+17·2	1	7	
		4187	0·767	75·3	346·1	+15·6	0	4	867*c*
		4187	0·774	74·2	345·5	+16·5	0	6	
		4187	0·793	73·2	343·8	+17·4	4	29	
		4187	0·809	71·3	342·4	+19·0	0	12	
			0·753	137·1	0·9	−28·0			128
			0·695	125·8	0·0	−18·6			114
			0·882	129·8	344·7	−30·3			140
Sept. 29		Centre			(36·3)	(+6·7)	(393)	(2274)	(2310)
272·468	CL, AR		0·898	292·4	88·0	+23·0			167
			0·909	244·4	84·3	−19·9			201
			0·849	267·0	81·6	− 1·1			256
			0·910	230·9	79·4	−31·3			141
			0·674	282·9	66·2	+13·6			114
		4182*a*	0·517	288·8	54·2	+15·4	10	55	
		4182	0·461	289·3	50·4	+14·8	0	6	62*c*
		4182	0·443	291·6	49·0	+15·4	0	3	
		4180*a*	0·090	332·6	26·2	+11·3	66	400	
		4185	0·372	194·1	29·1	−14·4	0	1	
		4185	0·336	193·7	28·5	−12·3	0	6	
		4185*a*	0·372	187·3	26·6	−14·9	121	528	
		4185	0·341	185·3	25·6	−13·1	0	26	
		4185	0·412	183·9	25·5	−17·5	0	2	
		4185	0·356	182·7	24·8	−14·1	0	6	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4187, September 28–October 8. A few very small spots in an irregular stream, *f* Group 4183, on September 29. The group rapidly increases up to October 2, after which it declines again. Its general aspect is that of a very irregular stream of spots, without any dominant or stable members. It extends almost to touch Group 4183.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
272d·468	CL, AR	4185	0·394	179·8	23·7	−16·5	2	8	
		4185	0·364	177·9	23·0	−14·6	2	27	
		4185*b*	0·392	173·5	21·2	−16·2	22	181	
		4185*c*	0·368	172·9	21·1	−14·6	27	120	
		4185	0·410	172·5	20·6	−17·2	12	82	
		4185	0·381	168·2	19·2	−15·1	12	98	
		4183	0·282	57·1	9·7	+15·3	0	17	
		4183	0·306	63·0	7·5	+14·4	0	4	
		4183	0·326	56·0	7·5	+16·9	1	7	
		4183*a*	0·338	61·7	5·9	+15·6	23	149	
		4183	0·387	64·5	2·6	+15·7	2	17	
		4183	0·377	74·0	2·1	+12·2	0	6	
		4183	0·410	65·6	1·0	+16·0	0	12	
		4183	0·406	71·7	0·5	+13·5	0	4	
		4183	0·423	67·5	0·0	+15·4	3	19	
		4183	0·444	64·3	359·1	+17·2	0	14	
		4183*b*	0·440	72·0	358·4	+13·9	19	99	
		4183	0·446	68·2	358·4	+15·6	0	32	
		4183	0·463	61·6	358·4	+18·8	0	24	
		4184*a*	0·466	151·4	10·3	−17·6	8	22	
		4188	0·304	109·9	7·3	+ 0·5	0	2	
		4188	0·366	110·3	3·8	− 1·0	0	6	
		4187	0·604	74·1	347·0	+14·9	0	2	
		4187	0·621	71·1	346·1	+16·9	3	16	116*c*
		4187	0·655	70·7	343·5	+17·6	11	58	
		4189	0·979	68·7	304·0	+22·2	10	91	490*c*
			0·848	149·8	349·1	−41·6			328
			0·847	83·2	325·6	+ 9·3			163
			0·867	65·7	323·8	+24·4			390
			0·946	116·8	317·8	−22·7			78
Sept. 30		Centre			(23·8)	(+6·7)	(354)	(2150)	(2506)
273·429	AW, PT		0·944	268·6	81·6	+ 0·9			193
			0·951	234·3	75·2	−31·0			213
			0·826	253·8	64·4	− 9·4			172
			0·794	283·1	63·9	+14·4			197
			0·734	244·6	53·9	−13·6			200
		4182*a*	0·687	285·5	54·3	+15·4	15	50	230*f*
		4180*a*	0·268	288·2	26·1	+11·2	65	392	
		4185*a*	0·448	214·7	26·4	−15·1	133	549	
		4185	0·414	218·0	26·2	−12·6	1	5	
		4185	0·485	210·3	26·0	−18·3	1	13	
1895.				°	°	°			
273d·429	AW, PT	4185	0·420	211·0	24·0	−14·6	3	28	
		4185	0·445	208·2	23·7	−16·6	5	52	
		4185	0·464	205·6	23·2	−18·2	1	5	
		4185	0·450	206·1	23·0	−17·3	0	7	
		4185	0·416	208·7	23·0	−14·9	1	27	
		4185*c*	0·400	205·0	21·1	−14·7	12	94	
		4185*b*	0·427	202·8	21·0	−16·6	22	196	
		4185*d*	0·394	200·2	19·2	−15·1	12	115	
		4183	0·163	4·4	10·4	+15·9	2	9	
		4183	0·143	20·7	8·1	+14·3	0	6	
		4183	0·181	26·1	6·4	+15·9	32	172	
		4183	0·198	34·3	4·5	+16·0	0	5	
		4183	0·212	40·3	2·9	+15·8	12	51	
		4183	0·222	40·0	2·6	+16·3	0	2	
		4183	0·231	45·3	1·3	+15·9	1	28	
		4183	0·211	55·5	0·9	+13·3	0	7	
		4183	0·250	50·9	359·5	+15·5	3	17	
		4183	0·267	48·0	359·2	+16·8	3	22	
		4183	0·281	44·7	359·2	+18·0	0	2	
		4183	0·248	54·8	359·1	+14·6	0	19	
		4183	0·252	59·4	358·3	+13·8	17	77	
		4183	0·259	56·1	358·3	+14·7	0	5	
		4183	0·275	50·9	358·3	+16·5	0	19	
		4183	0·271	54·0	358·0	+15·6	0	10	
		4183	0·265	61·6	357·3	+13·7	0	3	
		4183	0·281	57·8	356·9	+15·0	1	7	
		4184*a*	0·413	177·4	10·0	−17·7	6	14	
		4187	0·405	67·7	348·4	+14·9	3	11	
		4187	0·407	69·2	348·1	+14·4	0	4	
		4187	0·412	66·3	348·1	+15·6	3	10	
		4187	0·426	69·0	346·9	+14·8	2	7	
		4187	0·440	66·7	346·4	+16·0	9	27	
		4187	0·458	65·6	345·4	+16·8	2	29	
		4187	0·455	68·0	345·2	+15·7	0	12	
		4187	0·486	63·6	343·9	+18·4	2	35	
		4187	0·483	66·7	343·6	+16·9	20	111	
		4189	0·911	70·3	304·9	+20·7	12	64	
		4189	0·914	69·1	304·6	+21·7	20	65	406*c*
		4189	0·930	67·2	302·0	+23·6	0	7	
			0·804	68·4	318·0	+21·2			225
			0·921	123·1	311·3	−27·0			157
			0·966	67·3	294·8	+23·6			293
Oct. 1		Centre			(11·1)	(+6·6)	(421)	(2390)	(2286)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4188, September 30. Two very small faint spots.
Group 4189, September 30–October 12. A number of distinct irregular spots in a stream, short, broad and nearly continuous. *a*, the leader, is a large irregular composite spot. *b*, the last spot on October 4, is similar but smaller. The group undergoes many changes, *a* having divided into two parts, *c* and *d*, by October 7. *c* and *d* have become large and nearly regular by October 10, and make up the chief part of the group.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for day).
1895.				°	°	°			
274d.489	M,AR		0·946	284·1	69·0	+15·5			197
			0·858	251·6	53·2	−12·1			571
		4182	0·854	283·8	56·1	+15·2	0	16	420f
		4182a	0·842	284·5	54·7	+15·7	14	50	
		4180a	0·488	281·3	26·2	+11·3	72	367	
		4185e	0·615	231·6	27·2	−16·7	27	169	
		4185	0·578	237·3	26·9	−12·4	0	18	
		4185a	0·585	233·1	25·9	−14·8	129	854	
		4185	0·579	225·0	22·5	−18·1	22	154	
		4185b	0·549	226·5	21·5	−16·2	35	245	
		4185c	0·532	228·7	21·4	−14·5	18	86	
		4185d	0·515	225·4	19·3	−15·0	27	196	
		4183a	0·240	313·4	7·5	+16·0	22	107	
		4183	0·240	318·5	6·6	+16·9	14	28	
		4183	0·222	321·4	5·4	+16·5	0	5	
		4183	0·181	319·5	4·0	+14·4	0	6	
		4183	0·200	326·3	3·7	+16·2	9	66	
		4183	0·194	333·4	2·3	+16·6	0	9	
		4183	0·148	326·6	1·9	+13·7	0	4	
		4183	0·173	334·5	1·5	+15·5	9	27	
		4183	0·165	345·9	359·5	+15·7	12	64	
		4183	0·184	351·5	358·7	+17·1	6	41	
		4183b	0·135	351·7	358·2	+14·3	8	170	
		4183	0·103	357·0	357·4	+12·5	0	5	
		4184a	0·460	207·8	10·0	−17·5	5	13	
		4187	0·165	39·8	350·9	+13·8	0	52	
		4187	0·240	41·5	347·6	+16·9	7	36	
		4187	0·234	47·0	346·9	+15·7	19	189	
		4187	0·296	45·9	344·2	+18·3	3	18	
		4187	0·288	49·7	343·9	+17·1	17	101	
		4187	0·323	43·9	343·4	+19·8	0	7	
		4189a	0·793	68·0	305·2	+21·4	48	333	543f
Oct. 2		Centre			(357·1)	(+6·6)	(523)	(3436)	(1731)
275·497	CL,FT		0·936	259·9	51·8	− 7·1			299
			0·910	248·8	45·7	−16·2			279
		4182a	0·940	283·9	54·6	+15·3	9	58	447f
		4182	0·935	285·3	53·8	+16·6	0	8	
		4180a	0·672	279·3	26·1	+11·1	62	310	
		4185e	0·773	243·3	29·5	−15·8	21	164	
		4185	0·737	246·3	27·4	−12·5	0	11	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
275d.497	CL,FT	4185	0·728	245·1	26·3	−13·1	0	19	
		4185a	0·729	241·6	25·3	−15·4	126	744	
		4185	0·724	236·6	23·2	−18·5	0	10	219c
		4185f	0·714	234·9	21·8	−19·1	9	123	
		4185b	0·694	238·3	21·6	−16·2	11	188	
		4185c	0·685	240·1	21·6	−14·8	11	70	
		4185d	0·665	238·1	19·5	−15·3	21	158	
		4183	0·484	294·8	11·1	+17·5	0	3	
		4183	0·470	294·6	10·2	+17·1	0	9	
		4183a	0·443	292·7	8·8	+15·7	13	48	
		4183	0·447	298·2	8·2	+18·1	0	3	
		4183	0·435	296·0	7·8	+16·9	3	11	
		4183	0·390	295·6	5·1	+15·7	6	19	
		4183	0·374	297·6	3·9	+16·0	3	13	
		4183	0·352	296·5	2·8	+15·1	0	4	
		4183	0·348	298·4	2·3	+15·7	4	15	
		4183	0·331	291·1	2·2	+13·0	0	6	
		4183	0·308	293·6	0·6	+13·3	1	5	
		4183c	0·295	299·8	359·1	+14·7	13	77	
		4183d	0·279	295·7	358·7	+13·3	7	68	
		4183	0·275	302·7	357·6	+14·9	2	8	
		4184a	0·586	227·1	10·5	−17·7	2	10	
		4187	0·180	324·6	350·0	+14·9	10	22	
		4187	0·187	333·5	348·8	+16·1	4	12	
		4187	0·194	339·0	347·9	+16·9	1	6	
		4187	0·160	337·2	347·5	+15·0	6	52	
		4187	0·132	336·8	346·9	+13·4	0	3	
		4187	0·179	344·1	346·7	+16·3	0	5	
		4187	0·163	349·4	345·6	+15·7	2	16	
		4187	0·178	352·6	345·2	+16·6	0	53	
		4187	0·182	358·5	344·1	+16·9	0	6	
		4187	0·182	1·8	343·5	+16·9	4	11	
		4187	0·169	5·1	342·9	+16·2	3	16	
		4187	0·229	8·9	341·7	+19·5	0	14	
		4189a	0·645	64·6	305·3	+21·2	36	180	
		4189	0·643	66·5	305·1	+20·0	0	9	
		4189	0·663	64·1	304·0	+21·9	5	22	
		4189	0·668	66·7	303·1	+20·3	1	9	
		4189	0·674	66·2	302·7	+20·7	0	8	
			0·703	56·9	302·4	+27·5			29
			0·787	64·0	293·1	+24·3			176
			0·949	80·7	271·5	+10·9			262
Oct. 3		Centre			(343·8)	(+6·5)	(396)	(2606)	(1711)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.

The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
276d·383	AW, FT		0·967	253·0	44·8	−14·6			127
			0·880	285·3	34·1	+16·5			175
			0·699	297·5	14·5	+23·6			103
		4182*a*	0·990	284·6	55·0	+15·3	0	21	256*f*
		4180*a*	0·804	279·1	25·9	+11·1	60	313	190*c*
		4185*e*	0·879	248·5	29·9	−15·4	19	129	
		4185	0·869	245·1	27·8	−17·9	0	8	
		4185*abc*	0·836	246·4	24·6	−15·7	120	938	
		4185	0·834	241·9	23·0	−19·1	0	14	
		4185*f*	0·820	241·2	21·5	−19·2	31	131	865*c*
		4185	0·796	245·0	20·4	−15·4	3	24	
		4185	0·791	243·6	19·5	−16·3	0	7	
		4185*d*	0·782	244·8	19·0	−15·1	11	85	
		4183	0·631	287·6	10·7	+16·0	0	2	
		4183	0·618	288·2	9·6	+16·2	0	5	
		4183	0·607	287·5	8·9	+15·7	7	15	
		4183	0·603	289·9	8·3	+17·0	5	11	
		4183	0·602	292·4	7·9	+18·4	0	4	
		4183	0·554	289·3	4·9	+15·9	7	32	
		4183	0·557	291·8	4·8	+17·4	0	1	
		4183	0·543	291·6	3·8	+17·0	0	2	
		4183	0·530	289·1	3·3	+15·5	0	4	
		4183	0·516	289·7	2·2	+15·6	1	2	
		4183	0·509	285·6	2·2	+13·4	0	2	
		4183	0·513	290·5	1·9	+15·9	4	13	
		4183	0·483	288·4	0·2	+14·4	6	21	
		4183	0·481	290·4	359·8	+15·3	8	31	
		4183	0·473	286·7	359·8	+13·5	5	18	
		4183*c*	0·461	290·2	358·6	+14·9	12	36	
		4183*d*	0·454	287·0	358·5	+13·3	10	90	
		4183	0·461	293·2	358·2	+16·2	0	13	
		4183	0·444	290·4	357·5	+14·7	5	15	
		4183	0·420	290·7	355·9	+14·4	0	2	
		4187	0·344	294·8	350·8	+14·4	2	14	
		4187	0·331	288·6	350·7	+12·1	3	10	
		4187	0·323	292·9	349·8	+13·3	0	8	
		4187	0·334	299·4	349·6	+15·5	3	9	
		4187	0·329	297·5	349·6	+14·8	1	25	
		4187	0·311	293·7	349·0	+13·3	0	17	
		4187	0·310	299·0	348·3	+14·8	2	5	
		4187	0·305	296·7	348·3	+14·0	0	4	
		4187	0·319	303·4	348·1	+16·3	4	13	
		4187	0·298	300·5	347·4	+14·9	7	24	
		4187	0·295	311·6	345·4	+17·5	0	13	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
276d·383	AW, FT	4187	0·275	311·5	344·5	+16·7	1	13	
		4187	0·266	313·7	343·6	+16·9	4	9	
		4187	0·284	318·1	343·6	+18·4	0	9	
		4187	0·272	317·3	343·2	+17·8	0	2	
		4187	0·283	326·5	341·6	+19·9	0	10	
		4189*a*	0·491	56·7	306·1	+21·4	27	137	
		4189	0·503	59·2	304·7	+20·6	5	34	
		4189	0·515	56·8	304·5	+22·0	7	29	
		4189	0·538	54·3	303·7	+23·9	0	2	
		4189	0·527	57·2	303·6	+22·2	6	17	
		4189*b*	0·522	60·1	303·3	+20·7	5	67	
		4190	0·903	120·3	273·8	−23·8	0	5	117*c*
		4190	0·919	119·5	271·3	−23·9	0	5	
			0·916	111·8	269·5	−17·1			301
			0·911	79·5	265·9	+12·2			659
			0·963	66·8	256·5	+24·1			130
Oct. 4		Centre			(332·1)	(+6·4)	(391)	(2470)	(2923)
277·226	CL, AW		0·928	283·9	29·8	+15·3			152
			0·784	296·5	11·3	+24·7			158
I.		4180*a*	0·903	279·1	26·0	+11·0	88	329	223*c*
		4185*e*	0·951	251·6	30·1	−15·3	31	136	
		4185*a*	0·924	249·8	25·2	−15·9	158	728	
		4185	0·910	251·1	23·4	−14·2	0	9	
		4185*c*	0·905	250·4	22·6	−14·7	0	23	
		4185*b*	0·903	248·6	21·9	−16·2	16	127	
		4185*f*	0·906	245·2	21·4	−19·2	26	110	1267*c*
		4185	0·895	247·4	20·5	−16·9	0	11	
		4185	0·891	248·7	20·4	−15·7	0	7	
		4185	0·885	249·4	19·8	−14·9	37	115	
		4185*d*	0·888	247·7	19·7	−16·4	0	9	
		4183	0·752	285·6	9·7	+15·9	0	8	
		4183	0·744	285·3	9·0	+15·7	0	5	
		4183	0·745	287·0	8·9	+16·9	6	15	197*c*
		4183	0·733	286·5	7·9	+16·4	0	6	
		4183	0·676	286·3	3·2	+15·7	8	42	
		4183	0·630	289·2	359·3	+17·0	0	7	
		4183*d*	0·622	284·1	359·2	+13·8	24	160	
		4183*c*	0·622	286·0	359·1	+15·0	1	14	
		4183	0·617	286·7	358·6	+15·3	3	12	
		4183	0·618	288·5	358·5	+16·4	0	7	
		4183	0·605	285·6	357·8	+14·5	8	37	
		4183	0·581	286·4	356·0	+14·7	0	7	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4190, October 4. A pair of very small spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
277d·226	CL, AW	4187	0·516	286·0	351·6	+13·7	3	9	
		4187	0·509	284·4	351·2	+12·8	1	29	
I.		4187	0·508	285·6	351·1	+13·4	0	5	
		4187	0·509	287·9	350·9	+14·6	1	6	
		4187	0·507	289·0	350·6	+15·0	3	20	
		4187	0·490	286·3	349·8	+13·5	0	3	
		4187	0·493	288·8	349·7	+14·7	0	5	
		4187	0·483	292·0	348·7	+16·1	0	4	
		4187	0·475	287·2	348·7	+13·7	2	14	
		4187	0·466	289·3	347·9	+14·6	4	14	
		4187	0·470	292·7	347·7	+16·2	0	6	
		4187	0·445	296·5	345·5	+17·2	0	6	
		4187	0·435	298·3	344·6	+17·8	0	2	
		4187	0·426	295·1	344·6	+16·3	0	2	
		4187	0·419	296·8	343·9	+16·8	2	8	
		4187	0·426	304·1	342·9	+19·7	3	16	
		4187	0·424	305·3	342·5	+20·1	0	6	
		4187	0·378	298·0	341·2	+16·2	0	2	
		4189	0·332	40·3	307·8	+20·9	0	10	
		4189*a*	0·362	42·0	306·0	+21·7	50	206	
		4189*b*	0·380	47·6	303·6	+20·9	24	138	
		4189	0·394	44·8	303·6	+22·4	5	23	
		4189	0·431	42·6	302·4	+24·5	1	5	
		4189	0·445	41·2	302·1	+25·5	0	5	
		4189	0·406	48·4	302·0	+21·7	3	15	
		4191	0·486	50·3	297·0	+23·9	0	5	
		4191	0·472	59·1	295·6	+19·8	0	4	
		4191	0·494	53·6	295·6	+22·8	1	9	
		4191	0·516	52·8	294·4	+23·9	0	5	
			0·807	116·1	272·0	−16·6			97
			0·870	125·8	268·9	−26·8			138
			0·834	78·6	264·2	+13·0			284
			0·849	86·7	262·7	+ 6·2			103
			0·918	116·3	259·4	−21·0			224
			0·908	67·3	255·5	+23·3			142
			0·930	76·8	251·9	+14·6			235
Oct. 5		Centre			(321·0)	(+6·4)	(509)	(2506)	(3220)
278·261	CL, FT		0·896	254·0	8·5	−11·3			68
			0·854	293·2	5·6	+23·0			837
I.			0·875	244·3	3·5	−18·8			336
		4180*a*	0·977	279·4	25·7	+10·6	83	343	182*f*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
278d·261	CL, FT	4185*e*	0·997	253·5	30·5	−15·8	0	213	
		4185*a*	0·985	252·2	24·8	−16·3	0	718	
I.		4185*b*	0·977	251·6	22·1	−16·4	0	148	
		4185*f*	0·978	248·3	21·9	−19·7	21	82	661*c*
		4185	0·966	252·4	19·6	−15·1	0	19	
		4185*d*	0·963	251·5	18·8	−15·9	22	46	
		4183	0·878	285·7	9·1	+16·8	0	8	
		4183	0·833	284·4	3·9	+15·4	10	32	
		4183	0·818	284·6	2·3	+15·5	0	4	
		4183*d*	0·779	281·8	358·6	+13·1	7	106	848*c*
		4183	0·769	283·2	357·6	+14·1	5	27	
		4183	0·750	283·0	355·9	+13·9	0	7	
		4187	0·702	281·8	351·9	+12·7	3	7	
		4187	0·698	281·1	351·9	+13·4	0	4	
		4187	0·671	282·9	349·3	+13·3	0	3	
		4187	0·660	283·9	348·4	+13·9	5	15	
		4187	0·654	282·3	348·1	+12·8	0	7	
		4187	0·651	286·9	347·4	+15·7	0	6	
		4187	0·635	285·7	346·4	+14·8	2	7	207*c*
		4187	0·622	288·0	345·1	+16·0	0	3	
		4187	0·616	289·7	344·5	+17·1	6	17	
		4187	0·602	288·5	343·6	+16·1	7	22	
		4187	0·587	287·2	342·7	+15·1	0	6	
		4187	0·587	292·4	342·0	+18·1	3	8	
		4187	0·588	294·3	341·7	+19·2	0	4	
		4192	0·176	223·0	314·2	− 1·1	2	9	
		4192	0·176	218·1	313·5	− 1·7	0	2	
		4192	0·160	212·0	312·1	− 1·5	4	11	
		4192	0·150	211·6	311·8	− 1·0	0	1	
		4192	0·171	206·5	311·7	− 2·5	2	8	
		4192	0·157	208·0	311·5	− 1·7	0	4	
		4192	0·177	204·4	311·5	− 3·0	0	2	
		4192	0·167	204·3	311·2	− 2·5	0	3	
		4192	0·147	205·0	310·8	− 1·3	0	3	
		4192	0·135	203·8	310·4	− 0·8	3	23	
		4192	0·163	197·2	310·1	− 2·7	1	4	
		4192	0·137	197·5	309·7	− 1·2	2	6	
		4189	0·231	3·2	306·5	+19·6	0	1	
		4189*a*	0·257	4·3	306·1	+21·1	52	204	
		4189	0·270	9·6	304·5	+21·7	3	27	
		4189	0·280	13·3	303·3	+22·0	2	12	
		4189*b*	0·259	15·3	303·1	+20·7	33	175	
		4189	0·283	18·7	301·7	+21·7	0	6	
		4189	0·253	22·7	301·4	+19·7	0	4	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4191, October 5. A few very small spots.
Group 4192. October 6–11. A few small spots appearing suddenly near the central meridian on October 6. The group has greatly increased by the succeeding day, and become two parallel straight streams of spots. The group then diminishes, the two streams become irregular and confused with each other, all the spots become very small, except *a*. the leader on October 9, and finally, on October 11, *a* remains alone.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
278d·261	CL,FT	4189	0·276	20·7	301·3	+21·2	2	8	
			0·768	133·2	268·6	−26·8			
I.			0·666	83·8	265·4	+ 8·8			89
			0·818	122·1	259·3	−21·6			157
			0·795	78·1	254·4	+13·3			392
			0·853	86·4	248·6	+ 6·4			228
			0·872	64·8	247·0	+25·0			88
Oct. 6		Centre			(307·3)	(+6·3)	(280)	(2375)	89 (4182)
279·428	CL,FT		0·958	255·0	7·4	−12·4			
			0·934	292·6	1·5	+23·3			96
			0·956	246·0	0·7	−20·7			464
			0·741	299·0	337·6	+25·5			154
		4183	0·916	283·6	358·8	+15·0	0	12	79
		4183	0·912	279·2	358·2	+12·8	7	75	502c
		4183	0·907	282·2	357·5	+13·7	0	19	
		4187	0·857	282·2	351·2	+13·7	0	15	
		4187	0·846	282·7	350·0	+14·1	15	48	
		4187	0·838	281·8	349·1	+13·3	0	6	
		4187	0·812	283·9	346·4	+14·9	6	12	357c
		4187	0·804	285·8	345·5	+16·5	10	25	
		4187	0·787	285·5	343·8	+16·0	0	11	
		4187	0·767	289·7	341·5	+19·1	3	24	129c
		4192	0·435	251·9	316·2	− 2·0	9	20	
		4192	0·414	254·5	315·3	− 0·6	3	10	
		4192a	0·401	250·6	314·0	− 1·8	28	116	
		4192	0·392	252·9	313·8	− 0·8	0	3	
		4192	0·372	252·1	312·5	− 0·7	7	67	
		4192	0·355	249·8	311·3	− 1·1	0	2	121c
		4192	0·357	248·4	311·2	− 1·6	0	9	
		4192	0·346	250·9	310·9	− 0·5	1	4	
		4192	0·349	245·3	310·3	− 2·4	8	18	
		4192	0·334	248·9	310·0	− 0·9	11	30	
		4189	0·359	314·0	307·8	+20·5	1	5	
		4189	0·346	313·2	307·4	+19·7	1	5	
		4189c	0·363	318·0	307·0	+21·7	14	69	
		4189d	0·348	316·5	306·7	+20·7	21	67	
		4189	0·355	321·3	305·7	+22·2	2	13	
		4189	0·323	316·6	305·5	+19·7	5	26	
		4189	0·333	318·7	305·4	+20·6	1	7	146c
		4189	0·340	321·3	305·0	+21·5	1	5	
		4189	0·341	324·5	304·2	+22·2	0	2	
1895.				°	°	°			
279d·428	CL,FT	4189b	0·317	322·5	303·8	+20·7	18	127	
		4189	0·303	325·7	302·4	+20·7	5	14	
		4189	0·311	328·8	301·8	+21·5	0	5	
			0·895	83·9	228·1	+ 8·2			266
Oct. 7		Centre			(291·9)	(+6·3)	(177)	(871)	(2314)
280·298	CL, AW		0·888	293·7	343·0	+23·8			129
I.		4183	0·972	281·7	357·7	+12·8	7	48	
		4187	0·940	282·4	351·1	+13·7	5	25	
		4187	0·922	283·6	348·3	+14·9	0	13	947c
		4187	0·921	281·7	348·1	+13·1	0	4	
		4187	0·908	284·0	346·2	+15·3	0	25	
		4187	0·869	288·9	341·0	+19·5	2	11	484c
		4192	0·626	256·2	317·9	− 3·7	0	10	
		4192	0·610	257·9	317·0	− 2·4	3	11	
		4192	0·595	257·1	315·8	− 2·6	6	16	
		4192a	0·583	258·0	315·1	− 1·9	23	74	
		4192	0·578	259·5	315·0	− 0·9	0	3	
		4192	0·569	256·7	314·0	− 2·4	0	3	
		4192	0·549	258·7	312·9	− 1·0	0	10	
		4192	0·536	258·5	312·1	− 0·9	0	2	
		4192	0·534	256·3	311·6	− 2·0	0	2	
		4192	0·527	257·6	311·4	− 1·2	0	1	
		4192	0·521	258·8	311·1	− 0·5	0	4	
		4192	0·513	258·0	310·5	− 0·8	0	1	
		4192	0·513	254·6	310·0	− 2·4	5	24	
		4192	0·502	258·0	309·8	− 0·5	2	8	
		4192	0·498	256·5	309·3	− 1·2	1	6	
		4189	0·511	302·0	308·1	+21·2	0	14	
		4189c	0·499	303·8	306·9	+21·7	25	89	
		4189d	0·489	301·1	306·9	+20·1	28	84	
		4189	0·473	302·9	305·5	+20·4	0	2	
		4189	0·484	306·0	305·4	+22·2	0	13	
		4189	0·462	299·9	305·4	+18·9	0	14	
		4189	0·474	304·7	305·1	+21·2	0	3	
		4189	0·476	305·9	304·9	+21·8	0	1	
		4189	0·455	301·1	304·8	+19·2	0	2	
		4189b	0·456	304·8	304·0	+20·8	12	108	
		4189	0·469	308·3	303·9	+22·6	0	2	
		4189	0·459	307·8	303·4	+22·0	0	2	
		4189	0·442	305·7	303·0	+20·6	2	6	
		4189	0·436	306·8	302·3	+20·9	2	7	
			0·755	83·1	231·3	+ 9·3			99

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
280d·298	CL, AW		0·863	70·5	220·8	+20·0			39
			0·867	82·8	220·1	+ 9·3			164
I.			0·925	113·5	216·9	−19·0			199
			0·971	67·7	203·2	+23·1			112
Oct. 8		Centre			(280·5)	(+6·2)	(123)	(648)	(2173)
281·206	CL, AW		0·946	287·2	340·3	+18·3			797
			0·835	295·8	324·2	+24·8			163
I.		4192*a*	0·753	261·3	316·5	− 2·5	32	95	245*c*
		4192	0·701	263·8	312·5	+ 0·1	1	3	
		4192	0·700	262·1	312·2	− 1·1	2	8	
		4192	0·692	261·6	311·5	− 1·3	0	4	141*c*
		4192	0·683	259·8	310·6	− 2·4	0	17	
		4192	0·662	262·3	309·3	− 0·5	0	22	
		4189*c*	0·647	294·3	307·3	+20·2	23	107	
		4189*d*	0·644	297·2	306·5	+22·0	31	132	
		4189	0·640	300·3	305·5	+23·7	0	5	
		4189	0·622	294·9	305·2	+20·0	0	4	
		4189	0·652	305·1	305·1	+27·0	0	8	
		4189	0·646	303·9	305·0	+26·0	0	1	
		4189*b*	0·621	296·1	305·0	+20·8	2	13	238*c*
		4189	0·608	293·5	304·5	+19·0	5	25	
		4189	0·623	299·4	304·4	+22·7	0	4	
		4189	0·617	298·3	304·2	+22·9	5	15	
		4189	0·610	297·1	303·9	+21·1	2	12	
		4189	0·602	296·6	303·5	+20·6	0	8	
		4189	0·591	297·5	302·5	+20·9	0	5	
		4189	0·600	300·8	302·4	+22·9	0	5	
			0·736	82·8	220·9	+ 9·4			157
			0·801	116·3	220·1	−16·8			136
			0·897	121·3	211·3	−24·5			141
			0·876	110·1	210·6	−14·3			118
			0·940	66·2	197·9	+24·5			205
Oct. 9		Centre			(268·5)	(+6·1)	(103)	(493)	(2341)
282·221	CL, AW		0·918	293·1	317·7	−18·4			190
			0·759	299·2	302·3	+25·9			125
I.		4192*a*	0·891	263·3	317·3	− 3·1	19	64	
		4192	0·891	261·4	317·0	− 4·8	0	5	
		4192	0·876	264·6	315·6	− 1·7	0	4	
		4192	0·873	265·4	315·4	− 1·0	0	3	
		4192	0·862	263·4	313·9	− 2·5	0	3	
1895.				°	°	°			
282d·221	CL, AW	4192	0·853	266·5	313·3	+ 0·3	0	4	462*c*
		4192	0·844	264·8	312·1	− 1·1	0	4	
I.		4192	0·843	264·1	311·9	− 1·6	0	6	
		4192	0·842	263·5	311·7	− 2·1	0	4	
		4192	0·832	262·9	310·6	− 2·5	0	3	
		4192	0·824	263·8	309·9	− 1·6	0	2	
		4192	0·816	265·3	309·4	− 0·3	0	2	
		4189	0·817	291·7	309·4	+21·2	0	7	
		4189	0·805	289·7	308·4	+19·4	0	5	
		4189*c*	0·796	290·3	307·4	+19·8	27	104	
		4189*d*	0·788	292·8	306·3	+21·7	30	137	435*c*
		4189	0·774	291·2	305·2	+20·3	2	5	
		4189	0·773	290·9	305·1	+20·0	0	4	
		4189*b*	0·773	292·7	304·9	+21·4	7	44	
		4189	0·762	289·4	304·2	+18·7	3	12	
			0·742	121·3	213·4	−18·1			93
			0·812	125·2	208·8	−23·7			121
			0·797	66·4	203·1	+22·4			117
			0·904	131·8	201·3	−33·5			190
			0·857	75·6	195·9	+15·4			53
			0·873	60·6	195·4	+28·5			233
			0·933	52·8	187·2	+36·8			113
			0·928	70·8	186·4	+20·1			421
			0·955	105·1	184·6	−12·4			200
Oct. 10		Centre			(255·1)	(+6·1)	(88)	(422)	(2753)
283·467	AW, CL		0·902	308·0	300·8	+36·7			105
		4192*a*	0·984	265·8	317·6	− 3·1	7	39	545*f*
		4189	0·932	290·0	307·9	+20·8	0	7	
		4189*c*	0·926	289·2	306·9	+20·0	11	57	884*f*
		4189*d*	0·922	291·1	306·2	+21·8	17	112	
			0·738	56·2	194·5	+28·6			162
			0·798	66·4	186·5	+22·4			347
			0·864	110·7	182·2	−14·5			211
			0·892	52·4	178·0	+36·0			162
			0·960	69·5	163·9	+21·4			152
Oct. 11		Centre			(238·6)	(+6·0)	(35)	(215)	(2568)
284·524	AW, FT		0·914	296·6	290·6	+26·7			105
			0·768	229·4	264·8	−25·4			119
		4189*d*	0·985	291·1	306·2	+21·8	0	55	641*c*
		4193	0·807	288·4	278·3	+18·4	5	12	73*c*

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4193, October 12. A small spot *sf* Group 4189.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
284d.524	AW, FT	4194	0·690	240·4	263·0	−15·2	0	7	97c
		4194	0·675	238·3	261·2	−16·0	0	8	
		4194	0·667	239·7	261·1	−14·9	0	2	
		4195a	0·400	190·0	228·9	−17·1	5	11	
		4195	0·398	184·4	226·5	−17·3	0	7	
		4196	0·502	147·9	208·4	−19·3	4	12	94c
		4196	0·529	147·1	206·9	−20·6	0	2	
		4197a	0·931	77·0	155·5	+14·3	12	36	258f
			0·617	100·3	187·5	− 1·6			45
			0·759	44·6	182·9	+37·2			117
			0·701	63·3	182·1	+22·8			192
			0·863	44·8	170·7	+41·4			240
			0·820	69·2	170·0	+20·4			177
			0·857	55·2	168·3	+32·6			196
			0·835	83·4	167·9	+ 8·8			115
			0·938	119·0	160·5	−24·5			123
			0·915	66·0	158·4	+24·3			338
			0·943	103·9	156·1	−11·0			651
Oct. 12		Centre			(224·7)	(+6·0)	(26)	(152)	(3581)
285·221	CL,AW		0·904	294·2	280·2	+24·3			114
			0·896	247·0	275·3	−17·6			92
I.			0·856	287·0	274·5	−17·6			116
			0·813	232·7	261·2	−25·4			224
		4198	0·848	276·2	273·8	+ 8·4	0	3	251c
		4198	0·826	275·2	271·5	+ 7·6	0	2	
		4198	0·779	275·8	267·0	+ 8·2	0	8	
		4198	0·740	278·3	263·5	+10·1	0	3	
		4195a	0·450	210·8	229·5	−16·9	10	32	
		4195	0·435	209·9	228·6	−16·3	0	1	
		4195	0·440	204·3	226·5	−17·8	0	2	
		4195	0·420	205·1	226·3	−16·5	1	6	
		4195	0·414	205·7	226·3	−16·0	0	2	
		4196	0·438	164·7	208·6	−19·0	2	7	
		4197a	0·868	77·1	155·1	+14·1	13	39	181nf
			0·875	66·2	155·0	+23·6			90
			0·891	105·4	154·8	−10·9			286
Oct. 13		Centre			(215·6)	(+5·9)	(26)	(105)	(1354)
286·530	CL,FT		0·925	279·2	266·4	+10·7			153
			0·916	269·9	264·5	+ 2·3			126
			0·911	240·0	258·0	−24·2			305
1895.				°	°	°			
286d.530	CL,FT		0·832	283·7	254·7	+14·6			86
			0·816	293·3	252·2	+22·3			61
		4195a	0·641	234·6	231·3	−16·9	3	9	
		4199	0·378	275·3	220·5	+ 7·4	0	6	
		4199	0·358	277·2	219·2	+ 8·0	0	27	
		4199	0·342	271·4	218·3	+ 5·9	0	2	
		4196	0·448	204·8	209·7	−18·3	1	4	
		4197a	0·671	76·0	156·4	+13·7	12	96	203c
		4197	0·672	77·8	156·2	+12·5	0	4	
		4197	0·711	77·8	153·1	+12·7	1	6	
			0·820	112·7	147·0	−14·9			407
			0·951	108·3	129·0	−15·4			373
Oct. 14		Centre			(198·3)	(+5·8)	(17)	(154)	(1714)
287·533	AW,CL		0·949	282·5	257·3	+13·7			239
			0·961	246·8	255·3	−20·4			281
			0·934	293·7	254·4	+24·2			98
			0·744	276·5	233·3	+ 8·7			65
		4199	0·583	273·5	220·8	+ 6·7	0	3	
		4199	0·560	275·7	219·2	+ 7·9	1	6	
		4196	0·576	224·4	210·2	−19·1	0	1	
		4196	0·554	224·7	209·2	−17·9	1	2	
		4197a	0·478	71·9	157·4	+13·6	12	84	
		4197	0·499	72·3	155·9	+13·7	2	6	
		4197	0·524	71·2	154·4	+14·6	0	4	
		4197	0·533	68·4	154·2	+16·2	1	7	
		4197	0·548	72·7	152·6	+14·2	0	2	
		4200a	0·929	108·9	119·7	−15·2	5	41	507c
		4200	0·948	108·0	117·0	−15·0	2	9	
			0·793	84·7	132·5	+ 7·7			83
			0·853	115·0	131·0	−17·8			82
			0·932	79·5	115·9	+11·9			159
Oct. 15		Centre			(185·1)	(+5·7)	(24)	(165)	(1514)
288·665	CL,AW		0·948	296·1	241·9	+26·5			252
			0·916	278·9	236·8	+10·4			188
			0·912	243·9	231·3	−21·1			227
			0·760	229·8	209·8	−25·0			105
			0·865	301·0	228·2	+29·4			95
		4197a	0·250	56·2	157·8	+13·5	15	64	
		4197	0·273	60·9	156·0	+13·1	0	10	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4194, October 12. Three very small faint spots.
Group 4195, October 12–14. A small spot, *a*, followed by a few small companions on October 12 and 13.
Group 4196, October 12–15. One or two very small unstable spots.
Group 4197, October 12–22. A regular spot, *a*, followed, October 14–19, by a few very small spots in a straight stream.
Group 4198, October 13. Four very small spots in a straight stream.
Group 4199, October 14–15. Three faint ill-defined spots on October 14. The last has disappeared by October 15.
Group 4200, October 15–17. A diminishing spot, *a*, with a small companion on October 15.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
288d·665	CL, AW	4197	0·314	54·8	154·7	+15·8	1	9	
		4197	0·317	62·4	153·4	+13·8	0	14	
		4197	0·358	70·5	150·0	+12·1	0	3	
		4200*a*	0·805	113·7	120·5	−15·3	3	19	392*c*
Oct. 16		Centre			(170·1)	(+5·6)	(19)	(119)	(1259)
289·435	CL, AW		0·904	278·6	224·9	+10·1			282
			0·863	244·7	215·1	−18·5			360
		4197*a*	0·140	9·4	158·6	+13·4	22	76	
		4197	0·158	21·1	156·6	+14·0	0	9	
		4197	0·174	20·5	156·3	+14·8	0	5	
		4197	0·184	22·9	155·7	+15·2	1	7	
		4200*a*	0·694	118·6	120·9	−15·1	3	10	183*f*
			0·821	118·7	110·2	−19·7			115
Oct. 17		Centre			(159·9)	(+5·5)	(26)	(107)	(940)
290·539	AW, FT		0·953	277·6	218·1	+ 8·9			74
			0·917	251·3	209·1	−14·7			133
			0·917	241·1	206·4	−23·7			89
			0·842	292·7	202·1	+22·0			117
			0·849	300·7	201·5	+28·8			100
		4197*a*	0·268	301·4	158·9	+13·3	15	56	
		4197	0·232	307·5	156·3	+13·5	0	15	
			0·934	100·9	77·7	− 8·1			91
Oct. 18		Centre			(145·4)	(+5·5)	(15)	(71)	(604)
291·242	AW, CL		0·946	230·3	198·3	−34·8			149
			0·844	293·5	192·9	+22·7			414
I.			0·822	303·6	188·4	+30·4			110
			0·746	296·4	182·5	+23·1			98
		4197*a*	0·402	291·5	158·6	+13·4	12	33	
		4197	0·400	295·7	157·9	+15·0	0	2	
		4201*a*	0·912	80·3	70·0	+11·1	5	21	} 247*c*
		4201*b*	0·930	80·2	67·3	+11·1	4	22	
			0·907	124·3	78·3	+27·9			141
			0·945	73·2	64·6	+17·7			140
Oct. 19		Centre			(136·1)	(+5·4)	(21)	(78)	(1299)
1895.				°	°	°			
292d·181	AW, FT		0·936	299·7	192·7	+29·6			99
			0·926	290·7	191·6	+21·1			343
I.			0·891	254·4	184·6	−11·3			208
			0·798	293·5	175·6	+21·9			122
		4197*a*	0·583	285·4	158·8	+13·3	7	27	
		4201*a*	0·783	80·3	72·1	+10·9	44	113	}
		4201	0·801	79·9	70·4	+11·3	0	30	
		4201	0·809	80·0	69·6	+11·3	0	6	
		4201	0·820	81·2	68·5	+10·3	23	58	} 494*c*
		4201*b*	0·830	80·2	67·5	+11·1	7	29	
		4201	0·835	79·2	67·0	+11·9	5	25	}
		4202*a*	0·808	74·4	70·0	+15·7	0	4	124*c*
			0·871	108·4	65·8	−13·1			144
			0·908	98·5	59·5	− 5·4			284
			0·899	74·8	59·5	+16·0			111
Oct. 20		Centre			(123·7)	(+5·3)	(86)	(292)	(1929)
293·223	AW, FT		0·940	256·6	178·2	−10·7			92
			0·896	294·3	173·0	+24·0			183
I.			0·889	307·6	169·6	+35·5			77
			0·777	248·8	157·7	−12·8			177
			0·821	319·5	155·8	+42·2			62
		4197*a*	0·752	282·9	158·5	+13·1	7	23	
		4201	0·584	80·7	74·3	+ 9·7	0	1	
		4201*a*	0·599	78·6	73·3	+11·0	78	335	
		4201	0·625	80·7	71·3	+ 9·9	0	1	
		4201	0·626	78·5	71·3	+11·3	0	6	
		4201	0·634	78·8	70·7	+11·1	1	15	
		4201	0·638	81·8	70·3	+ 9·2	0	2	
		4201	0·639	79·6	70·3	+10·7	0	3	
		4201	0·646	79·0	69·8	+11·0	0	3	
		4201	0·649	81·8	69·5	+ 9·3	0	1	
		4201	0·656	78·8	69·1	+11·3	0	4	
		4201	0·657	77·7	69·1	+12·0	1	6	
		4201	0·661	81·5	68·6	+ 9·5	0	5	
		4201	0·668	82·0	68·0	+ 9·2	0	1	
		4201*b*	0·676	79·0	67·5	+11·3	55	286	
		4202*a*	0·634	71·8	71·4	+15·4	2	6	
		4202*b*	0·672	71·7	68·5	+16·0	3	9	
		4203*a*	0·981	106·7	33·2	−15·3	0	22	327*c*
			0·804	102·0	57·8	− 6·5			154
			0·816	73·6	55·4	+16·4			188
			0·901	111·1	48·9	+16·4			106
Oct. 21		Centre			(109·9)	(+5·2)	(147)	(729)	(1366)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4201, October 19–30. A pair of small spots, *a* and *b*, on October 19. The group rapidly increases in size on the succeeding days, and becomes a fine stream, of which *a* and *b*, now two large composite spots, are the first and last. Later, *a* becomes regular, and *b* divides into two spots, *c* and *d*. On October 29 the group consists almost entirely of six well defined spots, *a*, *c*, *d*, *e*, *f* and *g*.
Group 4202, October 20–26. A very small spot, *a*, on October 20 *n* of Group 4201. A second, *b*, forms a pair with it on October 21. *b* remains alone on October 22. The group has expanded into a short stream by October 24, after which it diminishes again.
Group 4203, October 21–25. Three small spots, *a*, *b* and *c*. *a* has disappeared by October 23, *b* by October 24. Two very small spots precede *c* on October 25.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
294d·278	AW, FT		0·896	254·6	157·5	−11·3			268
			0·898	314·9	154·8	+42·1			141
I.			0·838	294·4	151·9	+23·2			90
		4197*a*	0·887	282·0	158·7	+13·0	0	18	149*nf*
		4197	0·871	282·0	156·7	+13·0	0	6	
		4204	0·292	152·8	88·3	− 9·8	0	1	
		4201*a*	0·385	74·2	73·9	+10·9	79	380	
		4201	0·416	68·1	72·7	+13·7	0	3	
		4201	0·418	77·7	71·6	+ 9·8	7	23	
		4201	0·461	75·0	69·1	+11·5	6	20	
		4201	0·459	79·6	68·9	+ 9·4	0	4	
		4201	0·471	73·7	68·6	+12·2	2	26	
		4201	0·478	72·4	68·3	+12·9	0	1	
		4201*b*	0·486	76·5	67·3	+11·1	81	278	
		4202*b*	0·488	66·3	68·4	+15·9	1	6	
		4203*a*	0·913	109·8	33·1	−15·7	0	6	1025*c*
		4203*b*	0·912	107·2	32·7	−13·3	3	11	
		4203*c*	0·929	107·6	30·2	−14·2	4	14	
		4205*a*	0·961	109·0	24·7	−16·6	66	423	
		4206	0·940	77·0	25·6	+14·0	24	223	1149*c*
		4206	0·954	77·0	23·0	+14·0	5	50	
		4206	0·957	78·2	22·4	+12·8	0	15	
		4206	0·959	76·0	21·9	+14·9	0	44	
		4207*a*	0·948	80·3	24·2	+10·9	7	47	
		4207*b*	0·953	82·4	23·3	+ 8·8	7	52	
		4207*c*	0·958	79·9	22·3	+11·1	19	107	
		4207	0·961	80·9	21·6	+10·2	4	25	
		4207	0·967	80·4	20·3	+10·6	0	36	
Oct. 22		Centre			(96·0)	(+5·2)	(315)	(1819)	(2822)
295·204	AW, FT		0·972	256·2	158·6	−12·1			182
			0·942	284·3	154·6	+15·1			152
I.			0·937	294·4	153·4	+24·6			93
			0·826	245·7	135·5	−16·8			144
		4201*a*	0·192	56·8	74·5	+11·0	86	387	
		4201	0·257	48·7	72·4	+14·7	0	2	
		4201	0·215	69·9	72·2	+ 9·2	2	12	
		4201	0·226	65·9	71·9	+10·3	6	28	
		4201	0·231	63·5	71·8	+10·9	0	1	
		4201	0·231	68·8	71·3	+ 9·8	0	3	
		4201	0·282	53·9	70·3	+14·5	1	6	
		4201	0·263	64·8	69·9	+11·4	0	4	
		4201	0·306	51·7	69·5	+15·9	0	2	
1895.				°	°	°			
295d·204	AW, FT	4201	0·278	62·6	69·3	+12·3	2	27	
		4201*b*	0·297	66·9	67·8	+11·6	60	311	
I.		4202	0·286	51·2	70·6	+15·3	0	1	
		4202*b*	0·326	51·5	68·5	+16·6	2	9	
		4203*b*	0·805	110·8	33·4	−13·4	3	11	858*c*
		4203*c*	0·836	110·7	30·3	−14·2	0	17	
		4205*a*	0·889	111·5	24·5	−16·5	57	339	
		4206	0·841	79·0	26·6	+12·0	0	2	890*c*
		4206	0·845	77·0	26·2	+13·7	9	41	
		4206	0·854	78·0	25·2	+12·9	0	3	
		4206	0·857	75·5	24·9	+15·0	5	69	
		4206	0·862	76·8	24·3	+14·0	6	46	
		4206	0·867	75·4	23·7	+15·2	0	2	
		4206	0·875	76·3	22·8	+14·4	3	16	
		4206	0·879	78·1	22·2	+12·9	0	5	
		4207*b*	0·862	82·4	24·2	+ 9·1	10	56	
		4207*a*	0·864	79·9	24·0	+11·3	6	31	
		4207*c*	0·879	80·0	22·1	+11·3	10	120	
			0·941	63·9	13·8	+26·2			104
			0·945	72·5	12·6	+18·2			444
Oct. 23		Centre			(83·9)	(+5·1)	(268)	(1551)	(2867)
296·436	AW, FT		0·902	250·0	129·0	−15·6			104
			0·808	242·3	116·5	−18·7			55
		4201	0·184	307·1	76·2	+11·3	0	2	
		4201	0·148	294·6	75·4	+ 8·5	0	10	
		4201*a*	0·156	312·0	74·4	+11·0	70	409	
		4201	0·121	314·6	72·6	+ 9·9	5	26	
		4201	0·115	327·5	71·2	+10·6	2	6	
		4201	0·126	331·1	71·1	+11·3	0	2	
		4201	0·176	342·0	70·8	+14·6	0	6	
		4201	0·129	337·0	70·5	+11·8	0	4	
		4201	0·153	344·9	69·9	+13·4	1	4	
		4201	0·133	343·9	69·8	+12·3	0	5	
		4201	0·156	353·9	68·6	+13·9	0	3	
		4201*b*	0·116	355·4	68·1	+11·7	61	284	
		4201	0·170	357·6	68·0	+14·7	0	2	
		4202	0·204	339·3	71·9	+15·9	0	5	
		4202	0·189	341·2	71·2	+15·3	2	8	
		4202	0·202	349·4	69·8	+16·4	1	7	
		4202	0·204	352·2	69·2	+16·6	0	4	
		4202*b*	0·209	354·2	68·9	+16·9	1	8	
		4203*c*	0·657	118·0	31·1	−13·9	5	20	

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Group 4204, October 22. A very small spot.

Group 4205, October 22–November 2. A large double spot, *a*. It has divided into two large spots, *b* and *c*, by October 24. *b* becomes more regular day by day. *c* tends to disintegrate, and a number of small spots are thrown off from it, or form round it.

Group 4206, October 22–31. An irregular but fairly compact cluster of somewhat unstable spots. The group undergoes frequent change, and diminishes very rapidly after October 27. The measures on October 25 and 27 are uncertain, as the group appears blurred on the photographs on those days.

Group 4207, October 22–November 2. An irregular cluster immediately *s* of Group 4206. *a*, *b* and *c* are the principal spots. *b* increases in size and becomes a large composite spot, measured in two portions on October 31. The other spots diminish and die out. The measures on October 25 are uncertain, as the group appears blurred on the photograph on that day.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
296d.436	AW, FT	4205*b*	0·729	117·9	25·6	−16·2	47	231	5708*f*
		4205*c*	0·752	116·9	23·5	−16·3	11	110	
		4206	0·661	74·4	26·8	+14·0	7	28	
		4206	0·668	76·3	26·0	+12·8	0	5	
		4206	0·674	74·2	25·8	+14·3	0	10	
		4206	0·682	74·4	25·1	+14·3	3	13	
		4206	0·684	75·6	24·8	+13·5	10	54	
		4206	0·689	73·5	24·6	+14·9	3	30	
		4206	0·693	74·8	24·2	+14·1	0	8	
		4206	0·704	75·0	23·3	+14·1	0	2	
		4206	0·711	74·2	22·8	+14·7	0	5	290*c*
		4207	0·657	82·9	26·5	+ 8·5	1	6	
		4207	0·663	79·6	26·2	+10·6	0	3	
		4207*b*	0·676	81·1	25·1	+ 9·7	14	56	
		4207	0·683	84·8	24·5	+ 7·2	0	10	
		4207	0·692	78·9	24·0	+11·3	3	30	
		4207	0·695	81·1	23·6	+ 9·8	3	13	
		4207*c*	0·709	79·1	22·6	+11·3	3	38	
		4208*ab*	0·936	71·9	357·9	+18·7	58	389	
		4208*c*	0·944	74·4	356·5	+16·3	15	88	887*c*
		4208	0·962	73·6	352·9	+17·1	0	20	
		4208*d*	0·982	74·4	347·8	+16·3	0	263	
		4209	0·949	93·5	356·5	− 1·7	0	17	102*f*
			0·787	76·2	15·8	+14·0			81
			0·822	66·8	13·3	+21·9			352
			0·902	109·2	6·0	−14·9			116
			0·919	61·2	1·6	+28·4			165
Oct. 24		Centre			(67·6)	(+5·0)	(326)	(2244)	(2722)
297·434	CL, AW		0·960	252·6	126·0	−15·2			186
			0·904	245·0	115·0	−20·1			186
		4201*a*	0·354	287·0	74·6	+10·6	60	373	
		4201	0·322	288·0	72·6	+10·4	0	16	
		4201	0·305	285·6	71·7	+ 9·3	0	16	
		4201	0·321	296·5	71·6	+12·9	3	15	
		4201	0·307	303·3	69·8	+14·4	0	1	
		4201	0·278	296·9	69·1	+12·0	0	4	
		4201*c*	0·271	293·3	69·1	+10·9	26	140	
		4201	0·316	310·8	68·9	+16·6	0	2	
		4201	0·293	305·6	68·7	+14·6	0	2	
		4201*d*	0·262	300·8	67·8	+12·4	31	125	
		4202	0·329	309·2	69·9	+16·7	4	17	
		4202	0·314	308·7	69·2	+16·0	0	1	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
297d.434	CL, AW	4203	0·426	143·7	39·4	−15·3	0	2	
		4203	0·458	134·5	34·9	−14·1	0	3	
		4203*c*	0·500	129·5	31·2	−14·0	1	4	
		4205*b*	0·587	127·3	25·5	−16·5	40	236	
		4205*c*	0·612	125·5	23·3	−16·6	15	112	
		4205	0·635	123·0	21·0	−16·1	0	5	
		4206	0·488	69·1	26·5	+14·4	0	24	
		4206	0·494	70·6	26·0	+13·7	2	13	
		4206	0·501	69·2	25·7	+14·6	3	9	
		4206	0·497	73·2	25·5	+12·6	0	2	
		4206	0·502	71·6	25·3	+13·4	6	22	
		4206	0·517	69·0	24·7	+14·9	4	10	
		4206	0·513	72·4	24·5	+13·1	0	2	
		4206	0·517	71·1	24·4	+13·8	4	27	
		4207*b*	0·489	78·8	25·5	+ 9·8	12	53	
		4207	0·501	77·5	24·8	+10·5	0	16	
		4207	0·505	78·9	24·4	+ 9·8	2	8	
		4207	0·518	76·3	23·8	+11·3	3	14	
		4207	0·533	77·7	22·6	+10·7	0	4	
		4207	0·549	76·1	21·7	+11·7	0	3	
		4208*a*	0·827	70·5	359·3	+18·8	52	236	
		4208	0·843	74·6	357·2	+15·6	3	18	
		4208*b*	0·851	70·6	356·8	+19·0	17	175	
		4208*c*	0·848	73·1	356·7	+16·9	13	43	
		4208	0·897	73·2	350·7	+17·2	0	14	1806*c*
		4208	0·908	76·0	349·1	+14·7	0	7	
		4208	0·911	73·6	348·7	+17·0	0	31	
		4208*d*	0·917	74·4	347·8	+16·2	23	136	
		4208	0·930	75·7	345·8	+15·1	0	27	
		4209	0·850	95·1	356·7	− 2·9	2	12	101*c*
			0·773	64·5	5·6	+22·7			63
			0·873	58·2	355·8	+30·0			286
			0·936	86·3	345·0	+ 5·2			85
			0·945	64·8	343·6	+25·4			291
Oct. 25		Centre			(54·5)	(+4·9)	(326)	(1980)	(3004)
298·173	AW, CL		0·952	283·0	117·2	+13·8			87
			0·942	247·0	111·6	−19·8			175
I.		4201*a*	0·502	282·2	74·5	+10·2	64	375	
		4201	0·479	278·0	73·2	+ 8·1	0	6	
		4201	0·475	281·3	72·8	+ 9·6	0	2	
		4201	0·474	284·1	72·5	+10·9	0	12	
		4201	0·460	282·0	71·8	+ 9·8	2	14	

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4208, October 24–November 4. A fine but broken stream, consisting usually of two distinct clusters. *a*, the leader, is a large regular spot. Other principal spots are *b*, *c* and *d*, of which *d* is the largest. *b* and *c* soon break up and disappear, and after October 30 the group consists of *a*, followed at a distance by a long but very sparse and scattered stream of small spots.
Group 4209, October 24–25. A small spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
298d·173	AW, CL	4201	0·457	280·0	71·7	+ 8·8	0	5	
		4201	0·458	288·3	71·0	+12·6	0	2	
I.		4201c	0·423	285·9	69·1	+11·0	23	114	
		4201	0·431	292·9	68·7	+14·0	0	4	
		4201d	0·403	289·9	67·4	+12·3	34	145	
		4202	0·460	297·3	69·8	+16·5	0	7	
		4202	0·454	296·6	69·6	+16·1	0	5	
		4205b	0·486	138·5	25·1	−16·8	51	224	
		4205	0·497	135·9	23·7	−16·3	0	5	
		4205	0·495	134·1	23·1	−15·6	4	20	
		4205c	0·512	135·6	22·8	−16·9	18	95	
		4205	0·543	138·5	22·3	−19·5	0	3	
		4205	0·536	137·2	22·2	−18·6	0	1	
		4205	0·543	133·1	20·3	−17·4	0	3	
		4205	0·501	131·3	21·9	−14·8	6	27	
		4205	0·538	130·8	19·7	−16·2	0	3	
		4206	0·351	61·6	26·2	+14·1	10	39	
		4206	0·361	60·8	25·8	+14·7	4	11	
		4206	0·349	66·5	·25·6	+12·5	1	5	
		4206	0·354	64·5	25·6	+13·3	3	15	
		4206	0·355	68·6	25·0	+12·0	0	2	
		4206	0·380	61·4	24·6	+15·0	4	9	
		4206	0·365	68·1	24·5	+12·3	0	2	
		4206	0·375	64·9	24·3	+13·7	12	39	
		4206	0·375	68·4	23·9	+12·4	0	2	
		4206	0·391	64·7	23·4	+14·1	0	10	
		4206	0·386	68·5	23·2	+12·6	0	8	
		4206	0·392	69·8	22·7	+12·2	0	1	
		4207	0·308	75·0	27·2	+ 9·2	2	8	
		4207	0·318	68·6	27·2	+11·2	0	6	
		4207b	0·335	75·5	25·6	+ 9·3	25	109	
		4207	0·341	79·9	25·0	+ 8·0	2	6	
		4207	0·343	83·3	24·7	+ 6·9	0	2	
		4207	0·358	76·3	24·2	+ 9·3	3	19	
		4207	0·372	71·9	23·7	+11·1	2	18	
		4207	0·381	74·7	22·9	+10·2	0	4	
		4207	0·386	77·4	22·4	+ 9·3	0	3	
		4207	0·396	77·1	21·8	+ 9·5	0	3	
		4208a	0·730	68·2	359·1	+19·0	62	228	
		4208	0·749	70·2	357·1	+18·0	0	3	
		4208c	0·749	71·5	356·9	+17·0	13	57	
		4208b	0·754	68·8	356·9	+19·0	8	80	
		4208	0·757	70·2	356·4	+18·1	7	26	
		4208	0·757	73·7	356·0	+15·4	0	4	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
298d·173	AW, CL	4208	0·761	71·4	355·9	+17·2	0	2	2673c
		4208	0·766	68·7	355·8	+19·3	9	24	
I.		4208	0·814	72·0	350·7	+17·4	3	14	
		4208	0·823	75·5	349·5	+14·7	2	9	
		4208	0·832	75·5	348·5	+14·7	0	6	
		4208d	0·837	73·4	348·1	+16·5	34	199	
		4208	0·842	75·8	347·5	+14·5	0	4	
		4208	0·856	75·3	345·9	+15·1	0	10	
			0·767	118·6	359·8	−18·1			118
			0·831	55·7	351·8	+30·9			228
			0·872	87·7	344·0	+ 4·4			93
Oct. 26		Centre			(44·7)	(+4·8)	(408)	(2059)	(3374)
299·199	AW, JW	4201a	0·685	279·9	74·3	+10·2	63	372	
		4201e	0·652	281·8	71·6	+11·2	0	8	
M.		4201	0·640	284·6	70·5	+12·9	3	8	
		4201	0·631	284·4	69·8	+12·7	2	9	
		4201	0·623	283·5	69·3	+12·0	0	6	
		4201c	0·619	282·1	69·1	+11·2	24	92	
		4201d	0·606	284·0	68·0	+12·2	16	83	
		4201	0·597	288·0	66·9	+14·4	0	5	
		4201f	0·591	286·8	66·7	+13·7	9	32	
		4201	0·586	283·4	66·6	+11·7	1	21	
		4205b	0·381	164·6	25·2	−16·8	36	235	
		4205	0·379	159·0	23·1	−16·0	2	21	
		4205c	0·396	159·3	22·8	−17·1	13	81	
		4205	0·356	155·3	22·4	−14·1	0	7	
		4205	0·378	156·6	22·3	−15·6	0	5	
		4206	0·171	21·8	27·5	+13·8	0	19	
		4206	0·208	22·2	26·5	+15·7	0	15	
		4206	0·184	27·8	26·1	+14·0	0	22	
		4206	0·207	33·1	24·5	+14·6	31	189	
		4206	0·200	41·2	23·5	+13·3	0	8	
		4206	0·216	40·6	22·9	+14·1	2	10	
		4206	0·229	40·1	22·5	+14·7	1	2	
		4207	0·083	33·7	28·5	+ 8·7	0	6	
		4207	0·080	43·9	28·0	+ 8·0	0	7	
		4207	0·097	35·3	28·0	+ 9·3	2	28	
		4207b	0·114	47·6	26·3	+ 9·1	38	120	
		4207	0·147	51·8	24·5	+ 9·9	0	4	
		4208a	0·557	62·6	359·8	+18·9	44	218	
		4208c	0·575	67·3	357·7	+16·7	4	34	
		4208	0·584	65·2	357·5	+18·1	1	3	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
299d·199	AW, JW	4208	0·581	66·0	357·5	+17·6	2	6	
		4208*b*	0·592	64·4	357·0	+18·7	0	21	
M.		4208	0·589	66·3	356·9	+17·5	0	6	
		4208	0·596	65·5	356·6	+18·1	0	2	
		4208	0·600	67·7	355·9	+17·0	0	7	
		4208	0·610	64·5	355·7	+19·0	0	6	
		4208	0·622	67·8	354·3	+17·3	0	3	248*c*
		4208	0·635	69·2	353·1	+16·7	0	10	
		4208	0·646	67·3	352·5	+18·1	0	2	
		4208	0·655	68·1	351·7	+17·8	0	4	
		4208	0·661	72·2	350·6	+15·3	4	10	
		4208	0·662	73·6	350·4	+14·4	0	3	
		4208	0·679	72·0	349·3	+15·6	8	37	
		4208*d*	0·692	71·6	348·3	+16·0	12	58	
		4208	0·694	70·3	348·3	+16·9	0	6	
		4208	0·698	68·9	348·2	+18·0	0	7	
			0·744	78·3	343·3	+11·9			133
			0·819	59·8	338·7	+27·2			264
			0·811	70·0	337·7	+18·9			587
			0·948	97·3	320·6	− 5·4			324
Oct. 27		Centre			(31·2)	(+4·7)	(318)	(1858)	(1556)
300·453	AW, FT		0·922	253·6	79·7	−13·2			194
		4201*a*	0·864	278·6	74·5	+ 9·8	68	376	
		4201*g*	0·848	275·4	72·6	+ 7·0	0	8	
		4201*e*	0·841	280·7	71·9	+11·5	0	44	
		4201	0·840	276·8	71·8	+ 8·2	7	17	
		4201	0·825	283·3	70·1	+13·6	0	4	
		4201	0·820	282·4	69·6	+12·8	0	11	
		4201*c*	0·818	280·4	69·5	+11·1	14	77	641*c*
		4201	0·817	277·9	69·4	+ 9·1	4	17	
		4201	0·810	283·1	68·6	+13·3	0	20	
		4201*d*	0·806	281·8	68·2	+12·3	9	44	
		4201	0·803	284·5	67·8	+14·4	0	8	
		4201*f*	0·794	283·9	66·9	+13·8	7	15	
		4201	0·791	281·3	66·8	+11·7	0	4	
		4205*b*	0·402	206·2	25·2	−16·5	40	215	
		4205	0·385	201·7	23·1	−16·3	2	9	
		4205*c*	0·393	200·6	22·9	−16·9	11	64	
		4205	0·374	201·2	22·6	−15·8	0	14	
		4205	0·423	196·3	21·8	−19·3	0	2	
		4205	0·412	196·3	21·6	−18·7	0	1	
		4205	0·370	198·6	21·6	−15·9	0	3	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
300d·453	AW, FT	4205	0·441	193·7	21·0	−20·7	0	5	
		4206	0·277	307·5	27·6	+14·1	0	3	
		4206	0·272	311·8	26·7	+14·9	0	3	
		4206	0·253	307·1	26·5	+13·3	1	6	
		4206	0·262	313·8	25·8	+14·9	1	5	
		4206	0·247	311·1	25·6	+13·8	12	63	
		4206	0·228	311·9	24·6	+13·3	0	4	
		4207	0·256	288·7	28·8	+ 9·2	1	3	
		4207	0·258	291·4	28·7	+ 9·9	0	6	
		4207	0·266	296·5	28·6	+11·3	0	3	
		4207*b*	0·230	287·3	27·4	+ 8·4	28	149	
		4207	0·222	292·4	26·5	+ 9·3	2	6	
		4207	0·225	299·2	26·1	+10·8	1	6	
		4207	0·208	293·0	25·7	+ 9·2	0	2	
		4207	0·180	290·7	24·4	+ 8·2	0	3	
		4207	0·167	290·4	23·7	+ 7·9	0	7	
		4207	0·161	287·0	23·5	+ 7·3	0	1	
		4207	0·156	292·9	22·9	+ 8·0	0	5	
		4208*a*	0·349	43·4	0·0	+19·1	45	219	
		4208	0·344	50·6	358·5	+17·0	3	9	
		4208	0·353	50·2	358·2	+17·4	2	6	
		4208*b*	0·371	49·0	357·5	+18·5	2	14	
		4208	0·382	47·5	357·3	+19·3	2	8	
		4208	0·398	46·3	356·8	+20·3	0	4	
		4208	0·413	48·4	355·5	+20·2	0	2	
		4208	0·415	49·8	355·0	+19·8	0	2	
		4208	0·403	57·0	354·0	+16·9	0	15	
		4208	0·421	56·3	353·1	+17·8	0	2	
		4208	0·422	58·5	352·6	+17·0	0	11	
		4208	0·436	56·8	352·1	+18·0	0	6	
		4208	0·438	58·4	351·7	+17·5	2	15	
		4208	0·479	50·3	351·3	+22·0	0	2	
		4208	0·451	58·4	350·9	+17·9	0	1	
		4208	0·448	60·1	350·7	+17·1	0	5	
		4208	0·469	56·3	350·3	+19·2	0	13	
		4208	0·453	64·1	349·7	+15·6	2	15	
		4208	0·448	67·3	349·5	+14·1	0	5	
		4208*d*	0·468	63·5	348·9	+16·2	15	60	
		4208	0·480	61·3	348·5	+17·4	1	14	
		4208	0·482	68·1	347·2	+14·4	1	3	
		4208	0·494	70·9	346·1	+13·3	0	6	
		4210	0·815	82·3	319·9	+ 9·0	0	2	145*p*
			0·726	56·1	332·1	+27·2			190
			0·834	96·1	318·7	− 2·5			290

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4210, October 28–November 7. A very small spot on October 28. The group rapidly increases in size and becomes a fine stream, which undergoes constant and striking change. On October 30 it consists chiefly of two large spots, *a* and *b*, connected by a chain of small spots. Other well defined spots, *c*, *d*, *e*, *f* and *g*, form on the succeeding days. *e* is measured as two large spots on November 2 and 3. The stream is wedge-shaped on November 2. On November 5 the group consists chiefly of two very large spots, *a*, and a spot formed by the temporary union of *b* and *c*.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
300d·453	AW, FT		0·851	63·4	317·8	+24·9			191
			0·910	80·5	308·9	+10·6			102
			0·954	65·9	302·0	+24·3			183
			0·990	78·8	292·1	+11·8			121
Oct. 28		Centre			(14·6)	(+4·6)	(283)	(1672)	(2057)
301·200	CL, JW	4201*a*	0·936	278·3	74·4	+ 9·4	74	358	
		4201*g*	0·922	275·8	72·1	+ 7·1	10	81	
I.		4201*e*	0·914	280·8	71·0	+11·7	8	46	
		4201*c*	0·900	280·0	69·1	+11·0	16	68	1460*c*
		4201*d*	0·893	281·0	68·2	+11·9	10	39	
		4201	0·887	279·3	67·5	+10·4	0	13	
		4201*f*	0·881	283·5	66·6	+14·0	0	16	
		4205*b*	0·489	222·4	24·9	−16·9	43	200	
		4205	0·483	217·7	22·8	−18·1	0	5	
		4205*c*	0·466	217·9	22·2	−17·2	8	41	
		4205	0·448	218·6	21·6	−16·2	0	5	
		4205	0·433	220·2	21·5	−14·9	0	4	
		4206	0·412	295·8	27·2	+14·5	0	5	
		4206	0·395	295·9	26·2	+14·1	0	3	
		4206	0·383	295·1	25·6	+13·6	7	25	
		4207	0·415	281·4	29·0	+ 8·8	0	3	
		4207	0·405	282·3	28·3	+ 9·1	0	4	
		4207*b*	0·392	280·0	27·6	+ 8·1	27	130	
		4207	0·397	286·0	27·5	+10·4	0	5	
		4207	0·384	286·5	26·7	+10·4	0	4	
		4207	0·380	284·5	26·6	+ 9·6	3	12	
		4207	0·328	280·2	23·7	+ 7·6	0	5	
		4208	0·203	19·7	0·7	+15·5	0	6	
		4208*a*	0·264	18·1	359·8	+19·0	50	220	
		4208	0·215	23·6	359·7	+15·9	0	3	
		4208	0·243	26·7	358·3	+16·9	1	7	
		4208	0·271	37·1	355·0	+16·9	0	7	
		4208	0·302	44·4	352·1	+16·8	0	16	
		4208	0·337	44·7	350·4	+18·2	0	10	
		4208*d*	0·332	53·4	348·8	+15·7	12	68	
		4208	0·361	51·0	347·8	+17·4	1	17	
		4210	0·659	79·0	323·8	+10·6	8	27	
		4210	0·667	80·2	323·1	+ 9·9	2	15	154*c*
		4210	0·686	81·1	321·6	+ 9·3	0	24	
		4210	0·707	81·4	319·9	+ 9·3	10	38	
1895.				°	°	°			
301d·200	CL, JW	4211*a*	0·970	78·8	288·5	+12·0	26	104	673*c*
I.		4211	0·994	78·4	280·5	+12·0	0	62	
			0·921	65·0	298·2	+24·8			271
Oct. 29		Centre			(4·8)	(+4·5)	(316)	(1696)	(2558)
302·517	AW, FT		0·792	247·4	36·4	−14·9			131
		4201*c*	0·989	280·5	69·4	+11·1	0	138	174*c*
		4205*b*	0·677	239·3	24·7	−16·6	39	227	
		4205*c*	0·653	237·0	22·2	−17·2	7	23	108*c*
		4205	0·657	235·4	22·0	−18·3	0	4	
		4206	0·630	286·8	25·7	+14·0	1	7	
		4207*b*	0·668	277·0	29·3	+ 8·0	27	97	156*c*
		4208*a*	0·330	320·5	0·2	+19·0	54	219	
		4208	0·308	330·0	356·8	+19·8	0	10	
		4208	0·271	328·5	355·9	+17·7	0	23	
		4208	0·235	336·0	353·1	+16·8	0	12	
		4208	0·216	346·0	350·5	+16·5	0	8	
		4208	0·196	345·4	350·3	+15·3	6	19	
		4208*d*	0·203	350·2	349·5	+15·9	3	20	
		4208	0·225	359·9	347·5	+17·4	4	19	
		4208	0·258	7·6	345·3	+19·2	0	9	
		4208	0·283	13·3	343·4	+20·3	0	3	
		4208	0·240	16·6	343·3	+17·6	0	4	
		4208	0·277	16·6	342·6	+19·7	0	16	
		4210*a*	0·374	70·9	326·4	+11·1	19	116	
		4210	0·392	72·8	325·1	+10·7	2	11	
		4210	0·409	72·5	324·1	+11·1	4	23	
		4210	0·415	74·5	323·5	+10·4	0	3	
		4210	0·418	76·3	323·2	+ 9·7	1	6	
		4210	0·424	75·2	322·9	+10·3	0	5	
		4210*b*	0·458	78·3	320·5	+ 9·2	28	113	
		4211*a*	0·833	79·1	291·0	+11·6	19	87	
		4211	0·840	80·4	290·3	+10·4	0	7	
		4211	0·849	78·4	289·3	+12·2	13	71	
		4211	0·863	79·2	287·7	+11·6	10	50	
		4211	0·865	78·0	287·5	+12·6	0	33	356*c*
		4211	0·884	77·2	285·2	+13·4	0	20	
		4211	0·896	78·0	283·7	+12·7	0	25	
		4211	0·913	78·8	281·3	+12·0	5	32	
			0·862	60·7	289·8	+27·3			64
			0·977	78·5	269·3	+12·2			93
Oct. 30		Centre			(347·4)	(+4·4)	(242)	(1460)	(1082)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4211, October 29–November 9. A fine stream which undergoes constant and striking change. The leader, *a*, is throughout the principal member of the group, and has become very large by November 6. It is usually regular in shape. The following spots are generally small and numerous, following *a* in a straight stream.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
303d.223	AW, FT		0·879	249·1	36·5	−16·0			242
			0·796	233·3	22·8	−25·3			124
I.		4205*b*	0·777	243·9	24·7	−17·1	50	220	
		4205*c*	0·755	241·9	22·2	−17·8	4	10	
		4205	0·747	239·9	20·9	−18·9	1	4	187*c*
		4205	0·751	238·3	20·7	−20·0	0	3	
		4205	0·714	230·6	14·8	−23·5	0	3	
		4206	0·749	283·4	27·7	+12·9	0	2	
		4206	0·751	284·5	26·2	+13·7	0	4	
		4207	0·790	275·3	30·2	+ 6·9	2	5	
		4207	0·789	277·9	30·1	+ 8·9	3	9	593*c*
		4207*b*	0·789	276·6	30·1	+ 7·8	21	53	
		4207*b*	0·781	276·4	29·4	+ 7·7	3	20	
		4207	0·778	278·3	29·0	+ 9·2	0	6	
		4208*a*	0·438	305·3	0·1	+18·6	54	213	
		4208	0·383	305·6	356·9	+16·9	0	1	
		4208	0·369	307·7	355·7	+17·1	0	6	
		4208	0·396	316·7	354·8	+20·8	0	3	
		4208	0·342	309·9	353·8	+16·8	1	7	
		4208	0·324	310·0	352·9	+16·2	1	6	
		4208	0·360	319·7	352·3	+20·1	0	4	
		4208	0·317	311·2	352·3	+16·2	0	4	
		4208	0·301	311·0	351·6	+15·6	0	2	
		4208	0·302	313·7	351·1	+16·2	1	5	
		4208	0·285	311·7	350·7	+15·1	10	28	
		4208	0·296	315·5	350·4	+16·4	0	3	
		4208	0·277	316·7	349·3	+15·8	4	10	
		4208	0·252	313·1	348·9	+14·1	0	2	
		4208	0·282	323·9	348·0	+17·4	3	21	
		4210*a*	0·220	57·2	327·2	+11·0	22	119	
		4210	0·238	61·6	325·8	+10·7	1	4	
		4210	0·253	62·6	324·8	+10·9	10	34	
		4210	0·250	67·4	324·5	+ 9·7	0	1	
		4210	0·258	68·7	324·0	+ 9·5	2	4	
		4210*b*	0·317	73·9	320·1	+ 9·1	38	157	
		4211*a*	0·734	78·6	291·0	+11·3	49	227	
		4211	0·749	76·7	289·8	+12·8	0	3	
		4211	0·763	76·6	288·6	+13·0	5	44	
		4211	0·762	78·9	288·5	+11·3	11	66	
		4211	0·772	77·5	287·7	+12·4	0	3	
		4211	0·776	79·1	287·2	+11·2	0	7	
		4211	0·780	77·8	286·9	+12·2	6	25	672*c*
		4211	0·790	76·8	286·1	+13·0	8	39	
		4211	0·794	79·4	285·5	+11·0	0	2	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
303d.223	AW, FT	4211	0·802	76·8	284·9	+13·1	0	6	
		4211	0·818	78·6	283·2	+11·8	0	3	
I.		4211	0·822	78·2	282·8	+12·1	1	5	
		4211	0·833	78·4	281·7	+12·1	6	24	
		4211	0·835	79·3	281·4	+11·3	0	5	
		4212	0·947	104·3	268·5	+12·1	0	12	142*f*
			0·786	59·1	289·2	+26·7			87
			0·917	78·2	271·4	+12·6			155
Oct. 31		Centre			(338·0)	(+4·3)	(317)	(1444)	(2202)
304·437	CL, AW		0·960	254·2	33·8	−13·8			240
			0·756	293·8	9·4	+20·6			375
			0·733	306·3	4·2	+28·8			125
		4205*b*	0·909	248·9	24·4	−17·2	43	237	766*s*
		4205*c*	0·891	247·7	21·7	−17·7	0	14	
		4207*b*	0·927	277·7	30·1	+ 8·8	27	130	1322*n*
		4208*a*	0·647	294·1	0·4	+18·6	55	230	158*c*
		4208	0·601	292·9	357·2	+16·9	0	3	
		4208	0·557	293·4	354·0	+16·3	0	3	
		4208	0·523	292·5	351·9	+15·2	0	4	
		4208	0·510	291·8	351·2	+14·6	5	19	
		4208	0·490	295·0	349·3	+15·7	0	5	
		4208	0·478	291·5	349·1	+13·8	0	12	
		4208	0·467	293·2	348·2	+14·4	0	5	
		4208	0·447	294·5	346·7	+14·5	4	17	
		4208	0·452	304·7	345·0	+18·7	0	8	
		4208	0·421	310·8	341·7	+19·8	0	13	
		4210*a*	0·165	316·4	328·6	+11·0	22	98	
		4210*c*	0·146	325·2	326·8	+11·0	8	62	
		4210	0·129	324·2	326·4	+10·2	4	19	
		4210	0·056	352·5	326·2	+ 7·4	0	2	
		4210	0·114	327·6	325·5	+ 9·8	9	31	
		4210	0·133	334·0	325·4	+11·1	0	14	
		4210	0·093	333·0	324·4	+ 8·9	1	10	
		4210	0·127	348·6	323·5	+11·4	0	5	
		4210	0·109	0·3	321·9	+10·4	1	5	
		4210*d*	0·096	6·6	321·4	+ 9·7	2	16	
		4210*e*	0·065	10·8	321·3	+ 7·8	8	70	
		4210*b*	0·091	21·1	320·1	+ 9·1	25	142	
		4211	0·414	69·6	298·7	+12·1	0	7	
		4211*a*	0·507	74·8	292·2	+11·3	42	209	
		4211	0·540	74·4	290·0	+11·9	3	25	
		4211	0·541	76·2	289·8	+11·0	8	36	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4212, October 31–November 8. A few small spots in an irregular stream. The group undergoes constant change as to the size, number, and arrangement of its members. It is not seen on November 2.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
304d·437	CL, AW	4211	0·555	73·7	289·1	+12·5	0	12	236c
		4211	0·562	77·2	288·2	+10·7	1	8	
		4211	0·577	75·6	287·4	+11·7	0	9	
		4211	0·602	74·6	285·7	+12·6	8	39	
		4211	0·617	76·4	284·4	+11·7	0	13	
		4211	0·641	76·3	282·6	+12·0	0	19	
		4212	0·816	108·2	269·7	−12·1	0	13	244f
			0·723	111·8	278·7	−12·5			102
			0·848	78·5	264·1	+12·0			473
			0·913	117·4	260·7	−22·8			208
Nov. 1		Centre			(322·0)	(+4·2)	(276)	(1564)	(4249)
305·166	CL, AW		0·940	283·0	22·7	+13·7			243
I.			0·924	298·5	19·0	+27·9			139
			0·894	290·4	15·4	+20·0			669
			0·803	282·5	5·7	+12·5			162
			0·802	304·7	1·8	+29·8			207
		4205b	0·964	251·0	24·8	−17·1	26	224	
		4205	0·953	248·1	21·9	−19·4	0	21	477sf
		4205c	0·951	249·8	21·9	−17·8	0	15	
		4205	0·944	248·6	20·3	−18·6	0	31	
		4207b	0·980	278·2	31·2	+ 8·9	26	164	462f
		4208a	0·758	291·1	0·5	+18·6	54	228	302c
		4208	0·684	290·3	354·4	+16·8	0	2	
		4208	0·668	290·0	353·2	+16·3	0	5	
		4208	0·643	288·5	351·5	+15·0	7	35	
		4208	0·628	288·9	350·3	+15·0	0	3	
		4208	0·619	287·7	349·8	+14·1	5	13	
		4208	0·617	287·0	349·7	+13·6	0	3	
		4208	0·614	288·6	349·3	+14·6	0	3	
		4208	0·610	287·0	349·2	+13·6	0	1	
		4208	0·576	288·5	346·6	+14·0	1	4	
		4208	0·575	289·5	346·4	+14·5	5	13	
		4208	0·547	302·2	342·0	+20·5	0	7	
		4208	0·538	301·8	341·5	+20·0	0	5	
		4208	0·529	301·1	341·1	+19·4	0	2	
		4210a	0·308	294·2	329·1	+11·1	19	88	
		4210c	0·279	295·9	327·2	+11·0	22	92	
		4210f	0·268	292·1	327·0	+ 9·8	18	57	
		4210g	0·238	292·3	325·3	+ 9·2	3	12	
		4210	0·241	296·7	325·1	+10·2	3	21	
		4210	0·249	301·7	324·9	+11·5	5	12	
		4210	0·217	285·7	324·6	+ 7·4	0	1	
1895.				°	°	°			
305d·166	CL, AW	4210	0·238	300·3	324·5	+10·9	0	3	
I.		4210	0·221	291·2	324·5	+ 8·6	0	11	
		4210	0·233	304·9	323·7	+11·7	1	4	
		4210	0·215	300·1	323·3	+10·2	0	2	
		4210	0·204	294·1	323·3	+ 8·8	2	9	
		4210	0·191	293·1	322·7	+ 8·3	0	1	
		4210	0·213	305·5	322·6	+11·1	0	1	
		4210	0·190	295·5	322·4	+ 8·7	0	1	
		4210d	0·198	303·1	322·2	+10·2	12	56	
		4210e	0·178	291·2	322·1	+ 7·7	6	28	
		4210e	0·158	293·3	320·9	+ 7·7	14	95	
		4210b	0·164	306·1	320·2	+ 9·6	24	122	
		4210	0·149	299·3	320·0	+ 8·2	2	11	
		4210	0·141	328·5	316·8	+11·0	0	3	
		4213	0·195	165·8	309·8	− 6·8	0	1	
		4213	0·199	164·1	309·4	− 6·9	0	3	
		4213	0·199	161·4	308·9	− 6·7	0	3	
		4213	0·231	159·2	307·8	− 8·3	1	4	
		4211	0·355	63·8	293·5	+12·9	0	4	
		4211a	0·357	68·4	292·8	+11·4	44	183	
		4211	0·377	71·6	291·3	+10·6	0	7	
		4211	0·389	71·2	290·6	+11·0	12	23	
		4211	0·394	69·7	290·4	+11·7	2	14	
		4211	0·410	69·2	289·5	+12·1	2	17	
		4211	0·416	72·6	288·8	+10·9	0	4	
		4211	0·424	70·6	288·5	+11·9	0	2	
		4211	0·435	70·0	287·9	+12·3	0	4	
		4211	0·439	76·6	287·0	+ 9·5	1	8	
		4211	0·457	71·2	286·4	+12·1	0	6	
		4211	0·458	75·1	285·9	+10·4	4	24	
		4211	0·473	70·8	285·4	+12·6	9	42	
		4211	0·463	77·7	285·3	+ 9·3	0	6	
		4211	0·475	73·7	284·9	+11·3	0	9	
		4211	0·491	73·2	283·9	+11·7	0	15	
		4211	0·492	74·6	283·7	+11·1	0	2	
		4214	0·976	104·9	236·7	−13·6	0	29	3318
			0·880	122·8	257·2	−26·1			226
Nov. 2		Centre			(312·5)	(+4·1)	(330)	(1819)	(3218)
306·220	CL, FT		0·944	291·5	9·2	+21·6			202
I.			0·889	282·3	1·3	+12·8			211
			0·893	301·5	359·7	+29·8			149
			0·827	307·9	349·5	+33·0			67

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4213, November 2. Four very small spots.
Group 4214, November 2–4. A small spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895.									
306d·220	CL,FT		0·690	309·1	336·2	+29·0			123
		4208*a*	0·886	288·3	0·6	+18·1	51	200	480*f*
I.		4208	0·798	284·9	351·1	+14·3	2	6	
		4208	0·783	284·5	349·7	+13·8	2	7	205*c*
		4208	0·750	285·7	346·6	+14·4	2	9	
		4208	0·761	295·3	346·1	+21·6	0	7	
		4208	0·706	294·2	341·6	+19·8	0	5	383*c*
		4210	0·510	279·7	329·0	+ 8·4	0	4	
		4210	0·509	282·4	328·8	+ 9·8	0	5	
		4210*a*	0·509	284·8	328·5	+10·9	45	168	
		4210*f*	0·496	281·5	328·0	+ 9·2	28	78	
		4210*c*	0·481	284·7	326·7	+10·5	11	24	
		4210	0·481	286·0	326·6	+11·1	0	2	
		4210*g*	0·469	282·4	326·1	+ 9·3	43	104	
		4210	0·461	284·5	325·4	+10·2	1	7	
		4210	0·458	287·1	325·0	+11·3	0	2	
		4210	0·447	279·8	324·9	+ 8·0	0	1	
		4210	0·444	285·6	324·3	+10·5	0	2	
		4210	0·431	281·9	323·7	+ 8·7	3	10	
		4210	0·427	286·8	323·1	+10·7	0	5	
		4210	0·414	281·7	322·7	+ 8·5	8	24	
		4210*d*	0·415	285·5	322·4	+10·0	8	49	
		4210*e*	0·409	279·5	322·5	+ 7·5	13	43	
		4210	0·411	283·4	322·4	+ 9·2	2	7	
		4210*e*	0·393	278·3	321·6	+ 6·9	23	92	
		4210	0·400	285·5	321·5	+ 9·8	1	2	
		4210	0·392	281·7	321·3	+ 8·2	2	14	
		4210*b*	0·382	285·4	320·4	+ 9·6	20	112	
		4210	0·369	277·8	320·1	+ 6·6	0	4	
		4210	0·366	282·0	319·7	+ 8·1	2	10	
		4211	0·111	44·9	294·1	+ 8·5	1	3	
		4211*a*	0·155	35·2	293·4	+11·3	43	224	
		4211	0·132	44·5	293·2	+ 9·3	0	2	
		4211	0·170	45·9	291·5	+10·7	11	28	
		4211	0·200	38·5	291·3	+12·9	1	3	
		4211	0·184	45·4	291·0	+11·4	1	3	
		4211	0·190	47·1	290·5	+11·4	0	2	
		4211	0·199	46·2	290·2	+11·9	1	6	
		4211	0·241	40·7	289·3	+14·4	0	1	
		4211	0·198	64·4	288·2	+ 8·8	3	7	
		4211	0·255	44·0	288·1	+14·4	0	2	
		4211	0·217	56·4	288·0	+10·8	0	2	
		4211	0·217	59·1	287·7	+10·3	0	1	
		4211	0·230	61·2	286·8	+10·3	0	1	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
				°	°	°			
1895.									
306d·220	CL,FT	4211	0·251	53·0	286·8	+12·6	31	148	
		4211	0·250	57·0	286·3	+11·7	0	1	
I.		4211	0·242	62·3	286·1	+10·4	0	2	
		4211	0·271	52·0	286·0	+13·5	0	2	
		4211	0·275	54·9	285·3	+13·0	1	7	
		4211	0·283	52·4	285·3	+13·8	0	3	
		4211	0·257	63·7	285·1	+10·4	2	9	
		4211	0·262	61·3	285·1	+11·1	0	1	
		4211	0·258	67·6	284·7	+ 9·5	0	1	
		4211	0·285	55·3	284·7	+13·2	1	4	
		4211	0·274	61·9	284·4	+11·3	0	7	
		4211	0·284	58·0	284·4	+12·6	15	37	
		4211	0·289	63·1	283·4	+11·4	1	5	
		4212	0·582	116·1	266·5	−11·4	5	13	
		4212	0·609	114·0	264·2	−11·0	9	18	
		4214	0·907	107·3	235·7	−13·8	5	14	
		4215	0·930	112·5	233·4	−19·2	0	3	555*c*
		4215	0·938	111·5	231·8	−18·6	3	11	
		4215	0·950	109·5	229·3	−17·1	0	12	
			0·793	125·4	253·5	−24·5			119
Nov. 3		Centre			(298·6)	(+4·0)	(401)	(1586)	(2494)
307·212	CL,FT		0·944	299·5	355·4	+29·1			129
			0·895	273·0	349·0	+ 4·5			121
I.			0·912	305·5	348·5	+33·7			78
			0·849	291·6	342·6	+20·3			914
			0·790	301·1	334·5	+26·6			604
		4208*a*	0·971	287·7	1·9	+18·1	71	257	697*f*
		4208	0·884	284·4	347·5	+14·6	0	12	
		4210	0·710	283·0	330·3	+12·0	0	3	
		4210*a*	0·680	280·7	328·1	+10·2	105	533	
		4210	0·649	279·9	325·7	+ 9·4	3	11	
		4210	0·632	280·6	324·4	+ 9·8	0	8	
		4210	0·622	282·1	323·6	+10·6	0	3	
		4210*d*	0·613	280·8	323·0	+ 9·7	12	100	536*c*
		4210*e*	0·607	278·1	322·7	+ 8·0	58	257	
		4210	0·598	274·5	322·2	+ 5·9	0	4	
		4210*b*	0·584	280·5	320·9	+ 9·3	17	114	
		4210	0·579	276·0	320·8	+ 6·7	0	2	
		4210	0·570	279·2	320·0	+ 8·5	0	5	
		4210	0·561	280·0	319·3	+ 8·8	0	7	
		4211	0·193	295·8	295·6	+ 8·6	0	7	
		4211	0·180	292·4	295·1	+ 7·8	0	4	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.

The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4215, November 3–8. A few very small unstable spots *s* Group 4213. The group is not seen on November 5–7.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
307d·212	CL,FT	4211*a*	0·199	311·0	294·3	+11·4	63	321	
I.		4211	0·178	302·3	294·2	+ 9·3	6	16	
		4211	0·179	306·4	293·9	+10·0	0	1	
		4211	0·168	304·7	293·5	+ 9·3	4	23	
		4211	0·172	308·4	293·3	+10·0	0	4	
		4211	0·169	317·5	292·1	+11·0	0	7	
		4211	0·165	324·6	291·1	+11·6	0	11	
		4211	0·180	340·3	289·1	+13·6	0	1	
		4211	0·103	327·7	288·7	+ 8·9	0	8	
		4211	0·160	343·1	288·2	+12·7	14	77	
		4211	0·148	349·9	287·0	+12·3	10	82	
		4211	0·112	349·4	286·7	+10·2	0	2	
		4211	0·108	1·9	285·3	+10·1	0	6	
		4211	0·128	1·9	285·2	+11·2	0	18	
		4211	0·125	353·9	284·9	+11·0	1	10	
		4211	0·152	5·7	284·6	+12·6	21	90	
		4211	0·132	11·9	283·9	+11·3	0	7	
		4212	0·392	131·9	268·3	−11·4	12	25	
		4212	0·420	127·8	265·8	−11·2	0	7	
		4212	0·428	126·8	265·1	−11·1	3	10	
		4212	0·439	125·4	264·2	−11·1	5	18	
		4214	0·797	111·2	235·6	−14·3	0	3	575*c*
		4215	0·834	115·6	233·1	−18·7	0	7	
			0·877	82·4	224·2	+ 8·5			72
Nov. 4		Centre			(285·5)	(+3·9)	(405)	(2081)	(3726)
308·248	CL,FT		0·952	281·9	344·2	+12·6			165
I.			0·926	289·1	339·4	+19·1			488
			0·899	298·8	334·2	+27·4			331
			0·835	254·7	326·6	−10·5			156
			0·759	261·1	320·4	− 4·3			62
		4210*a*	0·832	278·9	328·0	+ 9·5	81	513	
		4210	0·810	278·8	325·8	+ 9·3	0	5	
		4210*d*	0·779	280·1	322·8	+10·3	0	21	615*c*
		4210*be*	0·767	277·1	321·8	+ 7·9	60	485	
		4210	0·754	276·7	320·7	+ 7·6	1	10	
		4211	0·412	281·8	295·7	+ 8·3	2	7	
		4211	0·404	281·5	295·3	+ 8·1	3	14	
		4211*a*	0·401	289·0	294·4	+11·0	86	347	
		4211	0·380	285·3	293·5	+ 9·3	15	118	
		4211	0·373	291·9	292·4	+11·6	0	3	
		4211	0·366	290·1	292·2	+10·8	6	13	
		4211	0·362	292·6	291·7	+11·6	0	2	
1895.				°	°	°			
308d·248	CL,FT	4211	0·333	288·6	290·4	+ 9·7	10	25	
I.		4211	0·323	287·8	289·9	+ 9·3	0	5	
		4211	0·329	295·4	289·4	+11·7	0	7	
		4211	0·315	297·2	288·4	+11·9	12	52	
		4211	0·290	295·4	287·2	+10·8	0	9	
		4211	0·292	298·9	286·9	+11·7	0	6	
		4211	0·285	300·6	286·3	+12·0	9	50	
		4211	0·275	305·1	285·1	+12·8	2	7	
		4211	0·254	302·2	284·4	+11·5	2	7	
		4211	0·258	305·2	284·2	+12·3	13	46	
		4211	0·233	302·2	283·3	+10·8	0	17	
		4212	0·275	170·5	269·2	−11·9	6	17	
		4212	0·265	166·9	268·3	−11·1	8	20	
		4212	0·262	160·5	266·7	−10·4	1	5	
		4212	0·273	160·3	266·4	−11·0	2	9	
		4212	0·273	157·4	265·7	−10·7	0	3	
		4212	0·286	157·9	265·5	−11·5	11	27	
		4212	0·295	152·5	263·8	−11·4	3	10	
			0·705	118·8	231·7	−16·9			524
			0·893	119·7	213·8	−24·2			107
			0·906	109·0	209·3	−15·4			101
Nov. 5		Centre			(271·8)	(+3·8)	(333)	(1860)	(2549)
309·423	CL, AW		0·965	294·1	331·0	+24·2			225
			0·867	263·3	315·8	− 4·0			220
			0·826	295·5	310·2	+23·0			177
		4210*a*	0·952	278·6	328·6	+ 9·3	68	475	
		4210*e*	0·918	276·1	322·9	+ 7·1	20	110	740*c*
		4210*b*	0·908	277·6	321·6	+ 8·5	14	90	
		4211*a*	0·633	282·3	295·1	+10·6	68	420	
		4211	0·597	283·5	292·4	+11·0	3	25	
		4211	0·583	280·1	291·7	+ 8·9	1	10	
		4211	0·551	285·3	289·0	+11·5	10	42	185*c*
		4211	0·515	286·9	286·4	+11·8	0	12	
		4211	0·498	288·0	285·1	+12·1	3	14	
		4212	0·353	222·2	270·2	−11·6	6	37	
		4212	0·345	219·6	269·2	−11·7	0	4	
		4212	0·318	211·7	266·3	−12·0	2	10	
		4212	0·295	210·6	265·1	−11·0	0	14	
		4212	0·298	207·3	264·3	−11·6	2	8	
			0·853	64·3	199·4	+23·7			86
			0·941	67·0	186·6	+22·8			192
Nov. 6		Centre			(256·3)	(+3·7)	(197)	(1271)	(1825)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
310d·291	CL, JW		0·924	263·3	311·7	− 4·8			90
			0·879	296·8	304·7	+25·1			146
I.		4210*a*	0·991	279·4	327·4	+ 9·8	0	254	
		4210*e*	0·977	276·5	322·7	+ 7·1	0	97	546*c*
		4210*b*	0·969	278·0	320·7	+ 8·6	19	113	
		4211*a*	0·765	281·6	294·5	+11·1	91	453	
		4211	0·757	278·4	293·9	+ 8·6	0	15	
		4211	0·731	280·1	291·6	+ 9·8	2	13	391*c*
		4211	0·731	281·9	291·5	+11·1	0	6	
		4211	0·729	278·8	291·5	+ 8·8	2	10	
		4211	0·694	282·7	288·4	+11·3	12	52	
		4211	0·659	284·1	285·5	+11·9	0	6	232*c*
		4211	0·652	284·4	284·9	+12·0	3	11	
		4212	0·497	240·1	270·8	−11·1	16	22	
		4212	0·495	239·0	270·5	−11·6	0	3	
		4212	0·477	238·9	269·4	−11·0	4	16	
		4212	0·438	237·5	266·9	−10·3	4	20	
		4212	0·440	236·4	266·7	−10·8	1	4	
		4212	0·436	232·6	265·5	−12·0	5	10	
		4212	0·421	234·4	265·2	−10·9	2	10	
		4212	0·415	235·3	265·1	−10·6	2	4	
		4212	0·404	231·9	263·7	−11·3	2	12	
			0·870	62·9	186·4	+25·0			141
Nov. 7		Centre			(244·9)	(+3·5)	(165)	(1131)	(1546)
311·229	CL, AW		0·926	295·5	299·4	+24·9			142
		4211	0·885	277·2	294·8	+ 8·0	0	8	
I.		4211*a*	0·882	280·7	294·4	+11·0	119	527	
		4211	0·876	277·8	293·7	+ 8·5	0	8	
		4211	0·869	281·8	292·8	+12·0	0	26	804*c*
		4211	0·830	281·1	288·5	+11·1	7	34	
		4211	0·813	278·5	286·9	+ 8·9	0	4	
		4211	0·805	280·1	286·0	+10·2	2	8	
		4212	0·668	248·9	271·9	−11·3	7	17	115*c*
		4212	0·651	248·1	270·5	−11·4	1	6	
		4212	0·601	247·2	266·8	−10·6	1	5	
		4212	0·597	246·0	266·2	−11·2	0	5	
		4212	0·590	246·5	265·9	−10·7	0	3	
		4212	0·597	243·7	265·7	−12·4	1	7	
		4212	0·587	245·8	265·5	−11·0	0	2	
		4212	0·568	244·4	264·0	−11·3	0	1	
		4215	0·399	181·1	233·1	−20·1	0	1	
		4215	0·399	179·3	232·3	−20·1	0	1	
1895.				°	°	°			
311d·229	CL, AW	4215	0·376	171·0	229·1	−18·3	1	4	
		4215	0·379	168·6	228·1	−18·3	1	6	
I.			0·904	100·9	169·0	− 8·3			138
			0·943	69·3	162·4	+20·6			136
Nov. 8		Centre			(232·6)	(+3·4)	(140)	(673)	(1335)
312·447	CL, FT		0·802	282·8	269·5	+12·3			199
			0·783	252·2	265·9	−11·7			199
			0·740	232·4	256·3	−24·2			130
		4211*a*	0·975	281·0	293·9	+11·5	94	454	606*f*
			0·862	66·3	158·4	+22·0			180
			0·966	74·4	141·4	+15·9			369
Nov. 9		Centre			(216·5)	(+3·3)	(94)	(454)	(1683)
313·223	JW, FT		0·975	279·5	283·5	+10·0			347
			0·908	255·9	269·9	−11·3			510
I.			0·904	249·0	268·2	−17·4			144
			0·880	282·8	267·6	+12·8			350
			0·847	238·9	258·5	−24·0			126
			0·855	229·8	256·0	−31·4			124
		4216	0·929	73·9	138·1	+16·2	2	6	
			0·788	76·9	154·6	+12·3			52
			0·868	65·6	147·5	+22·7			76
			0·917	73·5	140·0	+16·4			404
			0·953	110·3	136·2	−18·3			141
Nov. 10		Centre			(206·2)	(+3·2)	(2)	(6)	(2274)
314·404	CL, AW		0·980	256·9	268·1	−12·2			171
			0·965	281·5	265·6	+11·9			196
			0·923	241·3	253·7	−24·9			128
			0·876	285·0	251·4	+14·6			144
			0·722	241·8	232·4	−17·6			230
		4216	0·770	72·6	141·3	+15·3	2	9	
		4216	0·805	72·3	138·0	+16·0	0	5	274*c*
		4216	0·808	73·6	137·5	+15·0	1	9	
			0·787	51·2	144·7	+31·7			121
			0·821	112·6	138·7	−16·5			104
			0·902	40·0	135·1	+45·5			148
			0·943	114·7	123·4	−22·0			244
Nov. 11		Centre			(190·7)	(+3·1)	(3)	(23)	(1760)

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4216, November 10–20. A few small unstable spots irregularly arranged. The group undergoes constant change, and is not seen on November 16 and 18.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots: Area of UMBRA for each Spot (and for Day).	Spots: Area of WHOLE for each Spot (and for Day).	Faculæ: Area for each Group (and for Day).
1895.				°	°	°			
315d.623	CL, FT		0·859	249·0	231·2	−16·3			434
		4217	0·573	99·6	140·3	− 3·0	2	19	
		4216	0·619	64·5	138·9	+17·8	0	10	
			0·808	118·7	125·6	−20·8			239
Nov. 12		Centre			(174·7)	(+3·0)	(2)	(29)	(673)
316·416	CL, AW		0·926	282·2	231·9	+12·4			111
			0·936	303·5	231·3	+32·2			126
			0·932	250·0	230·6	−17·4			461
			0·938	241·7	229·8	−25·2			135
		4216	0·399	57·7	143·9	+15·0	1	5	
		4216	0·439	54·9	142·2	+17·3	0	7	
		4216	0·448	53·2	142·1	+18·2	0	7	
		4216	0·448	58·0	141·0	+16·3	6	24	
		4216	0·474	54·4	140·3	+18·7	3	13	
		4218*a*	0·958	96·4	91·4	− 5·3	26	173	504*c*
		4218	0·975	95·7	87·5	− 5·0	9	42	
Nov. 13		Centre			(164·2)	(+2·9)	(45)	(271)	(1337)
317·416	AW, CL		0·980	250·0	227·6	−19·0			208
		4216	0·274	28·0	143·3	+16·8	0	2	
		4216	0·286	28·5	142·8	+17·3	0	3	
		4216	0·300	28·2	142·5	+18·1	0	2	
		4216	0·279	31·7	142·2	+16·5	4	15	
		4216	0·304	41·9	138·9	+15·8	0	3	
		4216	0·287	48·7	138·2	+13·6	0	2	
		4219	0·534	113·6	121·3	− 9·9	1	2	
		4219	0·537	112·5	120·9	− 9·5	0	4	
		4219*a*	0·564	114·8	119·7	−11·3	2	10	
		4219	0·556	111·4	119·5	− 9·3	0	4	
		4219	0·579	109·2	117·6	− 8·6	0	7	
		4218*a*	0·874	98·0	90·8	− 5·6	44	238	
		4218	0·902	99·5	87·5	− 7·3	0	10	
		4218	0·905	98·3	87·0	− 6·3	0	10	445*c*
		4218	0·908	97·3	86·5	− 5·4	4	36	
		4220	0·969	80·0	75·2	+10·4	9	55	267*s*
		4220	0·973	79·1	74·3	+11·3	2	16	
		4221	0·986	91·5	70·9	− 1·1	9	52	391*c*
		4221*a*	0·988	93·2	70·3	− 2·7	59	254	
			0·960	72·7	77·4	+17·4			193
Nov. 14		Centre			(151·0)	(+2·8)	(134)	(725)	(1504)
1895.				°	°	°			
318d.271	CL, AW	4216	0·252	346·1	143·3	+16·8	2	9	
		4216	0·274	348·3	143·0	+18·2	0	2	
I.		4219	0·358	124·9	122·5	− 9·2	6	14	
		4219	0·371	121·4	121·1	− 8·5	0	2	
		4219	0·385	118·7	119·8	− 8·1	1	4	
		4219*a*	0·421	127·0	119·7	−12·1	12	34	
		4218*a*	0·758	99·3	91·2	− 5·2	41	189	
		4218	0·804	99·2	87·0	− 5·8	4	25	
		4218	0·810	101·6	86·7	− 7·7	4	12	402*c*
		4218	0·809	97·5	86·3	− 4·4	0	5	
		4218	0·810	98·4	86·3	− 5·2	7	39	
		4220	0·903	79·0	75·3	+11·1	7	47	403*f*
		4220	0·908	78·2	74·7	+11·9	3	14	
		4221	0·916	92·4	73·7	− 1·1	1	7	
		4221	0·933	91·6	71·1	− 0·5	12	47	477*c*
		4221*a*	0·940	93·4	70·1	− 2·4	90	267	
			0·892	72·6	77·2	+16·7			257
			0·936	104·7	71·8	−12·7			87
Nov. 15		Centre			(139·7)	(+2·7)	(190)	(717)	(1626)
319·469	AW, CL		0·924	293·4	190·4	+22·6			245
		4222	0·517	230·3	148·5	−16·9	2	12	
		4222	0·510	228·5	147·4	−17·3	0	16	
		4219*a*	0·264	166·8	120·4	−12·3	4	21	
		4218*a*	0·544	104·2	92·0	− 5·5	29	171	
		4218	0·613	102·4	87·1	− 5·5	9	49	
		4218	0·623	107·2	87·1	− 8·5	0	8	
		4220	0·751	77·3	75·8	+11·2	5	55	302*f*
		4221	0·792	92·7	71·8	− 0·5	0	19	
		4221	0·802	91·5	70·8	+ 0·4	0	13	446*f*
		4221*a*	0·805	95·5	70·7	− 2·9	45	233	
Nov. 16		Centre			(123·9)	(+2·6)	(94)	(597)	(993)
320·570	AW, CL	4223	0·577	259·6	144·0	− 4·0	0	5	
		4223	0·564	260·4	143·2	− 3·4	0	4	
		4223	0·554	262·7	142·7	− 2·0	0	9	
		4216	0·572	295·5	141·9	+16·2	0	5	
		4216	0·544	296·8	139·7	+16·2	1	5	
		4216	0·524	296·9	138·4	+15·8	0	2	
		4219*a*	0·327	217·8	121·3	−12·6	1	3	
		4219	0·312	217·8	120·7	−11·9	0	4	
		4219	0·320	215·4	120·4	−12·7	0	2	
		4224	0·043	75·6	107·1	+ 3·1	0	6	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4217, November 12. A small spot.
Group 4218, November 13–24. A large regular spot, *a*, followed by a few small spots in a short irregular stream. *b* is the most stable spot of the following stream. *a* has become a double spot by November 18, and has thrown off a portion *c* by November 19.
Group 4219, November 14–17. A small spot, *a*, with a few very unstable small companions.
Group 4220, November 14–23. A few small unstable spots irregularly scattered. The group undergoes constant change, and is not seen on November 21.
Group 4221, November 14–26. A large regular spot, *a*, usually with a few small unstable companions.
Group 4222, November 16. A pair of small spots.
Group 4223, November 17. Three very small spots near the place of Group 4217.
Group 4224, November 17. Three very small spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
320d·570	AW, CL	4224	0·070	90·8	105·5	+ 2·4	0	3	
		4224	0·082	94·3	104·8	+ 2·1	0	8	
		4225	0·358	152·9	99·8	−16·2	2	6	
		4225	0·377	153·3	99·3	−17·2	0	2	
		4225	0·369	140·1	95·4	−14·1	0	12	
		4225	0·381	140·6	95·1	−14·7	0	4	
		4218*a*	0·328	114·7	92·2	− 5·5	33	165	
		4218	0·395	110·3	87·7	− 5·6	5	20	
		4218	0·404	113·6	87·7	− 7·1	0	10	
		4218	0·416	112·9	86·9	− 7·1	0	18	
		4220	0·569	74·2	75·8	+10·9	1	4	
		4220	0·576	73·3	75·4	+11·5	9	17	
		4220	0·616	75·7	72·3	+10·7	0	9	
		4220	0·663	74·7	68·9	+11·9	0	10	
		4221	0·573	95·7	74·9	− 1·3	5	10	
		4221	0·581	95·7	74·3	− 1·3	0	2	
		4221	0·586	96·6	74·0	− 1·9	2	5	
		4221	0·601	95·3	72·9	− 1·2	0	4	
		4221*a*	0·632	97·6	70·8	− 2·9	44	230	
		4221	0·633	92·9	70·5	+ 0·1	4	18	151*c*
		4221	0·657	97·2	68·9	− 2·9	0	3	
		4221	0·680	94·8	67·0	− 1·5	0	5	
		4221	0·704	98·4	65·4	− 4·2	0	6	
		4221	0·724	98·1	63·7	− 4·2	0	15	
		4221	0·727	96·3	63·3	− 2·9	0	7	
			0·849	73·6	52·2	+15·1			126
			0·957	107·8	38·1	−16·3			237
			0·972	95·2	33·6	− 4·5			312
Nov. 17		Centre			(109·5)	(+2·4)	(107)	(638)	(826)
321·510	AW, CL		0·925	291·0	163·9	+20·3			195
			0·885	304·2	155·5	+31·0			149
			0·846	322·4	142·4	+43·6			88
			0·724	290·6	141·9	+16·4			140
			0·873	246·7	154·8	−18·9			157
		4218*a*	0·158	148·2	92·3	− 5·4	29	158	
		4218	0·207	132·2	88·3	− 5·7	1	4	
		4218	0·238	134·8	87·3	− 7·4	0	6	
		4220	0·397	66·3	75·4	+11·3	1	7	
		4220	0·441	68·0	72·5	+11·6	0	3	
		4221	0·367	98·9	75·9	− 1·1	1	4	
		4221	0·411	98·7	73·2	− 1·5	0	1	
		4221*a*	0·447	101·6	71·2	− 3·1	45	224	
1895.				°	°	°			
321d·510	AW, CL	4221	0·451	94·4	70·5	+ 0·1	0	4	
		4221	0·479	101·2	69·1	− 3·3	0	1	
		4221	0·490	98·8	68·2	− 2·3	0	4	
		4226*a*	0·974	107·2	21·6	−16·2	17	159	410*s*
			0·848	110·3	41·6	−15·8			94
			0·918	74·7	30·9	+15·0			725
Nov. 18		Centre			(97·1)	(+2·3)	(94)	(575)	(1958)
322·491	CL, AW		0·834	243·7	136·8	−20·3			134
			0·727	230·3	122·4	−25·9			58
		4216	0·839	287·6	140·1	+15·9	4	14	133*c*
		4218	0·224	238·6	95·1	− 4·6	0	8	
		4218*a*	0·198	229·8	92·8	− 5·1	22	100	
		4218	0·194	222·8	91·7	− 6·0	5	45	
		4218	0·174	224·4	91·1	− 5·0	0	2	
		4218	0·162	206·7	88·3	− 6·1	0	3	
		4220	0·210	45·6	75·4	+10·6	0	3	
		4220	0·215	52·8	74·1	+ 9·6	0	6	
		4220	0·249	49·9	72·9	+11·4	0	4	
		4221*a*	0·232	113·5	71·9	− 3·2	44	225	
		4221	0·274	105·6	68·9	− 2·1	0	6	
		4226*a*	0·905	108·7	21·3	−15·9	24	144	270*s*
			0·804	76·0	31·2	+12·6			384
			0·914	59·5	20·6	+28·6			85
			0·920	67·7	18·3	+21·3			439
			0·922	98·5	17·6	− 7·0			159
			0·986	77·9	3·7	+12·3			232
Nov. 19		Centre			(84·1)	(+2·2)	(99)	(560)	(1894)
323·311	CL, AW		0·929	308·6	137·4	+36·3			129
			0·893	244·5	133·1	−21·5			112
I.		4216	0·919	286·5	139·5	+16·0	3	15	365*p*
		4218*a*	0·354	249·7	92·7	− 5·1	25	83	
		4218	0·346	245·6	91·7	− 6·2	5	21	
		4218	0·338	248·8	91·7	− 5·0	0	1	
		4218	0·336	247·5	91·4	− 5·4	0	6	
		4227	0·135	265·1	81·0	+ 1·5	0	2	
		4220	0·186	345·6	76·0	+12·4	0	3	
		4220	0·162	346·7	75·5	+11·1	0	5	
		4221	0·075	237·9	76·9	− 0·2	0	3	
		4221	0·074	232·4	76·6	− 0·5	0	1	
		4221*a*	0·088	166·0	72·1	− 2·8	47	219	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4225, November 17. Four very small spots.
Group 4226, November 18–30. A large regular spot, *a*, with a very small companion on November 27.
Group 4227, November 20. A very small spot *np* Group 4221.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
323d·311	CL, AW	4221	0·104	150·7	70·4	− 3·1	0	2	
		4221	0·139	146·0	68·8	− 4·6	0	2	
I.		4221	0·097	123·9	68·7	− 1·1	0	1	
		4228	0·359	173·9	71·0	−18·7	2	12	
		4228	0·366	170·1	69·5	−19·0	0	1	
		4226*a*	0·820	110·6	20·7	−15·5	28	149	109*c*
		4229*a*	0·963	70·7	359·3	+19·2	14	92	164*c*
			0·901	120·0	13·6	−25·7			196
			0·877	98·9	12·8	− 6·7			105
			0·902	64·6	10·6	+23·7			344
			0·930	80·4	5·0	+ 9·8			166
			0·952	58·0	3·3	+30·9			104
			0·959	75·1	0·0	+14·9			316
Nov. 20		Centre			(73·3)	(+2·1)	(124)	(618)	(2110)
324·311	CL, FT		0·980	286·3	138·5	+16·4			144
			0·906	256·5	123·8	−11·3			100
I.		4218*a*	0·554	257·4	92·8	− 5·2	20	97	
		4218	0·543	254·4	91·7	− 6·7	4	13	
		4221*a*	0·229	249·2	72·4	− 2·7	50	219	
		4221	0·202	245·1	70·6	− 2·9	0	2	
		4221	0·204	240·9	70·3	− 3·7	1	5	
		4221	0·201	236·9	69·8	− 4·3	4	9	
		4226*a*	0·677	115·4	20·9	−15·3	30	149	
		4229*a*	0·877	69·4	0·1	+19·0	14	70	691*s*
			0·812	64·1	8·3	+22·0			391
			0·814	80·1	6·0	+ 9·2			137
			0·888	55·6	1·5	+31·1			201
Nov. 21		Centre			(60·1)	(+2·0)	(123)	(564)	(1664)
325·327	AW, CL	4218*a*	0·731	260·7	93·0	− 5·5	24	105	
		4218	0·720	258·0	91·7	− 7·3	2	8	
I.		4218	0·707	263·0	91·2	− 3·7	0	6	235*sf*
		4218	0·700	260·8	90·5	− 5·1	0	6	
		4220	0·555	291·9	78·5	+13·4	6	26	
		4220	0·527	296·2	75·9	+15·0	2	20	
		4220	0·516	295·4	75·3	+14·3	1	6	
		4221*a*	0·449	260·1	72·9	− 2·8	46	200	90*c*
		4226*a*	0·519	125·0	20·6	−15·6	31	130	75*c*
		4229*a*	0·753	66·6	0·1	+18·6	15	67	259*sf*
		4230*a*	0·972	81·3	330·4	+ 8·9	13	93	278*c*
			0·851	53·9	353·5	+31·1			107
1895.				°	°	°			
325d·327	AW, CL		0·850	76·5	349·1	+12·4			192
I.			0·921	65·1	341·3	+23·5			381
Nov. 22		Centre			(46·7)	(+1·8)	(140)	(667)	(1617)
326·171	AW, FT		0·876	266·3	41·5	−33·4			72
		4218*a*	0·849	262·1	93·0	− 5·8	14	94	197*sf*
I.		4220	0·665	291·2	75·3	+15·2	0	4	
		4221*a*	0·621	263·5	73·5	− 2·7	49	191	150*c*
		4221	0·578	263·1	70·4	− 2·6	1	4	
		4221	0·573	260·0	69·8	− 4·3	0	5	
		4226*a*	0·387	139·6	20·5	−15·4	28	128	
		4229*a*	0·630	61·7	359·8	+18·7	11	49	
		4230*b*	0·904	80·1	331·1	+ 9·7	1	21	
		4230*a*	0·908	80·9	330·5	+ 9·0	11	63	464*c*
		4230	0·913	80·0	329·9	+ 9·8	0	18	
			0·811	76·3	342·0	+12·0			137
			0·877	63·7	336·6	+23·7			774
			0·910	100·5	330·8	− 8·8			96
Nov. 23		Centre			(35·5)	(+1·7)	(115)	(577)	(1890)
327·234	CL, FT		0·821	285·1	75·8	+13·3			386
			0·812	272·5	75·6	+ 2·9			155
I.			0·788	244·2	69·9	−19·0			108
		4218*a*	0·952	263·0	93·1	− 6·2	16	81	220*sf*
		4221*a*	0·797	265·2	74·0	− 2·8	37	180	185*f*
		4226*a*	0·295	176·8	20·5	−15·4	24	125	
		4229*a*	0·460	49·7	359·9	+18·7	11	38	
		4229	0·500	48·6	358·0	+20·7	0	2	
		4230*b*	0·775	78·9	331·2	+ 9·6	4	13	
		4230*a*	0·779	79·8	330·8	+ 9·0	11	41	385*c*
			0·804	57·1	332·5	+26·9			260
Nov. 24		Centre			(21·5)	(+1·6)	(103)	(480)	(1699)
328·213	JW, CL		0·931	273·3	77·0	+ 3·7			204
			0·915	283·2	74·3	+12·7			427
I.		4221*a*	0·915	266·2	74·4	− 2·9	37	179	507*sf*
		4226*a*	0·357	214·8	20·8	−15·6	27	110	
		4229*a*	0·333	24·9	0·1	+19·0	10	35	
		4229	0·310	30·9	359·1	+16·9	0	1	
		4229	0·312	32·9	358·5	+16·6	0	3	
		4229	0·326	37·2	356·8	+16·5	0	7	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4228, November 20. A small spot *s* Group 4221.
Group 4229, November 20–29. A regular spot, *a*, with one or two very small companions after November 23.
Group 4230, November 22–29. An irregular spot, *a*, with a close companion, *b*, on November 23, and a second companion which is very faint. *a* diminishes from day to day, and has become regular by November 25. A very small companion is seen near it on November 28.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
328d·213	JW, CL	4230*b*	0·614	76·3	331·5	+ 9·6	1	8	
		4230*a*	0·616	77·6	331·3	+ 8·8	10	26	
I.		4231	0·956	80·2	295·8	+ 9·9	0	13	} 472*c*
		4231*a*	0·961	78·8	294·9	+11·1	15	65	
		4231*b*	0·963	77·2	294·5	+12·7	37	133	
Nov. 25		Centre			(8·6)	(+1·5)	(137)	(580)	(1610)
329·476	CL, AW	4221*a*	0·991	267·2	73·9	− 2·6	36	216	286*sf*
		4226*a*	0·549	238·9	20·9	−15·3	26	113	
		4232	0·232	322·0	0·3	+11·8	0	5	
		4232	0·255	327·0	0·1	+13·6	0	4	
		4229*a*	0·332	336·1	0·0	+18·9	8	22	
		4229	0·297	343·5	357·0	+17·8	0	6	
		4230*a*	0·369	70·1	331·5	+ 8·4	6	19	
		4331*a*	0·833	77·9	296·1	+10·8	13	50	} 353*c*
		4331*b*	0·839	76·3	295·6	+12·1	29	138	
			0·946	77·2	281·3	+12·5			273
Nov. 26		Centre			(351·9)	(+1·3)	(118)	(573)	(912)
330·192	JW, FT		0·816	289·9	35·8	+16·8			356
			0·812	289·7	35·4	+16·6			443
M.		4226	0·699	242·6	23·2	−17·8	0	4	
		4226*a*	0·667	244·6	21·3	−15·6	15	92	
		4229*a*	0·421	317·0	0·3	+19·0	4	25	
		4229	0·387	321·9	357·2	+18·8	0	3	
		4230*a*	0·222	56·7	331·9	+ 8·1	3	18	
		4231*a*	0·729	76·4	296·8	+10·7	11	45	} 403*f*
		4231*b*	0·739	74·9	296·1	+11·9	31	129	
			0·914	78·6	277·1	+10·9			318
			0·930	105·5	275·5	−13·9			238
Nov. 27		Centre			(342·7)	(+1·2)	(64)	(316)	(1758)
331·212	AW, FT		0·934	251·8	36·7	−16·6			96
			0·896	288·1	31·7	+16·6			323
I.			0·861	277·6	28·3	+ 7·1			94
			0·855	240·7	23·8	−24·1			72
			0·802	293·8	20·1	+19·5			338
			0·695	300·0	9·2	+21·1			178
			0·641	289·0	7·5	+12·8			83
		4226*a*	0·809	249·9	21·1	−15·5	14	73	54*c*
		4229*a*	0·577	302·5	0·0	+18·9	6	12	
1895.				°	°	°			
331d·212	AW, FT	4230*a*	0·134	339·0	332·0	+ 8·2	2	10	
		4230	0·134	351·2	330·4	+ 8·6	0	2	
I.		4231	0·553	67·8	297·6	+12·9	0	1	
		4231*a*	0·556	71·0	296·9	+11·3	11	42	
		4231*b*	0·572	69·6	296·1	+12·3	30	122	
		4231	0·603	67·0	294·4	+14·4	0	4	
			0·620	89·1	291·0	+ 1·4			31
			0·689	68·6	287·7	+15·3			37
			0·773	109·0	280·5	−13·9			46
			0·805	76·2	276·4	+11·6			81
			0·846	103·9	272·6	−11·2			90
Nov. 28		Centre			(329·2)	(+1·0)	(63)	(266)	(1523)
332·316	AW, FT		0·974	287·0	30·9	+16·8			139
			0·887	293·8	15·0	+21·4			395
I.			0·892	236·8	12·7	−28·7			59
			0·856	244·7	10·3	−20·9			67
			0·834	303·0	6·5	+27·5			82
			0·789	285·4	5·6	+12·7			298
		4226*a*	0·922	252·9	20·4	−15·4	10	68	80*s*
		4229*a*	0·745	295·3	359·9	+19·2	2	12	182*c*
		4230*a*	0·324	292·4	332·1	+ 8·0	1	7	
		4231*ab*	0·359	57·9	296·6	+11·9	32	184	
Nov. 29		Centre			(314·6)	(+0·9)	(45)	(271)	(1302)
333·191	AW, FT		0·920	245·9	7·7	−21·7			149
			0·918	295·2	7·6	+23·3			563
I.			0·891	280·2	5·7	+ 9·5			192
			0·829	290·8	359·5	+21·9			344
			0·864	309·0	356·5	+33·4			84
			0·684	294·5	343·6	+17·1			88
		4226*a*	0·978	253·9	20·1	−15·6	0	28	70*f*
		4231*a*	0·203	31·3	297·0	+10·8	5	32	
		4231*b*	0·219	28·4	297·0	+11·9	25	122	
			0·916	102·6	238·7	− 8·2			126
			0·950	111·3	233·0	−20·0			254
Nov. 30		Centre			(303·1)	(+0·8)	(30)	(182)	(1870)
334·221	AW, FT		0·949	244·6	358·7	−23·7			159
			0·935	289·5	357·5	+18·4			425
I.			0·879	281·1	350·5	+10·1			144

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4231, November 25–December 5. Two regular spots, *a* and *b*, close together. They are accompanied by a small companion on November 25, and by two very small ones on November 28. *a* and *b* are measured together on November 29. They diminish rapidly after that date, and *a* has disappeared by December 2.
Group 4232, November 26. A pair of very small faint spots.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
334d·221	AW, FT		0·852	287·7	346·6	+15·3			96
			0·833	295·5	343·2	+21·4			304
I.			0·774	303·7	335·0	+25·9			290
		4231*b*	0·239	324·7	297·6	+11·9	26	123	
		4231*a*	0·218	324·0	297·0	+10·9	0	5	
		4233	0·936	99·2	220·7	− 8·4	0	8	} 164*c*
		4233	0·955	99·7	217·3	− 9·1	0	7	
			0·891	113·3	229·0	−20·3			146
Dec. 1		Centre			(289·5)	(+0·7)	(26)	(143)	(1728)
335·477	AW, JW		0·961	305·3	343·6	+33·9			231
			0·938	283·9	342·0	+13·2			370
M.			0·924	254·4	339·4	−14·2			94
			0·927	292·3	339·3	+20·8			384
			0·865	277·3	332·5	+ 6·6			309
			0·863	302·6	328·2	+27·9			449
		4234*a*	0·551	244·1	303·5	−13·5	14	89	
		4234	0·550	242·1	303·0	−14·4	0	4	
		4234	0·534	244·8	302·6	−12·7	0	3	
		4234	0·540	240·1	301·9	−15·1	0	9	
		4234	0·524	244·1	301·8	−12·8	1	13	
		4234	0·526	242·2	301·5	−13·7	0	2	
		4234*b*	0·514	238·4	299·8	−15·1	5	31	
		4231*b*	0·459	294·6	298·1	+11·4	21	111	
		4235	0·114	81·2	266·6	+ 1·5	1	5	
		4235	0·157	68·4	264·6	+ 3·9	0	7	
			0·808	102·6	220·0	− 9·9			166
Dec. 2		Centre			(273·0)	(+0·5)	(42)	(274)	(2003)
336·222	AW, FT		0·948	296·4	332·4	+25·0			265
			0·910	281·0	328·1	+10·2			223
I.			0·893	305·2	321·4	+31·1			123
			0·855	297·6	318·6	+23·5			97
		4234*a*	0·684	249·8	304·2	−13·3	35	228	
		4234	0·650	249·2	301·5	−13·0	0	8	
		4234	0·653	244·8	300·8	−15·8	1	4	} 249*c*
		4234	0·639	249·6	300·8	−12·6	2	9	
		4234*b*	0·639	244·6	299·8	−15·6	12	72	
		4231*b*	0·600	288·7	298·4	+11·4	23	80	
		4235*a*	0·104	284·8	268·8	+ 1·9	10	36	
		4235	0·093	289·6	268·1	+ 2·2	2	10	
		4235	0·082	282·4	267·7	+ 1·5	0	4	
1895.				°	°	°			
336d·222	AW, FT	4235	0·074	283·3	267·2	+ 1·4	0	4	
		4235	0·066	283·6	266·8	+ 1·3	0	2	
I.		4235	0·059	300·8	266·0	+ 2·1	4	10	
		4235	0·048	297·8	265·5	+ 1·7	0	8	
		4235	0·069	330·9	265·0	+ 3·9	0	6	
		4235	0·032	326·7	264·1	+ 2·0	1	4	
Dec. 3		Centre			(263·1)	(+0·4)	(90)	(485)	(957)
337·280	AW, FT		0·979	278·2	327·2	+ 8·1			141
			0·962	267·3	323·1	− 2·5			96
I.			0·959	293·0	321·2	+22·1			195
			0·953	301·8	318·7	+30·3			157
			0·941	313·8	312·7	+40·7			125
		4234*a*	0·844	253·9	305·4	−13·4	31	197	}
		4234	0·813	253·5	302·2	−13·1	0	5	} 149*c*
		4234*b*	0·793	249·6	299·6	−15·9	9	37	
		4231*b*	0·774	284·4	298·9	+11·3	7	21	116*f*
		4235*a*	0·360	274·5	270·2	+ 1·9	17	72	
		4235	0·344	273·9	269·2	+ 1·6	1	5	
		4235	0·339	274·6	268·9	+ 1·9	2	7	
		4235	0·324	274·1	268·0	+ 1·6	1	6	
		4235	0·324	275·6	267·9	+ 2·1	0	1	
		4235	0·300	274·1	266·5	+ 1·5	3	12	
		4235*b*	0·267	274·6	264·6	+ 1·5	13	47	
		4235	0·261	278·8	264·1	+ 2·6	0	3	
			0·920	121·7	186·2	−28·8			95
			0·963	97·5	175·2	− 7·2			176
Dec. 4		Centre			(249·2)	(+0·3)	(84)	(413)	(1250)
338·216	CL. JW		0·800	285·8	288·7	+12·7			142
		4234*a*	0·940	255·9	306·0	−13·2	29	136	} 408*c*
I.		4234*b*	0·893	252·0	298·6	−15·9	2	19	
		4231*b*	0·889	282·5	298·8	+11·2	3	21	278*c*
		4235*a*	0·573	273·1	271·6	+ 2·0	18	75	98*c*
		4235	0·496	272·3	266·4	+ 1·3	4	15	
		4235*b*	0·471	272·8	264·7	+ 1·5	6	24	
		4235	0·460	273·7	264·0	+ 1·9	0	5	
		4236	0·887	97·1	174·7	− 6·2	2	10	} 119*c*
		4236	0·893	97·6	174·0	− 6·7	0	11	
		4237	0·931	102·3	169·0	−11·4	0	29	101*f*
		4238	0·982	104·7	158·4	−14·4	33	94	
Dec. 5		Centre			(236·8)	(+0·2)	(97)	(439)	(1146)

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4233, December 1. A pair of very small faint spots.
Group 4234, December 2–5. An irregular stream forming suddenly, increasing rapidly, and diminishing as quickly. *a*, the leader, is a large spot; *b*, the last spot, is of considerable size on December 3.
Group 4235, December 2–8. A pair of very small spots on December 2. The group rapidly increases in size, and has become by December 3 a number of spots closely following each other in a straight stream. The two principal spots, *a* and *b*, are stable. The smaller spots between them soon die out.
Group 4236, December 5–14. A pair of small spots on December 5. On December 6 two small spots close together, *a* and *b*, and a small regular spot, *c*, the latter corresponding to the pair seen the previous day. *b* alone remains by December 8. It is followed by some very small companions on December 10 and 11, and undergoes several changes as to its area.
Group 4237, December 5–8. A small faint spot on December 5 *s* of Group 4236. Another spot, *a*, on December 6 and 7. *a* is followed by a few very small companions on December 8.
Group 4238, December 5–11. A long irregular straggling group, in three principal clusters, none of which are large, but of which the first is the most important, and alone remains by December 10. The individual spots are nearly all small and unstable.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
339d·498	CL, AW		0·949	281·7	290·9	+11·1			201
		4235a	0·804	273·1	273·2	+ 2·5	20	91	110c
		4235	0·755	271·3	268·7	+ 1·0	0	7	
		4235b	0·714	272·6	265·3	+ 1·9	4	14	
		4236a	0·645	100·1	180·3	− 6·5	0	8	
		4236b	0·656	100·1	179·5	− 6·6	5	23	
		4236c	0·720	99·9	174·5	− 7·1	9	30	
		4237a	0·752	105·9	172·4	−11·9	1	13	
		4238	0·876	106·7	160·0	−14·6	8	41	
		4238	0·895	106·9	157·6	−15·1	5	37	279c
		4238	0·908	106·5	155·9	−14·9	0	8	
		4238	0·946	108·2	150·0	−17·2	5	20	
		4239a	0·978	101·2	142·4	−11·0	16	116	292f
		4240a	0·987	108·9	139·9	−18·7	15	77	268f
Dec. 6		Centre			(219·9)	(0·0)	(88)	(485)	(1150)
340·470	CL, FT	4235a	0·918	272·9	273·5	+ 2·6	25	109	215c
		4235b	0·853	272·4	265·5	+ 2·0	0	10	
		4236a	0·442	104·7	181·8	− 6·6	1	6	
		4236b	0·451	104·2	181·2	− 6·5	4	18	
		4236	0·473	104·1	179·8	− 6·8	0	4	
		4236	0·491	103·9	178·6	− 6·9	0	4	
		4236c	0·547	102·8	174·8	− 7·1	8	22	
		4237a	0·595	111·8	172·8	−12·9	0	7	
		4238	0·765	109·6	159·1	−15·0	9	94	
		4238	0·786	109·8	157·3	−15·6	0	9	
		4238	0·806	109·4	155·3	−15·6	8	37	323c
		4238	0·805	108·7	155·2	−15·0	0	8	
		4238	0·858	110·0	149·9	−17·2	0	12	
		4239a	0·905	102·6	143·1	−11·4	28	115	
		4239	0·915	101·9	141·7	−10·9	12	40	298c
		4239	0·935	101·6	138·6	−10·9	3	26	
		4239	0·949	103·2	136·3	−12·6	0	22	
		4240a	0·927	110·3	140·7	−18·8	20	95	275f
		4241a	0·982	70·9	129·1	+18·7	33	178	243c
Dec. 7		Centre			(207·2)	(−0·2)	(151)	(816)	(1354)
341·273	AW, CL	4235	0·981	272·4	275·2	+ 2·3	23	137	289f
I.		4236b	0·270	112·4	182·1	− 6·3	3	14	
		4237a	0·447	119·1	173·1	−12·9	0	2	
		4237	0·476	119·4	171·4	−13·8	0	3	
		4237	0·473	117·9	171·3	−13·1	0	2	
1895.				°	°	°			
341d·273	AW, CL	4237	0·491	112·6	169·2	−11·2	0	5	
		4238	0·644	112·9	158·9	−14·8	5	22	
I.		4238	0·658	112·9	157·9	−15·1	6	28	
		4238	0·673	113·2	156·8	−15·6	0	24	
		4238	0·682	114·5	156·4	−16·7	0	3	263c
		4238	0·694	113·8	155·3	−16·5	0	3	
		4238	0·700	111·2	154·3	−14·9	2	14	
		4238	0·711	111·2	153·4	−15·1	0	5	
		4238	0·766	112·3	148·9	−17·2	0	2	
		4238	0·766	111·2	148·7	−16·3	0	9	84c
		4238	0·782	112·2	147·4	−17·4	0	3	
		4239a	0·818	103·9	142·7	−11·6	37	129	
		4239	0·829	103·1	141·5	−11·0	6	18	
		4239	0·830	102·5	141·3	−10·6	0	11	
		4239	0·843	102·6	139·9	−10·8	0	7	507c
		4239	0·847	101·8	139·4	−10·2	0	8	
		4239	0·866	102·7	137·4	−11·2	0	30	
		4239	0·890	104·3	134·6	−12·8	3	20	
		4240a	0·855	111·7	139·9	−18·6	12	72	
		4240	0·870	111·7	138·1	−18·9	0	4	
		4240	0·875	112·2	137·6	−19·5	0	4	266c
		4240	0·896	111·7	134·8	−19·5	0	14	
		4240	0·907	112·4	133·4	−20·4	0	18	
		4241a	0·944	69·5	127·4	+19·2	56	176	741f
		4241	0·971	70·8	121·6	+18·5	0	14	
		4242a	0·969	112·5	122·1	−21·9	8	55	410c
			0·757	68·6	149·7	+15·7			65
Dec. 8		Centre			(196·6)	(−0·4)	(161)	(856)	(2625)
342·240	CL, AW		0·842	245·9	238·7	−20·4			99
		4236b	0·096	178·2	183·6	− 6·0	9	20	
I.		4238	0·482	120·9	158·6	−14·8	4	20	
		4238	0·499	122·6	158·0	−16·0	1	4	
		4238	0·493	120·6	157·9	−15·0	6	13	
		4238	0·501	120·9	157·4	−15·3	1	3	
		4238	0·517	120·6	156·4	−15·6	0	3	
		4238	0·575	117·9	152·0	−16·0	0	2	
		4238	0·618	117·8	149·1	−17·1	0	3	
		4238	0·628	117·1	148·2	−17·0	0	6	
		4238	0·636	117·5	147·7	−17·5	0	2	
		4239a	0·672	106·8	142·9	−11·6	35	153	
		4239	0·697	105·2	140·7	−10·9	0	4	231c
		4239	0·699	103·9	140·4	−10·0	4	18	

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4239, December 6–18. A large composite spot. *a*, followed at first by a few small spots in a straggling stream. *a* has become regular, and the smaller spots have disappeared by December 12. *a* is again attended by a small companion on December 13 and 18.

Group 4240, December 6–14. A number of spots in an irregular stream, mostly divided into two clusters. The leader, *a*, is a composite spot. A second composite spot, *b*, has formed at the end of the stream by December 9. The other spots are small, and the group as a whole undergoes much change.

Group 4241, December 7–19. A fine but irregular straggling stream. Three large spots, *a*, *b* and *c*, slightly connected by lines of very small spots, are its chief features. *b* has broken up by December 13, and *c* by December 14, but the principal portion of *c* is still recognisable. *a* has become regular by December 14. The small spots disappear, and *a* alone remains by December 17.

Group 4242, December 8–17. A slowly diminishing regular spot, *a*. It is attended by one very small companion on December 10 and 16, and by several on December 14.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
342d·240	CL, AW	4239	0·739	104·8	137·2	−11·2	6	29	
		4239	0·741	103·9	137·0	−10·6	2	8	
I.		4240*a*	0·732	115·1	139·7	−18·4	9	52	
		4240	0·744	115·4	138·7	−18·9	2	10	
		4240	0·747	113·6	138·0	−17·7	0	10	
		4240	0·756	115·0	137·6	−19·0	0	8	338*c*
		4240	0·771	115·0	136·2	−19·3	0	7	
		4240	0·795	114·6	133·9	−19·6	0	8	
		4240*b*	0·807	114·2	132·6	−19·6	15	72	
		4241*a*	0·858	66·7	127·3	+19·5	39	197	
		4241	0·892	68·8	122·7	+18·6	1	7	
		4241	0·896	69·1	122·1	+18·4	0	4	
		4241	0·916	67·4	119·6	+20·3	0	5	707*c*
		4241*b*	0·935	68·8	116·3	+19·6	0	18	
		4241	0·936	69·9	116·0	+18·6	0	20	
		4241*c*	0·952	70·1	113·1	+18·7	40	140	
		4242*a*	0·891	114·5	123·1	−21·9	16	80	308*c*
		4243*a*	0·977	111·6	107·1	−21·2	44	125	317*c*
			0·790	106·0	132·9	−12·8			117
			0·887	109·0	122·7	−17·0			126
Dec. 9		Centre			(183·8)	(−0·5)	(234)	(1051)	(2243)
343·372	AW, CL		0·895	249·4	230·8	−18·6			274
			0·829	260·4	224·4	− 8·3			167
I.		4236*b*	0·294	249·8	184·9	− 6·4	4	11	
		4236	0·282	250·4	184·3	− 6·0	0	2	
		4236	0·252	241·3	181·7	− 7·5	0	2	
		4236	0·230	240·5	180·5	− 7·1	0	3	
		4238	0·307	145·3	158·5	−15·1	2	7	
		4238	0·312	144·4	158·1	−15·3	2	6	
		4238	0·320	143·4	157·5	−15·4	6	16	
		4238	0·320	141·4	157·0	−15·0	0	3	
		4244	0·464	134·1	148·3	−19·3	0	9	
		4239*a*	0·478	115·1	142·7	−12·2	42	185	
		4239	0·499	114·1	141·2	−12·3	0	1	
		4239	0·509	115·4	140·8	−13·1	0	5	
		4239	0·501	111·8	140·7	−11·2	0	1	
		4239	0·503	110·8	140·4	−10·8	0	2	
		4239	0·510	112·2	140·2	−11·6	1	6	
		4239	0·550	111·5	137·5	−12·1	1	4	
		4239	0·559	110·6	136·7	−11·9	0	2	
		4239	0·581	111·0	135·3	−12·5	0	1	
		4239	0·600	112·8	134·3	−13·9	4	13	
1895.				°	°	°			
343d·372	AW, CL	4240*a*	0·583	123·8	138·3	−19·2	13	71	
		4240	0·585	122·1	137·5	−18·6	0	3	
I.		4240	0·603	122·8	136·5	−19·5	0	2	
		4240	0·611	123·7	136·2	−20·3	0	8	215*c*
		4240	0·652	123·4	133·3	−21·5	1	6	
		4240*b*	0·666	121·1	131·5	−20·6	16	95	
		4240	0·674	122·6	131·4	−21·7	1	3	
		4241*a*	0·719	62·1	126·8	+19·2	44	181	
		4241	0·753	65·2	123·1	+18·0	0	7	
		4241	0·771	65·5	121·5	+18·2	5	18	
		4241	0·787	64·9	120·1	+19·1	0	9	
		4241	0·791	66·0	119·5	+18·4	0	6	
		4241	0·802	65·0	118·7	+19·4	0	7	
		4241*b*	0·813	64·5	117·7	+20·1	23	92	851*c*
		4241	0·820	66·5	116·5	+18·7	1	8	
		4241	0·831	61·9	116·5	+22·6	0	11	
		4241	0·822	67·9	116·1	+17·6	1	6	
		4241	0·828	66·9	115·6	+18·6	1	7	
		4241	0·839	62·0	115·6	+22·8	2	13	
		4241	0·839	68·2	114·2	+17·8	0	10	
		4241*c*	0·849	67·9	113·2	+18·3	30	119	
		4242*a*	0·768	119·5	122·7	−22·6	13	66	472*c*
		4243*a*	0·900	113·9	106·8	−21·7	24	86	462*sp*
			0·864	42·7	120·2	+38·9			116
			0·927	95·5	101·2	− 5·4			141
			0·963	103·4	95·0	−13·1			76
Dec. 10		Centre			(168·9)	(−0·6)	(237)	(1113)	(2774)
344·272	AW, JW		0·942	282·4	226·6	+11·4			118
I.		4245	0·605	247·8	192·1	−13·8	2	7	
		4245	0·593	247·1	191·1	−13·9	0	2	
		4245	0·574	246·3	189·6	−13·9	1	17	
		4236*b*	0·494	259·2	186·1	− 5·9	10	52	
		4236	0·491	260·8	186·0	− 5·1	0	1	
		4238	0·246	184·9	158·2	−14·9	0	3	
		4238	0·271	183·8	158·1	−16·3	0	2	
		4238	0·260	183·3	157·9	−15·7	0	2	
		4238	0·251	183·4	157·9	−15·1	6	13	
		4239*a*	0·310	131·0	143·2	−12·4	40	156	
		4239	0·331	133·2	142·7	−13·8	0	2	
		4239	0·315	126·8	142·1	−11·6	0	3	
		4246	0·419	120·7	135·4	−13·0	0	11	
		4246	0·436	120·7	134·4	−13·5	0	8	

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The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4243, December 9–19. A spot, *a*, which, at times regular, undergoes several changes of shape and size. It is frequently accompanied by a small companion. The group has undergone a sudden revival by December 16, and is then a short irregular stream of small spots, *b* and *c* being the principal.
Group 4244, December 10. A small faint spot *sf* Group 4238. The Groups 4238, 4240, 4242, 4243 and 4244 follow each other in one almost continuous stream.
Group 4245, December 11. A few small spots in a short straight stream.
Group 4246, December 11–14. A pair of small spots on December 11. The group is not seen on December 12 and 13, but a single very small spot is seen on December 14.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
344d·272	AW, JW	4240	0·419	135·8	139·2	−18·1	1	7	
		4240*a*	0·431	136·2	138·7	−18·7	5	30	
I.		4240	0·434	134·2	138·0	−18·2	0	4	
		4240	0·451	134·7	137·3	−19·1	0	3	
		4240	0·480	132·6	135·1	−19·6	0	16	
		4240	0·501	130·4	133·2	−19·5	0	7	
		4240*c*	0·514	132·6	133·2	−21·0	9	66	
		4240*b*	0·532	130·6	131·5	−20·8	4	54	
		4241*a*	0·585	53·8	127·1	+19·5	49	179	
		4241	0·594	59·3	124·8	+17·0	0	10	
		4241	0·636	58·4	122·2	+18·9	0	17	
		4241	0·658	58·8	120·5	+19·3	6	36	
		4241	0·668	58·5	119·9	+19·8	0	9	
		4241	0·665	60·3	119·6	+18·6	0	6	
		4241	0·660	63·7	119·1	+16·4	0	4	923*c*
		4241	0·673	62·0	118·5	+17·8	0	7	
		4241*b*	0·700	58·7	117·4	+20·7	23	123	
		4241	0·697	61·2	116·9	+19·0	0	2	
		4241	0·727	56·2	116·0	+23·3	0	4	
		4241	0·704	63·2	115·8	+17·9	0	5	
		4241*c*	0·730	63·3	113·7	+18·6	28	90	
		4242	0·635	127·2	123·8	−23·1	0	3	259*c*
		4242*a*	0·635	125·8	123·3	−22·3	12	47	
		4243*a*	0·793	116·8	107·7	−21·4	19	70	4538*p*
			0·801	30·5	123·4	+42·9			97
Dec. 11		Centre			(157·0)	(−0·7)	(215)	(1078)	(1850)
345·430	AW, FT	4236*b*	0·708	262·4	186·5	− 5·9	8	72	
		4239*a*	0·206	189·0	143·7	−12·6	30	161	
		4240*a*	0·313	171·6	139·0	−18·7	0	20	
		4240	0·380	158·7	133·3	−21·5	5	28	
		4240	0·366	157·4	133·2	−20·4	0	8	
		4240	0·389	155·5	131·9	−21·5	4	32	
		4241*a*	0·413	35·0	127·4	+18·9	21	157	
		4241	0·415	43·0	124·7	+16·8	0	6	
		4241	0·430	44·8	123·4	+16·9	0	5	
		4241	0·458	44·7	122·1	+18·2	1	9	
		4241*b*	0·528	47·4	117·5	+20·1	9	93	
		4241	0·547	44·5	117·4	+22·2	0	18	
		4241*c*	0·542	53·2	114·7	+18·1	15	77	
		4242*a*	0·473	143·0	123·9	−22·8	10	38	
		4247*a*	0·420	79·3	117·5	+ 3·7	20	104	
		4247	0·472	78·7	114·3	+ 4·6	0	8	
1895.				°	°	°			
345d·430	AW, FT	4247*b*	0·485	77·6	113·5	+ 5·3	6	41	
		4243*a*	0·630	125·2	108·2	−21·9	15	64	
			0·920	95·1	75·1	− 5·1			311
Dec. 12		Centre			(141·8)	(−0·8)	(144)	(941)	(311)
346·474	CL, AW		0·909	255·8	192·7	−13·3			82
		4236*b*	0·856	263·6	186·6	− 6·0	9	45	144*c*
		4239*a*	0·336	231·7	143·6	−12·9	28	142	
		4239	0·284	229·4	140·7	−11·6	0	15	
		4240*a*	0·365	210·1	139·1	−19·3	8	31	
		4240	0·346	210·5	138·6	−18·3	0	4	
		4240	0·403	193·9	134·1	−24·0	0	6	
		4240	0·372	193·9	133·5	−22·1	0	7	
		4240	0·375	191·9	132·8	−22·4	0	7	
		4240*b*	0·355	190·7	132·0	−21·3	0	8	
		4241*a*	0·338	1·6	127·4	+18·7	21	134	
		4241	0·298	4·8	126·5	+16·2	0	6	
		4241	0·304	9·3	125·1	+16·4	0	18	
		4241	0·352	8·3	124·9	+19·3	0	14	
		4241	0·328	9·3	124·8	+17·8	0	15	
		4241	0·338	10·0	124·5	+18·4	0	5	
		4241	0·364	9·5	124·4	+20·0	0	8	
		4241	0·342	13·6	123·2	+18·4	0	5	
		4241	0·389	25·4	117·8	+19·5	0	13	
		4241	0·409	26·8	116·7	+20·4	9	64	
		4241*c*	0·395	33·9	114·7	+18·1	17	71	
		4242*a*	0·379	169·8	123·8	−22·8	6	27	
		4247*a*	0·178	64·0	118·8	+ 3·5	33	193	
		4247	0·205	71·6	116·8	+ 2·7	0	6	
		4247	0·218	71·3	116·1	+ 3·1	0	5	
		4247*b*	0·272	65·0	113·7	+ 5·6	17	71	
		4247	0·292	67·9	112·3	+ 5·3	0	10	
		4243	0·489	140·2	108·2	−22·9	1	11	
		4243*a*	0·484	138·4	107·8	−22·0	14	41	
		4248*a*	0·882	77·4	67·1	+10·6	4	24	70*f*
			0·803	95·1	74·8	− 4·7			262
Dec. 13		Centre			(128·0)	(−1·0)	(167)	(1006)	(558)
347·236	AW, JW		0·963	253·5	191·8	−16·2			166
		4236*b*	0·933	263·9	186·7	− 6·1	16	62	463*f*
I.		4239*a*	0·469	243·9	143·5	−12·8	28	148	
		4246	0·383	235·7	136·9	−13·5	0	4	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.

The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4247, December 12–19. A fine group appearing suddenly near the central meridian. It consists of two principal spots, *a* and *b*, connected by a sparse stream of small spots. *a* is a large elliptical spot, *b* tends to divide.

Group 4248, December 13–19. A small spot, *a*, on December 13. It has thrown off a small fragment, and is followed by a short stream of small spots by December 14. By December 16 *a* alone remains, but it is again attended by two very small companions on December 19.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
347d·236	AW,JW	4240	0·482	223·9	138·9	−21·3	0	3	
I.		4240*a*	0·463	226·5	138·8	−19·5	10	17	
		4240	0·414	231·0	137·5	−16·0	0	4	
		4240	0·437	222·7	136·3	−19·7	0	5	
		4240	0·443	220·7	135·9	−20·6	0	5	
		4240	0·409	223·4	135·1	−18·3	0	3	
		4240	0·436	214·3	133·3	−22·1	0	4	
		4240*b*	0·413	213·0	131·9	−21·3	0	2	
		4241	0·407	336·5	128·0	+20·8	0	2	
		4241*a*	0·376	335·9	127·3	+18·9	24	137	
		4241	0·333	336·3	126·0	+16·6	0	3	
		4241	0·328	338·3	125·2	+16·6	1	5	
		4241	0·376	341·9	125·1	+19·8	0	3	
		4241	0·345	340·7	124·8	+17·8	0	7	
		4241	0·340	342·1	124·3	+17·7	0	1	
		4241	0·365	2·4	117·1	+20·2	3	10	
		4241	0·374	4·8	116·1	+20·7	3	10	
		4241	0·389	4·7	116·0	+21·6	2	4	
		4241	0·322	8·3	115·2	+17·4	0	1	
		4241	0·333	8·4	115·1	+18·1	11	24	
		4241*c*	0·386	7·1	115·1	+21·3	0	7	
		4241	0·377	8·3	114·7	+20·7	0	2	
		4241	0·341	11·8	113·8	+18·3	2	14	
		4241	0·357	12·6	113·3	+19·2	0	4	
		4242*a*	0·381	193·1	123·4	−22·8	7	19	
		4242	0·408	187·2	121·2	−24·9	0	6	
		4242	0·415	186·5	121·0	−25·4	0	1	
		4242	0·370	187·4	120·9	−22·5	0	1	
		4242	0·401	181·7	118·7	−24·7	0	6	
		4242	0·438	180·2	118·1	−27·0	0	8	
		4242	0·446	175·6	115·8	−27·4	0	3	
		4247*a*	0·088	344·5	119·3	+ 3·7	35	179	
		4247	0·083	358·1	118·2	+ 3·7	0	3	
		4247	0·071	3·9	117·7	+ 2·9	0	13	
		4247	0·076	28·2	115·9	+ 2·8	1	4	
		4247	0·086	25·3	115·9	+ 3·3	0	2	
		4247	0·115	38·2	113·9	+ 4·1	0	1	
		4247*b*	0·146	33·3	113·4	+ 5·9	18	90	
		4247	0·134	42·7	112·8	+ 4·6	1	3	
		4243*a*	0·400	153·4	106·9	−22·0	13	35	
		4243	0·434	154·6	106·3	−24·0	0	10	
		4248*a*	0·790	75·4	67·1	+10·8	0	4	
		4248*a*	0·791	74·9	67·1	+11·1	8	16	
		4248	0·801	74·9	66·1	+11·3	0	4	
1895.				°	°	°			
347d·236	AW,JW	4248	0·818	75·5	64·4	+11·1	0	2	142*c*
I.		4248	0·821	74·2	64·3	+12·3	0	3	
		4248	0·831	74·5	63·2	+12·2	0	8	
		4248	0·837	75·1	62·5	+11·8	6	16	
			0·900	98·9	54·2	− 8·5			80
Dec. 14		Centre			(118·0)	(−1·1)	(189)	(928)	(851)
348·275	CL,FT		0·959	261·2	177·6	− 8·8			214
I.			0·795	248·6	155·0	−17·6			350
		4239*a*	0·651	251·2	143·4	−13·0	31	135	
		4241*a*	0·502	312·5	127·2	+18·7	25	118	
		4241	0·460	310·3	125·6	+16·1	2	17	
		4241	0·460	312·6	124·9	+16·9	0	9	
		4241	0·452	312·6	124·5	+16·6	0	4	
		4241	0·449	313·5	124·1	+16·8	0	3	
		4241*c*	0·372	330·8	115·2	+17·7	3	10	
		4241	0·370	332·2	114·7	+17·9	1	4	
		4242	0·476	219·8	123·5	−22·5	8	22	
		4247*a*	0·283	287·8	119·9	+ 3·8	39	187	
		4247	0·257	286·5	118·5	+ 3·1	0	8	
		4247	0·216	294·1	115·6	+ 3·9	0	2	
		4247*b*	0·202	306·8	113·6	+ 5·7	15	64	
		4247	0·184	307·5	112·7	+ 5·2	0	4	
		4243*a*	0·363	186·0	106·6	−22·3	0	24	
		4248*a*	0·623	70·1	67·8	+11·3	3	16	
		4248	0·679	70·6	63·5	+12·1	0	7	
		4248	0·692	71·5	62·4	+11·8	0	2	
			0·917	106·0	38·6	−15·1			152
			0·947	69·5	34·9	+18·9			313
Dec. 15		Centre			(104·3)	(−1·2)	(127)	(636)	(1029)
349·201	AW, FT		0·885	249·8	152·9	−18·4			295
I.			0·713	238·0	133·0	−23·2			144
		4239*a*	0·796	254·3	143·7	−13·3	33	136	569*sf*
		4241*a*	0·644	301·8	127·2	+18·7	28	129	
		4241	0·611	300·4	125·3	+16·9	0	5	
		4241*c*	0·494	311·2	114·9	+17·7	2	10	
		4241	0·471	311·9	113·4	+17·1	0	4	
		4242	0·605	238·6	125·1	−19·4	0	5	
		4242*a*	0·611	233·2	123·8	−22·5	6	17	
		4247*a*	0·483	280·4	120·3	+ 3·9	24	174	
		4247	0·457	279·5	118·7	+ 3·2	0	9	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.			′	°	°	°			
349d·201	AW,FT	4247*b*	0·394	288·8	113·9	+ 6·0	13	49	
		4247*b*	0·390	287·1	113·9	+ 5·4	1	5	
I.		4243*b*	0·445	218·8	109·4	−21·4	5	23	
		4243	0·428	219·7	108·9	−20·4	0	2	
		4243	0·416	216·5	107·3	−20·8	0	5	
		4243*c*	0·407	217·0	107·1	−20·2	8	39	
		4243	0·428	211·4	105·9	−22·7	0	2	
		4249	0·143	11·8	90·3	+ 6·7	0	4	
		4248*a*	0·458	61·7	67·8	+11·3	3	14	
		4250*a*	0·978	73·5	15·2	+15·8	0	289	173*n*
			0·864	29·3	53·2	+47·7			253
			0·947	104·1	21·3	−13·7			123
Dec. 16		Centre			(92·0)	(−1·3)	(123)	(921)	(1557)
350·193	AW,JW		0·957	249·9	151·3	−19·6			200
			0·861	244·5	136·1	−22·5			470
I.			0·862	312·0	129·7	+34·3			63
			0·744	245·9	124·6	−18·6			112
		4239*a*	0·906	255·9	143·3	−13·3	20	145	526*sf*
		4241*a*	0·781	295·6	126·9	+18·7	24	124	994*f*
		4242*a*	0·746	240·6	123·5	−22·4	2	10	98*sf*
		4247*a*	0·664	277·8	120·1	+ 4·2	33	153	
		4247	0·642	277·7	118·5	+ 3·9	0	3	
		4247	0·615	278·4	116·4	+ 4·0	1	3	
		4247	0·590	279·6	114·5	+ 4·5	0	1	
		4247*b*	0·582	281·8	113·8	+ 5·7	8	34	
		4247	0·564	278·9	112·8	+ 3·9	0	7	
		4243	0·597	234·9	110·5	−21·2	0	7	
		4243*b*	0·585	235·3	109·8	−20·6	7	49	
		4243	0·576	235·7	109·3	−20·1	0	7	
		4243*c*	0·548	233·9	107·0	−20·0	6	27	
		4243	0·559	228·9	106·1	−22·7	0	4	
		4243	0·552	229·1	105·7	−22·4	0	2	
		4248*a*	0·296	41·5	67·5	+11·4	7	13	
		4250*a*	0·913	71·5	14·8	+16·2	47	285	392*f*
		4250	0·939	72·4	10·7	+15·9	0	15	
			0·865	60·0	23·6	+24·8			127
			0·949	62·9	10·3	+25·1			142
Dec. 17		Centre			(79·0)	(−1·4)	(155)	(889)	(3124)
351·201	CL,FT		0·934	244·3	133·0	−24·4			185
			0·924	307·2	126·6	+32·8			69
I.			0·870	250·5	124·9	−17·7			151
1895.				°	°	°			
351d·201	CL,FT		0·916	315·5	122·4	+39·9			231
			0·852	240·8	120·9	−25·4			381
I.			0·803	294·6	115·9	+18·5			716
			0·714	233·6	105·3	−26·1			133
		4239*a*	0·981	256·3	144·3	−13·7	13	119	570*sf*
		4239	0·950	252·4	136·9	−17·2	0	3	
		4241*a*	0·895	291·8	126·8	+18·7	25	124	487*f*
		4247*a*	0·822	276·1	120·5	+ 4·2	36	183	
		4247*b*	0·752	279·0	113·8	+ 5·8	2	10	262*c*
		4247*b*	0·749	278·1	113·6	+ 5·1	0	6	
		4247	0·724	280·0	111·3	+ 6·2	0	5	
		4243*b*	0·740	243·2	110·4	−20·6	6	22	
		4243	0·733	243·3	109·8	−20·3	0	3	150*c*
		4243*c*	0·708	242·6	107·5	−20·1	0	11	
		4248*a*	0·231	350·1	68·0	+11·7	4	9	
		4251*a*	0·596	109·8	30·8	−12·8	4	10	
		4251	0·623	111·1	29·0	−14·2	2	5	
		4251	0·620	109·2	28·9	−13·0	0	4	
		4251	0·626	109·5	28·6	−13·2	1	3	112*c*
		4251	0·623	107·4	28·4	−12·0	0	3	
		4251	0·634	110·6	28·1	−14·0	5	11	
		4251*b*	0·642	106·6	26·9	−11·7	6	22	
		4251*c*	0·652	108·6	26·5	−13·1	0	2	
		4252	0·748	98·2	17·7	− 7·1	6	19	95*f*
		4250*a*	0·795	68·1	15·7	+16·3	57	270	
		4250	0·816	68·6	13·5	+16·4	0	5	638*c*
		4250	0·831	70·1	11·7	+15·5	2	7	
		4250	0·836	70·7	11·0	+15·2	0	3	
			0·847	58·4	12·9	+25·4			205
			0·871	119·6	8·3	−26·2			81
			0·903	108·4	2·2	−17·2			68
			0·936	64·6	359·1	+23·1			540
			0·919	74·4	357·2	+13·7			141
Dec. 18		Centre			(65·7)	(−1·5)	(169)	(859)	(5215)
352·310	AW,JW		0·948	245·1	121·3	−24·1			531
			0·847	241·2	105·9	−25·0			420
I.		4241*a*	0·978	289·7	127·6	+18·9	10	116	1160*f*
		4247*a*	0·941	275·4	120·9	+ 4·5	8	151	563*f*
		4243*b*	0·878	247·6	110·8	−20·4	0	18	440*c*
		4248	0·395	308·5	69·5	+12·6	0	5	
		4248*a*	0·381	307·8	68·9	+11·9	0	9	
		4248	0·337	307·1	66·9	+10·0	0	3	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4249, December 16. A very small faint spot.
Group 4250, December 16–27. A large regular spot, *a*, usually attended by one or two small companions.
Group 4251, December 18–27. A number of small spots in a short stream on December 18. The group has greatly increased by the succeeding day, when it consists chiefly of two large composite spots, *a* and *b*. *b* is the less compact, and is measured in four parts. *a* has become a large regular spot by December 21, and *b* has greatly diminished, and is represented by a pair of spots, *c* and *d*, which have disappeared by December 23, when *a* remains alone.
Group 4252, December 18–27. A small spot on December 18. The group has greatly increased by the succeeding day, when it consists of a short stream, the two chief members of which are *a* and *b*, regular spots. *b* has become a large composite spot by December 21; it has divided into two parts, *c* and *d*, by December 23, after which the group rapidly declines.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
352d·310	AW, JW	4251*a*	0·375	121·0	31·9	−12·7	35	117	
		4251	0·393	121·3	31·0	−13·3	9	20	
I.		4251	0·395	119·4	30·5	−12·7	1	17	
		4251	0·408	120·6	30·0	−13·6	8	46	
		4251	0·430	119·7	28·6	−13·8	0	2	
		4251	0·410	112·7	28·6	−10·7	0	3	
		4251	0·418	114·8	28·4	−11·7	0	2	
		4251*b*	0·429	114·2	27·7	−11·7	6	22	
		4251*b*	0·439	115·6	27·3	−12·5	5	12	
		4251	0·438	113·9	27·1	−11·8	1	4	
		4251*b*	0·450	114·0	26·4	−12·1	5	45	
		4251	0·465	118·1	26·2	−14·1	2	4	
		4251*b*	0·461	115·6	26·0	−13·0	11	37	
		4252	0·511	102·0	21·0	− 7·6	0	1	
		4252*a*	0·536	99·6	19·1	− 6·6	12	38	
		4252	0·551	98·7	18·0	− 6·2	0	7	
		4252*b*	0·608	100·0	14·1	− 7·4	31	70	
		4250*a*	0·633	60·9	16·0	+16·5	50	224	
			0·722	59·2	9·9	+20·3			119
			0·825	53·1	2·6	+28·5			348
			0·854	61·9	356·6	+22·7			265
			0·843	71·8	355·6	+14·3			149
			0·936	68·5	344·0	+19·3			158
			0·965	62·7	339·2	+25·7			160
Dec. 19		Centre			(51·1)	(−1·7)	(194)	(973)	(4313)
353·273	AW, FT		0·984	289·2	116·8	+18·5			352
			0·966	274·8	113·2	+ 4·2			203
I.			0·936	245·8	106·5	−23·2			630
			0·884	263·1	100·4	− 7·0			96
			0·832	275·1	94·4	+ 3·2			153
		4253	0·314	230·4	52·8	−13·3	0	2	
		4251*a*	0·217	151·9	32·5	−12·8	44	206	
		4251	0·230	146·5	31·1	−12·8	3	18	
		4251	0·232	144·0	30·5	−12·6	1	15	
		4251	0·252	132·4	27·6	−11·5	0	3	
		4251*b*	0·278	132·7	26·5	−12·6	19	190	
		4252*a*	0·329	104·3	19·9	− 6·4	10	23	
		4252	0·351	106·0	18·7	− 7·2	0	3	
		4252*b*	0·421	103·7	14·3	− 7·1	22	108	
		4250*a*	0·483	48·8	16·3	+16·8	41	192	
		4250	0·506	49·2	14·9	+17·6	0	2	
		4250	0·505	50·8	14·5	+16·9	0	3	
1895.				°	°	°			
353d·273	AW, FT	4250	0·494	56·2	13·5	+14·3	0	11	
		4254	0·733	73·9	352·9	+10·5	0	3	80*c*
I.		4254	0·755	72·4	351·3	+12·0	0	6	
		4255*a*	0·980	99·9	320·2	−10·0	0	352	
			0·703	44·9	4·3	+28·3			53
			0·765	54·5	355·2	+25·0			363
			0·813	67·9	346·8	+16·7			100
			0·836	121·4	345·6	−26·8			25
			0·900	61·9	338·2	+24·2			644
			0·915	79·9	333·1	+ 8·5			131
Dec. 20		Centre			(38·5)	(−1·8)	(140)	(1137)	(2830)
354·188	AW, JW		0·983	244·5	105·4	−25·4			568
			0·919	273·3	92·8	+ 2·3			194
I.			0·831	271·5	82·0	+ 0·2			119
		4251	0·209	213·9	33·2	−11·9	0	7	
		4251*a*	0·223	208·1	32·6	−13·2	57	235	
		4251	0·201	200·1	30·4	−12·7	0	5	
		4251*c*	0·183	180·5	26·5	−12·4	0	45	
		4251*d*	0·204	180·0	26·4	−13·6	7	35	
		4252*a*	0·128	127·4	20·6	− 6·3	0	18	
		4252	0·225	118·8	15·0	− 8·1	0	31	
		4252*b*	0·233	115·6	14·2	− 7·6	22	83	
		4250*a*	0·359	27·3	16·5	+16·7	35	201	
		4254	0·539	66·0	356·4	+11·0	0	8	
		4254	0·587	70·2	352·4	+ 9·9	3	11	
		4254	0·608	67·3	351·6	+12·0	0	19	
		4255*a*	0·908	100·1	321·5	−10·0	124	372	
		4255	0·958	99·1	313·2	− 9·3	4	20	
		4255	0·966	99·4	311·5	− 9·6	14	89	
		4255	0·979	100·5	308·2	−10·7	0	51	963*c*
		4256*a*	0·988	102·6	305·4	−12·7	0	369	
		4256*b*	0·993	100·1	303·2	−10·3	0	427	
			0·772	57·8	341·4	+22·9			328
			0·821	77·0	332·4	+ 9·5			121
			0·901	57·3	327·3	+28·1			610
			0·935	65·1	320·1	+22·4			373
Dec. 21		Centre			(26·4)	(−1·9)	(266)	(2026)	(3276)
355·268	CL, AW		0·921	268·6	79·0	− 2·1			203
			0·864	260·1	71·6	− 9·6			148
I.			0·840	286·4	67·5	+12·6			108

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n, s, p, f, c,* denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4253, December 20. A very small spot.

Group 4254, December 20–28. A few small unstable spots, irregularly scattered. The group changes from day to day until after December 23. *a*, the leader on that day, remains alone on December 24 as a small regular spot, and persists as such till December 30. A very small companion is seen near it on December 26.

Group 4255, 1895 December 20–1896 January 1. A fine stream. On and after December 22 it consists of a large regular spot, *a*, followed by a long sparse stream of spots, mostly small, of which *b*, *c* and *d* are the principal. The stream diminishes from day to day up to December 29, when *a* remains alone. *a* increases slightly after this date.

Group 4256. 1895 December 21–1896 January 2. A very fine stream closely following Group 4255. Its principal members are:—*a*, a large regular spot; *b*, a very large composite spot; *c*, a large double spot, the latter being often measured in two parts. *c* has disappeared, and *b* has divided into two parts by December 29. The group diminishes steadily throughout its whole course.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
355d·268	CL, AW	4251*a*	0·398	239·2	32·6	−13·6	43	226	
		4251	0·374	236·6	30·8	−13·7	0	6	
I.		4251	0·365	238·0	30·5	−13·0	2	17	
		4251	0·352	233·7	29·0	−13·9	0	6	
		4251	0·341	232·9	28·3	−13·8	0	2	
		4251	0·352	229·2	28·1	−15·2	0	4	
		4251	0·323	232·4	27·3	−13·3	0	4	
		4251	0·328	227·7	26·6	−14·7	0	3	
		4251*c*	0·306	232·5	26·4	−12·6	3	15	
		4251*d*	0·317	229·6	26·4	−13·7	3	12	
		4252	0·159	233·9	19·5	− 7·3	0	5	
		4252	0·118	215·4	16·0	− 7·5	4	28	
		4252	0·126	196·7	14·2	− 8·9	11	57	
		4252*b*	0·106	199·6	14·1	− 7·7	5	76	
		4250*a*	0·329	347·0	16·5	+16·6	36	181	
		4250	0·297	2·5	11·3	+15·2	0	9	
		4257	0·314	162·1	6·3	−19·3	1	6	
		4254	0·323	48·5	357·9	+10·4	0	4	
		4254	0·333	49·9	357·2	+10·4	0	2	
		4255*a*	0·770	101·1	322·2	− 9·8	63	311	
		4255*b*	0·799	101·3	319·6	−10·2	12	89	378*c*
		4255*c*	0·798	99·5	319·5	− 8·8	5	35	
		4255	0·824	99·9	317·0	− 9·3	0	6	
		4255	0·857	101·2	313·5	−10·6	2	7	
		4255	0·861	100·0	313·0	− 9·6	2	8	473*c*
		4255*d*	0·878	100·3	311·0	−10·0	13	91	
		4256*a*	0·927	103·4	304·5	−13·1	68	274	
		4256	0·944	103·4	301·7	−13·3	0	10	
		4256*b*	0·945	101·3	301·4	−11·4	129	449	963*c*
		4256	0·966	100·5	297·1	−10·7	20	110	
		4256	0·971	102·9	296·1	−13·0	0	29	
		4256	0·977	102·3	294·4	−12·5	0	96	
			0·762	50·9	330·6	+27·1			116
			0·872	51·9	318·9	+31·3			141
			0·859	60·1	317·6	+24·2			197
			0·935	71·2	304·8	+16·8			57
			0·934	78·5	304·0	+10·0			296
Dec. 22		Centre			(12·1)	(−2·0)	(422)	(2178)	(3080)
356·519	CL, FT		0·914	260·8	61·6	− 9·3			169
			0·908	285·0	59·6	+12·6			122
		4251*a*	0·617	250·6	32·4	−13·6	45	221	
		4250	0·470	308·7	18·0	+15·0	0	2	
		4250	0·487	312·0	17·9	+16·9	0	2	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
356d·519	CL, FT	4250*a*	0·465	312·5	16·6	+16·2	34	167	
		4252	0·380	258·2	17·7	− 6·5	0	2	
		4252	0·371	258·4	17·1	− 6·3	2	7	
		4252	0·360	257·1	16·4	− 6·7	3	8	
		4252	0·352	255·8	15·8	− 7·0	0	3	
		4252	0·347	258·7	15·7	− 6·0	0	3	
		4252	0·349	251·7	15·3	− 8·4	0	5	
		4252	0·338	257·7	15·1	− 6·2	0	2	
		4252	0·341	253·9	15·0	− 7·5	5	17	
		4252*c*	0·339	247·8	14·3	− 9·5	17	89	
		4252*d*	0·327	250·1	13·8	− 8·5	12	32	
		4254*a*	0·214	339·0	0·2	+ 9·3	4	14	
		4254	0·225	341·5	359·9	+10·1	2	5	
		4254	0·224	358·7	356·1	+10·7	2	5	
		4254	0·222	3·7	355·0	+10·6	0	3	
		4255*a*	0·557	105·2	322·8	−10·2	64	305	
		4255	0·590	103·4	320·4	− 9·6	0	3	
		4255*c*	0·596	102·7	319·9	− 9·3	5	18	
		4255	0·600	104·4	319·7	−10·4	0	8	
		4255*b*	0·614	104·5	318·8	−10·6	3	38	
		4255	0·613	102·6	318·6	− 9·4	0	4	
		4255	0·625	103·5	317·8	−10·1	3	9	
		4255	0·689	105·8	313·2	−12·4	1	9	
		4255	0·688	103·0	313·0	−10·5	0	4	
		4255	0·690	104·0	312·9	−11·2	0	2	
		4255*d*	0·697	102·7	312·2	−10·4	8	56	
		4255	0·710	102·6	311·2	−10·4	0	4	
		4255	0·724	103·4	310·1	−11·2	0	3	
		4256	0·758	104·2	307·3	−12·1	0	7	
		4256*a*	0·778	105·7	305·6	−13·6	47	237	
		4256	0·796	105·6	303·9	−13·7	0	6	
		4256	0·808	105·9	302·7	−14·1	0	6	
		4256*b*	0·809	103·4	302·4	−12·1	75	404	
		4256	0·833	104·4	300·1	−13·2	0	2	861*c*
		4256	0·835	103·7	299·8	−12·6	0	18	
		4256	0·842	102·0	298·9	−11·3	4	25	
		4256	0·843	103·7	298·9	−12·7	0	14	
		4256	0·851	102·3	297·9	−11·6	1	4	
		4256*c*	0·859	104·9	297·2	−13·9	6	80	
		4256*c*	0·871	103·7	295·7	−13·0	17	79	
			0·773	74·7	306·7	+10·3			318
			0·919	76·3	290·3	+11·7			242
			0·961	86·3	282·2	+ 2·9			95
Dec. 23		Centre			(355·8)	(−2·2)	(360)	(1932)	(1807)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4257, December 22. A very small spot.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
357d·324	CL, JW		0·824	292·2	37·7	+16·6			367
		4251*a*	0·745	253·1	32·2	−14·1	46	223	
I.		4251	0·697	254·9	28·4	−12·2	0	6	
		4252	0·545	261·2	17·8	− 6·8	0	4	
		4252	0·530	260·7	16·8	− 7·0	0	5	
		4252	0·507	257·9	15·0	− 8·2	0	2	
		4252*c*	0·499	254·4	14·2	− 9·8	16	77	
		4252*d*	0·490	256·2	13·8	− 8·8	3	24	
		4250*a*	0·595	301·6	16·8	+16·0	30	172	
		4258*a*	0·529	237·1	13·0	−18·8	13	25	
		4258	0·513	237·6	12·1	−18·1	0	6	
		4258	0·505	236·2	11·2	−18·4	0	7	
		4258	0·499	235·2	10·6	−18·6	0	3	
		4258*b*	0·496	233·9	10·1	−19·1	0	5	
		4258*c*	0·482	234·8	9·5	−18·3	2	19	
		4254*a*	0·343	309·0	0·7	+10·2	6	23	
		4255*a*	0·405	109·3	322·4	− 9·9	66	341	
		4255*c*	0·447	105·3	319·3	− 8·9	0	11	
		4255*b*	0·470	107·9	318·2	−10·4	8	35	
		4255	0·507	108·2	315·8	−11·2	0	4	
		4255	0·541	104·6	313·1	− 9·9	0	17	
		4255*d*	0·552	104·4	312·4	− 9·9	4	19	
		4256	0·629	106·1	307·1	−12·0	0	4	
		4256*a*	0·656	107·5	305·3	−13·2	47	178	
		4256	0·681	107·2	303·3	−13·4	0	9	
		4256*b*	0·694	104·8	302·0	−12·0	78	394	
		4256	0·707	102·7	300·7	−10·7	8	19	523*c*
		4256	0·727	104·8	299·3	−12·4	3	52	
		4256	0·736	102·7	298·3	−10·9	11	38	
		4256*c*	0·760	105·8	296·5	−13·5	15	71	
		4256*c*	0·771	104·4	295·4	−12·6	11	83	
		4259	0·851	72·1	288·8	+13·8	2	17	214*sf*
			0·913	106·0	279·7	−15·6			570
Dec. 24		Centre			(345·1)	(−2·4)	(369)	(1893)	(1674)
358·191	CL, JW		0·893	289·1	34·7	+15·7			294
			0·788	241·5	22·7	−23·7			73
I.		4251*a*	0·862	254·4	32·6	−14·7	47	229	543*c*
		4252*c*	0·659	257·7	14·4	−10·0	13	73	
		4250*a*	0·727	294·4	17·0	+15·6	33	163	182*c*
		4258*a*	0·681	244·7	14·1	−18·8	40	149	
		4258	0·652	241·9	11·2	−19·8	4	11	
		4258*b*	0·640	242·3	10·4	−19·3	12	28	
		4258*c*	0·621	242·3	9·0	−18·7	19	50	
1895.				°	°	°			
358d·191	CL, JW	4254*a*	0·512	294·3	1·9	+ 9·9	3	11	
		4255*a*	0·235	125·1	322·5	−10·2	65	311	
I.		4255	0·258	114·0	320·0	− 8·4	0	6	
		4255*c*	0·257	112·8	319·9	− 8·1	0	2	
		4255*b*	0·305	119·0	318·0	−10·9	6	27	
		4255	0·341	112·1	315·1	− 9·8	0	8	
		4255	0·372	110·4	313·1	− 9·8	0	2	
		4256*a*	0·499	112·7	305·6	−13·3	46	181	
		4256*b*	0·539	108·6	302·3	−12·0	72	416	
		4256	0·582	109·2	299·5	−13·1	0	8	
		4256	0·581	103·5	298·9	− 9·9	0	4	
		4256	0·584	105·5	298·9	−11·0	0	11	
		4256	0·598	110·6	298·6	−14·1	0	5	
		4256	0·595	108·9	298·5	−13·1	0	15	
		4256	0·595	105·5	298·1	−11·1	1	13	
		4256	0·604	108·5	297·8	−13·1	0	7	
		4256*c*	0·617	108·9	297·0	−13·5	10	47	
		4256*c*	0·628	107·5	296·0	−12·8	15	86	
		4259	0·723	68·7	290·0	+13·4	0	12	
		4259	0·729	68·9	289·5	+13·4	0	8	
		4259	0·744	71·0	287·8	+12·3	0	7	
			0·861	81·6	275·0	+ 5·9			152
Dec. 25		Centre			(333·7)	(−2·5)	(386)	(1890)	(1244)
359·152	AW, FT		0·965	288·5	34·0	+17·1			170
			0·892	303·4	18·3	+28·0			82
I.			0·819	237·1	12·[illegible]	−28·0			56
			0·783	304·0	6·2	+24·1			167
		4251*a*	0·949	255·5	32·4	−14·6	23	191	448*f*
		4250*a*	0·852	290·1	16·9	+15·6	35	155	402*nf*
		4252	0·816	260·5	15·4	− 9·2	0	6	
		4252	0·806	260·0	14·4	− 9·6	2	13	353*np*
		4252	0·806	259·1	14·3	−10·3	3	9	
		4258*a*	0·820	248·9	14·7	−18·7	32	113	
		4258	0·793	247·2	11·7	−19·5	0	10	
		4258*b*	0·776	246·8	10·0	−19·5	0	14	202*c*
		4258*c*	0·765	247·1	9·0	−19·0	15	56	
		4254*a*	0·677	288·0	1·7	+10·1	4	12	
		4254	0·659	287·9	0·4	+ 9·7	1	6	
		4255*a*	0·138	190·9	322·5	−10·4	68	278	
		4255	0·172	170·4	319·3	−12·4	1	4	
		4255	0·157	162·6	318·3	−11·2	3	11	
		4255	0·167	144·6	315·4	−10·4	0	3	
		4255	0·151	138·9	315·3	− 9·1	0	2	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets. The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4258, December 24–27. A short stream forming suddenly *s* Group 4252. It has greatly increased by the second day, but diminishes rapidly afterwards. The leader, *a*, is a regular spot, and the two last spots, *b* and *c*, have definite nuclei. The other spots are unstable.
Group 4259, December 24–25. A small spot on December 24. Three small faint spots on December 25.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*continued.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
359d·152	AW, FT	4255	0·192	138·1	313·5	−10·8	0	4	
		4256*a*	0·319	126·3	305·7	−13·4	40	175	
I.		4256	0·317	120·0	304·8	−11·6	0	1	
		4256*b*	0·355	118·8	302·5	−12·3	71	333	
		4256	0·392	113·6	299·6	−11·4	1	5	
		4256	0·408	116·3	299·1	−12·8	1	10	
		4256	0·433	120·1	298·3	−14·9	4	8	
		4256	0·444	116·4	296·9	−13·7	0	8	
		4256	0·451	118·7	296·9	−14·9	0	1	
		4256	0·461	120·6	296·7	−15·9	0	2	
		4256*c*	0·445	114·5	296·6	−13·0	24	94	
		4260*a*	0·945	79·2	251·1	+ 9·3	2	23	} 432*c*
		4261*b*	0·951	83·1	249·6	+ 5·8	3	34	
			0·757	81·2	272·5	+ 4·9			147
Dec. 26		Centre			(321·0)	(−2·6)	(333)	(1581)	(2459)
360·266	CL, AW		0·937	255·6	15·7	−14·4			121
			0·910	299·8	9·7	+28·1			320
I.			0·896	247·4	8·8	−21·4			108
			0·825	304·6	355·4	+26·1			273
		4251	0·998	255·9	31·8	−13·9	0	157	332
		4252	0·933	260·0	15·2	−10·3	0	9	332*np*
		4250*a*	0·956	287·0	17·7	+15·4	38	154	488*nf*
		4258*a*	0·936	251·3	15·3	−18·4	14	56	}
		4258*b*	0·900	250·4	9·8	−18·8	0	9	} 186*c*
		4258*c*	0·899	249·6	9·5	−19·5	2	18	
		4254*a*	0·847	283·4	2·9	+ 9·9	2	10	115*c*
		4255*a*	0·304	243·0	322·3	−10·5	60	278	
		4255	0·285	232·1	319·7	−12·7	1	6	
		4255	0·261	233·1	318·6	−11·6	0	2	
		4255	0·226	229·1	316·4	−11·1	0	2	
		4255	0·213	230·7	316·0	−10·4	0	1	
		4255	0·217	226·4	315·6	−11·3	0	3	
		4255	0·196	227·0	314·7	−10·3	0	2	
		4255	0·186	228·8	314·5	− 9·7	0	1	
		4255	0·195	224·7	314·4	−10·6	0	2	
		4256*a*	0·192	177·0	305·8	−13·7	34	159	
		4256	0·154	154·0	302·5	−10·7	0	3	
		4256*b*	0·183	158·2	302·4	−12·4	47	324	
		4256	0·185	150·0	301·0	−11·9	1	7	
		4256	0·212	153·6	300·9	−13·6	0	4	
		4256	0·237	154·8	300·4	−15·0	0	4	
		4256	0·207	149·9	300·3	−13·0	0	2	
		4256	0·213	147·7	299·7	−13·0	0	4	

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
360d·266	CL, AW	4256	0·249	140·3	297·0	−13·7	0	3	
		4256*c*	0·243	137·1	296·7	−12·9	12	45	
I.		4260*a*	0·824	77·1	252·2	+ 9·0	3	12	} 228*c*
		4261*b*	0·830	81·6	251·0	+ 5·5	0	17	
		4262*a*	0·983	76·9	228·1	+12·3	40	241	250*c*
			0·821	73·5	253·1	+11·9			121
			0·933	102·1	237·7	−12·3			125
			0·957	79·6	234·2	+ 9·1			163
Dec. 27		Centre			(306·4)	(−2·7)	(254)	(1535)	(3162)
361·293	CL, FT		0·962	249·0	6·7	−21·0			231
			0·931	298·2	357·3	+24·9			399
I.			0·825	303·7	342·0	+25·3			235
			0·748	311·3	331·9	+27·3			161
		4254*a*	0·948	281·5	3·2	+10·0	0	7	369*n*
		4255*a*	0·503	253·3	322·1	−10·9	55	248	
		4255	0·417	251·9	316·4	−10·1	1	7	
		4256*a*	0·286	228·0	305·4	−13·8	29	155	
		4256	0·281	218·9	303·3	−15·4	0	1	
		4256*b*	0·235	222·3	302·1	−12·8	43	259	
		4256	0·218	214·5	300·1	−13·2	0	2	
		4256	0·204	211·6	299·1	−12·9	0	4	
		4256	0·192	202·7	297·1	−13·1	0	2	
		4256*c*	0·186	199·3	296·4	−13·0	4	17	
		4260	0·669	75·4	252·2	+ 7·5	0	1	}
		4260*a*	0·673	73·4	252·2	+ 8·8	0	1	} 55*c*
		4261*a*	0·676	79·0	251·2	+ 5·2	0	11	
		4261	0·685	77·4	250·7	+ 6·5	0	3	
		4263*a*	0·854	76·0	235·6	+10·4	0	4	} 140*c*
		4263*b*	0·869	77·9	233·7	+ 9·0	0	3	
		4262*a*	0·917	75·4	227·8	+12·1	33	199	}
		4262	0·929	78·1	225·7	+ 9·9	0	4	} 479*c*
		4262	0·940	75·6	224·2	+12·5	0	26	
		4262*b*	0·948	76·1	222·7	+12·2	8	48	
Dec. 28		Centre			(292·8)	(−2·9)	(173)	(1002)	(2069)
362·157	FT, JW		0·978	282·1	358·3	+11·2			264
			0·947	293·5	349·7	+21·1			526
I.			0·940	306·8	344·9	+32·9			263
			0·855	303·6	333·9	+26·4			697
		4255*a*	0·663	257·0	322·4	−10·9	53	236	
		4256*a*	0·444	244·0	305·6	−14·0	26	154	
		4256*d*	0·392	245·2	302·7	−12·3	19	136	
		4256*e*	0·385	240·9	301·6	−13·6	10	82	

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4260, December 26–28. A small spot, *a*, with a very small companion on December 28.
Group 4261, December 26–28. A small spot, *a*, with a very small companion on December 28. The group lies *s* of Group 4260.
Group 4262, 1895 December 27–1896 January 7. A large regular spot, *a*, followed by a short stream of spots, all small except the last one, *b*. *b* has disappeared by January 1, and *a* remains alone by January 6.
Group 4263, 1895 December 28–1896 January 2. A pair of very small spots, *a* and *b*, on December 28, *sp* Group 4262. The group has developed into a short stream by December 30. The spots are small and mostly unstable.

Measures of Positions and Areas of Sun Spots and Faculæ on Photographs—*concluded.*

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
362d·157	FT, JW	4263*a*	0·727	72·6	236·7	+10·4	0	7	
		4263*b*	0·752	74·9	234·2	+ 9·2	5	19	
I.		4262*a*	0·821	73·0	228·2	+12·1	38	179	
		4262	0·840	73·6	226·1	+12·0	0	9	
		4262*b*	0·873	74·2	222·4	+12·2	10	55	508*c*
		4262	0·876	73·3	222·1	+13·1	0	15	
		4262	0·889	74·0	220·4	+12·7	0	22	
Dec. 29		Centre			(281·4)	(−3·0)	(161)	(914)	(2258)
363·263	AW, FT		0·949	296·3	334·9	+23·7			251
			0·930	281·1	334·1	+ 9·1			108
I.			0·921	303·4	328·1	+29·0			258
			0·843	298·5	319·6	+21·9			158
			0·806	308·4	312·2	+27·9			228
		4255*a*	0·825	259·1	322·1	−10·7	60	269	302*f*
		4256*a*	0·640	251·9	305·4	−13·9	25	124	
		4256*d*	0·603	254·3	303·0	−11·9	11	97	
		4256*e*	0·590	251·9	301·8	−13·1	10	96	
		4256	0·584	249·3	301·0	−14·4	0	4	
		4256	0·579	248·0	300·4	−15·1	0	2	
		4263*a*	0·541	65·3	237·0	+10·3	2	14	
		4263	0·568	67·9	234·7	+ 9·7	0	7	
		4263*b*	0·566	69·0	234·6	+ 9·1	3	23	
		4262*a*	0·663	67·7	228·1	+12·1	44	201	
		4262	0·681	69·7	226·3	+11·3	0	11	
		4262	0·708	71·0	224·0	+11·0	0	15	370*c*
		4262*b*	0·726	71·0	222·5	+11·4	1	33	
			0·961	109·6	192·9	−19·7			143
Dec. 30		Centre			(266·8)	(−3·1)	(156)	(896)	(1818)

Greenwich Civil Time.	Measurers.	No. of Group, and Letter for Spot.	Distance from Centre in terms of Sun's Radius.	Position Angle from Sun's Axis.	Heliographic Longitude.	Heliographic Latitude.	Spots. Area of UMBRA for each Spot (and for Day).	Spots. Area of WHOLE for each Spot (and for Day).	Faculæ. Area for each Group (and for Day).
1895.				°	°	°			
364d·293	CL, JW		0·936	296·7	318·8	+23·5			308
			0·895	306·2	309·6	+30·1			274
I.			0·817	283·4	306·6	+ 9·1			212
			0·832	317·3	296·8	+35·3			76
		4255*a*	0·940	260·3	323·2	−10·2	60	287	347*f*
		4256*a*	0·797	255·4	305·5	−13·6	22	129	
		4256*d*	0·771	257·4	303·2	−11·7	5	69	
		4256*e*	0·761	256·1	302·2	−12·6	7	69	448*c*
		4256	0·749	254·0	300·9	−14·0	0	6	
		4263	0·324	49·3	238·9	+ 9·1	0	2	
		4263	0·345	48·9	238·0	+10·0	0	1	
		4263	0·353	50·2	237·3	+10·0	0	2	
		4263*a*	0·357	52·4	236·6	+ 9·5	3	17	
		4263	0·355	54·4	236·3	+ 8·8	0	4	
		4263	0·362	55·9	235·6	+ 8·6	0	2	
		4263	0·370	54·6	235·5	+ 9·3	1	5	
		4263	0·369	56·9	235·1	+ 8·5	0	1	
		4263	0·376	56·4	234·8	+ 8·9	0	1	
		4262*a*	0·487	57·2	228·5	+12·3	31	191	
		4262	0·501	60·9	226·8	+11·2	6	32	
		4262	0·530	63·0	224·6	+11·1	4	14	
		4262	0·540	63·3	223·9	+11·2	2	6	
		4262*b*	0·552	63·8	223·0	+11·3	1	10	
		4264	0·766	103·6	203·7	−12·4	0	2	
		4264	0·783	104·3	202·2	−13·2	2	9	122*c*
		4264	0·828	103·4	197·7	−12·8	0	2	
			0·915	96·7	187·1	− 7·4			131
			0·952	112·6	181·4	−22·5			129
Dec. 31		Centre			(253·2)	(−3·2)	(144)	(861)	(2047)

The Groups of Spots are numbered in the order of their appearance. When there is no number in the third column it is to be understood that there is a Facula unaccompanied by a Spot. The positions of Faculæ relative to the Spots with which they are associated are indicated by the letters *n*, *s*, *p*, *f*, *c*, denoting respectively north, south, preceding, following, concentric. The longitude and latitude of the centre of the disk are given in brackets.
The Areas of Spots and Faculæ are expressed in millionths of the Sun's visible Hemisphere.

Group 4264, 1895 December 31–1896 January 5. A few very small unstable spots irregularly scattered.

ROYAL OBSERVATORY, GREENWICH.

LEDGERS

OF

AREAS AND POSITIONS OF GROUPS OF SUN SPOTS

DEDUCED FROM THE MEASUREMENT

OF THE

SOLAR PHOTOGRAPHS,

FOR EACH DAY IN THE YEAR

1895.

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS DEDUCED FOR EACH DAY from the MEASUREMENTS of the PHOTOGRAPHS taken at the ROYAL OBSERVATORY, GREENWICH, at DEHRA DÚN IN INDIA, and at the ROYAL ALFRED OBSERVATORY, MAURITIUS, in the YEAR 1895.

NOTE.—The Greenwich Civil Time at which the photograph was taken is expressed by the month, day of the month (civil reckoning), and decimal of a day, reckoned from Greenwich Mean Midnight.

The Projected Area of the Umbræ and Whole Spots is the area as it is measured on the photograph, uncorrected for the effect of foreshortening, and expressed in millionths of the Sun's apparent disk.

The Column "Longitude from Central Meridian" gives the Mean heliographic longitude of the group, reckoned from the meridian passing through the centre of the Sun's disk at the moment of observation; longitudes west of the centre being reckoned as positive.

Dates for which no numbers are given indicate days for which no photographic record is at present available.

Group 3836.

A somewhat ill-defined spot, *a*, with a very small companion on January 1.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1894. d					°	°	°
Dec. 25·287	0	30	0	77	30·9	−14·8	−79·1
26·217	14	68	17	83	32·0	−14·6	−65·7
27·473	6	40	5	31	32·2	−15·1	−49·0
28·467	20	59	13	37	31·7	−15·1	−36·4
29·459	15	55	8	31	31·8	−15·2	−23·2
30·234	0	43	0	22	31·3	−15·0	−13·5
31·210	8	24	4	12	31·7	−15·1	−0·3
1895.							
Jan. 1·194	0	13	0	7	31·6	−15·3	+12·6
2·187	0	19	0	11	31·7	−15·1	+25·8
Means ...	...	...	5	35	31·66	−15·03	...

Group 3838.

Three very small spots on December 26. The group increases rapidly up to December 28, when it forms an irregular stream of nebulous spots. The spots are unstable with the exception of *a*, the leader on December 27, and tend to form in front of the group and disappear at the rear.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1894.							
Dec. 26·217	3	23	2	15	63·1	+14·6	−34·6
27·473	33	223	18	122	63·2	+13·9	−18·0
28·467	75	396	40	207	63·9	+13·9	−4·2
29·459	48	351	25	186	64·2	+13·6	+9·2
30·234	34	173	19	97	65·2	+13·6	+20·4
31·210	13	49	8	32	66·7	+12·8	+34·7
1895.							
Jan. 1·194	0	10	0	8	68·1	+12·8	+49·1
Means ...	...	...	16	95	64·91	+13·60	...

Group 3842.

A large spot, *a*, with double nucleus, sometimes attended by small companions. It has broken up by January 4, principally into two spots, *b* and *c*, which diminish on the succeeding days.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1894. d					°	°	°
Dec. 28·467	9	80	34	305	346·7	+16·7	−81·4
29·459	31	167	46	253	346·2	+16·7	−68·8
30·234	59	289	64	317	344·4	+17·5	−60·4
31·210	51	372	41	292	344·8	+17·4	−47·2
1895.							
Jan. 1·194	49	379	32	244	344·8	+17·1	−34·2
2·187	67	475	39	275	344·6	+17·2	−21·3
3·225	75	456	41	248	344·1	+17·2	−8·1
4·208	44	299	23	161	344·9	+17·1	+5·6
5·242	50	255	29	146	345·6	+17·3	+20·0
6·253	38	142	25	93	346·0	+17·2	+33·7
7	No	photo	graph.				
8·472	5	48	6	60	347·0	+16·4	+63·9
Means ...	...	...	35	218	345·37	+17·07	...

Group 3843.

A few very faint, small and unstable spots irregularly arranged.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1894.							
Dec. 31·210	0	12	0	7	56·5	+14·9	+24·5
1895.							
Jan. 1·194	8	37	5	25	56·4	+14·3	+37·4
2·187	0	42	0	34	57·7	+14·2	+51·8
Means ...	...	...	2	22	56·87	+14·47	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3845.

A small faint spot, with a very small companion on December 31 and January 2.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
					°	°	°
1894. d Dec. 31·210	5	20	5	20	332·0	+ 5·5	− 60·0
1895. Jan. 1·194	0	12	0	9	334·3	+ 4·8	− 44·7
2·187	2	22	1	13	332·7	+ 5·4	− 33·2
3·225	0	15	0	8	334·6	+ 4·8	− 17·6
Means ...	...	...	2	13	333·40	+ 5·13	...

Group 3846.

A composite spot, *a*, which speedily becomes large, but diminishes after January 2. It is followed by a few small spots on January 2, but these greatly increase in number, and the group becomes a very complicated and irregular stream. *a* has disappeared by January 7, but the succeeding day a new large spot, *b*, has appeared 4° South of its place, and has become the leader of the group, then a sparse stream, by January 9.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1894. Dec. 31·210	0	8	0	20	314·7	+12·1	− 77·3
1895. Jan. 1·194	17	76	22	94	314·3	+12·3	− 64·7
2·187	39	242	34	208	313·6	+13·1	− 52·3
3·225	39	253	26	172	312·9	+12·6	− 39·3
4·208	49	299	28	173	313·1	+11·2	− 26·2
5·242	93	378	50	212	313·5	+11·5	− 12·1
6·253	80	585	41	305	312·6	+11·1	+ 0·3
7	No	photo	graph.				
8·472	51	375	31	224	313·4	+ 9·6	+ 30·3
9·220	44	172	31	118	313·8	+ 9·7	+ 40·6
10·255	18	197	16	178	314·0	+10·2	+ 54·5
11·478	2	51	3	78	313·2	+10·3	+ 69·7
Means ...	...	...	26	162	313·55	+11·25	...

Group 3847.

A very large spot, *a*, with generally some small companions.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1894. Dec. 31·210	31	148	101	485	310·2	−18·0	− 81·8
1895. Jan. 1·194	45	349	66	507	309·2	−17·6	− 69·8
2·187	89	533	85	508	308·3	−17·2	− 57·6
3·225	126	716	91	519	307·5	−17·3	− 44·7
4·208	98	718	59	435	307·8	−17·3	− 31·5
5·242	115	688	63	376	307·1	−17·5	− 18·5
6·253	107	607	55	314	307·2	−17·4	− 5·1
7	No	photo	graph.				

Group 3847—*continued.*

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
					°	°	°
1895. d Jan. 8·472	83	418	47	237	307·5	−17·3	+ 24·4
9·220	88	405	55	251	307·2	−17·4	+ 34·0
10·255	68	307	52	232	307·2	−17·7	+ 47·7
11·478	36	195	39	211	306·0	−17·9	+ 62·5
12·419	13	122	24	233	306·8	−17·7	+ 75·6
Means ...	...	...	61	359	307·67	−17·53	...

Group 3848.

A very small faint spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Jan. 2·187	0	13	0	7	337·8	− 9·9	− 28·1
Means ..	...	...	0	7	337·8	− 9·9	...

Group 3849.

A small spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Jan. 2·187	2	16	1	10	326·1	− 7·8	− 39·8
Means ...	...	...	1	10	326·1	− 7·8	...

Group 3850.

A pair of very faint small spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Jan. 3·225	0	30	0	16	348·3	+19·2	− 3·9
Means ...	...	...	0	16	348·3	+19·2	...

Group 3851.

A small group usually consisting of a pair of small unstable spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Jan. 4·208	0	19	0	12	11·1	− 3·5	+ 31·8
5·242	4	53	3	40	13·0	− 2·7	+ 47·4
6·253	0	16	0	15	9·9	− 3·2	+ 57·6
Means ...	...	...	1	22	11·33	− 3·13	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Date. Greenwich Civil Time.	Projected Area of		Area for Group.		Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
	Umbra.	Whole Spot.	Umbra.	Whole Spot.			
Group 3852. A pair of small spots, *a* and *b*, on January 4. Two very small spots are seen between *a* and *b* on January 5.							
1895. d					°	°	°
Jan. 4·208	0	39	0	32	289·1	−23·0	−50·2
5·242	2	35	1	24	287·0	−23·7	−38·6
Means ...	...	...	1	28	288·05	−23·35	...
Group 3853. A small spot.							
Jan. 4·208	0	8	0	12	269·0	−23·1	− 70·3
Means ...	...	...	0	12	269·0	−23·1	...
Group 3854. A regular spot followed by a close pair measured as a single spot.							
Jan. 5·242	14	60	29	118	40·3	+ 8·4	+ 74·7
Means ...	...	...	29	118	40·3	+ 8·4	...
Group 3855. Three small spots, the two following of which are measured together.							
Jan. 6·253	3	35	2	27	1·3	− 7·3	+ 49·0
Means ...	...	...	2	27	1·3	− 7·3	...
Group 3856. A regular spot, *a*, followed by a stream of small spots, of which *b*, the last spot on January 10, is the largest. *b* has divided into two portions by January 11, and still further by the succeeding day. The other members of the stream are also very unstable, and *a* alone remains by January 16.							
Jan. 8·472	16	100	14	84	230·1	−13·7	− 53·0
9·220	31	244	21	171	229·4	−14·3	− 43·8
10·255	59	307	34	181	229·8	−14·0	− 29·7
11·478	96	405	50	213	230·2	−14·4	− 13·3
12·419	72	463	38	238	230·3	−14·3	− 0·9
13·355	63	288	34	149	232·1	−14·3	+ 13·3
14·227	55	220	31	124	233·0	−14·2	+ 25·7
15·248	48	228	32	150	233·5	−14·3	+ 39·7
16·187	17	119	14	97	233·5	−14·7	+ 52·0
17·612	5	28	6	39	232·6	−13·9	+ 69·7
Means ...	...	...	27	145	231·45	−14·21	...
Group 3857. A small spot *a*. A close pair of very small spots is seen near *a* on January 9.							
1895. d					°	°	°
Jan. 9·220	12	66	6	34	267·1	−18·3	− 6·1
10·255	5	13	3	7	267·9	−17·3	+ 8·4
11·478	6	13	3	7	268·0	−16·8	+ 24·5
12·419	3	13	2	8	268·3	−16·8	+ 37·1
Means ...	...	...	4	14	267·83	−17·30	...
Group 3858. A number of spots, mostly small, irregularly arranged, appearing suddenly to the west of the central meridian. The group changes much from day to day, and becomes a long stream, of which *a*, the leader on January 10, is much the largest.							
Jan. 10·255	15	142	9	87	290·7	+10·6	+ 31·2
11·478	55	270	43	210	291·3	+11·1	+ 47·8
12·419	48	230	52	248	292·0	+10·5	+ 60·8
13·355	4	95	8	178	292·0	+10·8	+ 73·2
Means ...	...	...	28	181	291·50	+10·75	...
Group 3859. A very small faint spot in the midst of bright faculæ.							
Jan. 11·478	0	2	0	3	175·7	−14·3	− 67·8
Means ...	...	...	0	3	175·7	−14·3	...
Group 3860. One or two small unstable spots. No spot lasts longer than two days. The group is not seen on January 18. Three very small spots are seen further north on January 19.							
Jan. 13·355	2	7	3	12	146·6	−24·3	− 72·2
14·227	0	3	0	4	145·7	−23·5	− 61·6
15·248	0	7	0	6	142·9	−24·0	− 50·9
16·187	6	45	4	30	145·1	−23·8	− 36·4
17·612	0	37	0	21	146·2	−23·8	− 16·7
18·479	0	0	0	0	...	...	...
19·209	0	19	0	10	149·2	−20·6	+ 7·5
Means ...	...	...	1	12	145·95	−23·33	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3861.

A few small unstable spots irregularly arranged. The group is not seen on January 18 or 22.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Jan. 14·227	2	8	2	12	137·0	−26·8	− 70·3
15·248	2	16	2	16	137·4	−26·8	− 56·4
16·187	2	18	2	13	135·1	−27·6	− 46·4
17·612	3	34	2	21	134·8	−27·3	− 28·1
18·479	0	0	0	0	...	...	...
19·209	6	83	3	47	137·8	−27·8	− 3·9
20·397	0	62	0	35	138·4	−27·2	+ 12·3
21·225	1	16	1	9	138·3	−27·5	+ 23·1
22·248	0	0	0	0	...	...	...
23·489	4	15	3	13	135·2	−28·0	+ 49·9
24·599	0	10	0	12	135·6	−27·3	+ 64·9
Means ...	...	...	1	16	136·62	−27·37	...

Group 3862.

A small spot.

Jan. 15·248	2	11	2	8	238·5	+14·0	+ 44·7
Means ...	...	...	2	8	238·5	+14·0	...

Group 3863.

A very small spot.

Jan. 15·248	0	11	0	6	174·2	−13·1	− 19·6
16·187	0	10	0	5	172·5	−14·8	− 9·0
Means ...	...	...	0	6	173·35	−13·95	...

Group 3864.

A very small spot.

Jan. 15·248	0	6	0	6	140·3	+21·7	−53·5
Means ...	...	...	0	6	140·3	+21·7	...

Group 3865.

A pair of very small spots, *a* and *b*, on January 17. *a* has disappeared by January 18, and *b* by January 23. A small irregular stream of unstable spots has begun to form behind *b* by January 21, but diminishes again after January 23.

1895. d					°	°	°
Jan. 17·612	0	12	0	15	98·4	+10·6	−64·5
18·479	6	33	5	29	98·7	+10·4	−52·7
19·209	13	28	9	20	99·6	+10·7	−42·1
20·397	10	35	6	20	100·8	+10·7	−25·3
21·225	5	18	3	10	100·7	+11·0	−14·5
22·248	18	75	9	38	99·6	+11·2	− 2·1
23·489	18	101	10	55	99·2	+11·5	+13·9
24·599	4	27	3	16	99·5	+11·4	+28·8
25·198	3	23	2	16	100·3	+11·2	+37·5
Means ...	...	...	5	24	99·64	+10·97	...

Group 3866.

A few very small spots, in an irregular cluster between Groups 3865 and 3867.

Jan. 17·612	0	10	0	15	93·1	+10·7	−69·8
18·479	2	23	2	25	91·2	+11·4	−60·2
19·209	4	84	3	69	91·7	+11·5	−50·0
20·397	0	22	0	14	92·5	+10·5	−33·6
21·225	1	6	1	3	89·6	+10·6	−25·6
22·248	0	8	0	4	88·8	+10·8	−12·9
Means ...	...	...	1	22	91·15	+10·92	...

Group 3867.

An irregular stream, consisting of a very large spot, *a*, and a few much smaller spots following it. *a* has divided into two large spots, *b* and *c*, by January 21. These have become regular by January 25, and with one or two small companions, compose the entire group.

Jan. 17·612	21	89	58	250	84·3	+11·7	−78·6
18·479	34	312	66	547	79·7	+12·6	−71·7
19·209	119	623	143	728	79·3	+12·6	−62·4
20·397	178	963	136	742	80·1	+12·8	−46·0
21·225	146	739	93	473	80·5	+12·6	−34·7
22·248	148	834	82	468	80·5	+12·4	−21·2
23·489	137	808	72	425	80·4	+12·7	− 4·9
24·599	131	715	70	382	80·8	+12·6	+10·1
25·198	170	780	95	436	81·0	+12·3	+18·2
26·298	128	610	81	385	81·6	+12·0	+33·2
27·534	118	452	96	369	81·6	+12·1	+49·4
28·350	70	354	87	387	82·0	+11·6	+60·6
29·313	49	203	98	400	82·3	+11·7	+73·6
Means ...	...	...	91	461	81·08	+12·28	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3868.

A small spot.

Date. Greenwich Civil Time.	Projected Area of Umbra	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Jan. 18·479	8	26	6	19	192·7	+18·9	+41·3
19·209	5	17	4	15	193·3	+18·6	+51·6
Means ...	...	...	5	17	193·00	+18·75	...

Group 3869.

A pair of very small spots.

Jan. 18·479	4	20	3	13	189·2	+19·1	+37·8
Means ...	...	...	3	13	189·2	+19·1	...

Group 3870.

A few very small faint unstable spots, not seen on January 19.

Jan. 18·479	0	10	0	5	141·9	− 4·2	− 9·5
19·209	0	0	0	0	...	...	...
20·397	6	55	3	30	142·0	− 4·4	+ 15·9
21·225	2	17	1	9	141·9	− 4·6	+ 26·7
Means ...	...	...	1	11	141·93	− 4·40	...

Group 3871.

A pair of very small faint spots *n* of Group 3861.

Jan. 19·209	0	11	0	6	138·4	−19·5	− 3·3
Means ...	...	...	0	6	138·4	−19·5	...

Group 3872.

A number of spots in a fine stream. At first it consists of two large spots, *a* and *b*, with a number of small faint spots between them. These intermediate spots increase after January 25, and three large irregular spots, *c*, *d* and *e*, have formed by January 27. These five principal spots, by fresh divisions and combinations, continue to change until the West limb is reached.

Jan. 21·225	33	179	43	243	46·3	−10·7	− 68·9
22·248	96	516	84	442	46·9	−10·6	− 54·8
23·489	148	840	96	536	47·4	−10·4	− 37·9

Group 3872—*continued.*

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Jan. 24·599	99	822	55	455	46·4	−10·7	− 24·3
25·198	150	739	79	390	46·8	−10·5	− 16·0
26·298	136	750	69	381	48·9	−10·6	+ 0·5
27·534	211	1137	114	602	49·6	−10·4	+ 17·4
28·350	228	1252	133	741	51·3	−10·5	+ 29·9
29·313	215	1206	147	832	52·2	−10·5	+ 43·5
30·429	109	993	104	939	52·5	−10·3	+ 58·6
31·532	62	529	98	920	53·4	− 9·9	+ 73·9
Feb. 1·223	27	355	61	875	49·6	−10·7	+ 79·2
Means ...	...	...	90	613	49·28	−10·48	...

Group 3873.

Two small faint spots *nf* Group 3867.

Jan. 23·489	4	35	2	20	72·2	+16·3	+ 13·1
Means ...	...	...	2	20	72·2	+16·3	...

Group 3874.

A pair of small spots, *a* and *b*, until January 26. Both spots have broken up by this date and the group has increased in size. It has become an irregular stream by January 27, of which *c*, the largest spot, is the leader. *c* appears to represent part of *a*, and *d* part of *b*. The group diminishes after passing the central meridian on January 28.

Jan. 23·489	4	26	6	38	14·5	−12·9	− 70·8
24·599	12	48	11	41	16·3	−12·3	− 54·4
25·198	14	65	10	48	15·9	−12·0	− 46·9
26·298	34	185	21	113	16·2	−12·4	− 32·2
27·534	46	194	25	101	18·6	−12·3	− 13·6
28·350	37	296	19	149	18·9	−12·4	− 2·5
29·313	49	219	26	113	20·3	−12·3	+ 11·6
30·429	29	169	16	95	21·0	−12·7	+ 27·1
31·532	10	74	7	51	22·8	−12·5	+ 43·3
Feb. 1·223	10	37	10	30	22·9	−12·2	+ 52·5
2·205	2	13	3	16	23·5	−12·3	+ 66·0
Means ...	...	...	14	72	19·17	−12·39	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3875.

A faint spot on January 24. Three spots, of which the first two are measured together, on January 25. The group has greatly increased by January 26, and consists of a large irregular spot, *a*, followed by a number of smaller spots irregularly arranged; of these, the two last, *b* and *c*, are the largest. The group diminishes after January 28, *a* becoming regular, and the smaller spots disappearing, so that after February 1 only *a* and one small companion, *d*, remain, and *d* has disappeared by February 4. *a* has divided into two parts, but is still measured as one on February 4.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Jan. 24·599	2	16	4	39	351·4	−15·8	−79·3
25·198	5	85	8	174	346·1	−15·9	−76·7
26·298	67	337	67	334	348·6	−16·9	−59·8
27·534	86	503	60	344	349·8	−17·6	−42·4
28·350	93	633	55	377	350·5	−18·0	−30·9
29·313	122	617	65	332	351·5	−18·0	−17·2
30·429	96	567	49	291	352·0	−18·4	−1·9
31·532	99	544	52	285	352·7	−18·3	+13·2
Feb. 1·223	85	457	48	257	353·8	−18·1	+23·4
2·205	91	404	57	255	354·4	−18·0	+36·9
3·182	73	302	57	235	354·6	−18·4	+50·0
4·275	36	218	40	243	354·6	−18·3	+64·6
5·445	5	48	12	120	354·8	−17·5	+80·0
Means ...	...	...	44	253	351·91	−17·63	...

Group 3876.

A small faint spot.

Jan. 26·298	0	18	0	10	40·1	+22·4	−8·3
Means ...	...	...	0	10	40·1	+22·4	...

Group 3877.

Three small faint spots on January 26. A different three on January 27.

Jan. 26·298	5	51	3	29	28·7	+15·2	−19·7
27·534	0	16	0	8	31·3	+13·6	−0·9
Means ...	...	...	2	19	30·00	+14·40	...

Group 3878.

Two small faint spots.

Jan. 26·298	0	15	0	14	350·7	−6·5	−57·7
27·534	0	10	0	7	352·2	−6·6	−40·0
Means ...	...	13	0	11	351·45	−6·55	...

Group 3879.

A few very small faint spots irregularly arranged.

1895. d					°	°	°
Jan. 27·534	2	32	1	16	7·0	−3·5	−25·2
Means ...	...	...	1	16	7·0	−3·5	...

Group 3880.

A number of spots, mostly small, in a compact cluster. By January 30 they have nearly coalesced to form a single large spot, an equilateral triangle in shape, but the condensation is not completed, and the group has broken up by the succeeding day, and rapidly diminishes.

Jan. 27·534	2	8	2	9	331·3	−18·3	−60·9
28·350	3	57	3	44	331·9	−18·2	−49·5
29·313	29	173	18	110	332·0	−18·2	−36·7
30·429	69	390	38	212	332·6	−18·4	−21·3
31·532	35	201	18	103	333·5	−18·3	−6·0
Feb. 1·223	12	98	6	52	333·9	−18·0	+3·5
2·205	7	82	4	45	334·1	−18·6	+16·6
3·182	3	40	2	23	335·4	−18·2	+30·8
Means ...	...	...	11	75	333·09	−18·28	...

Group 3881.

A pair of small faint spots following Group 3867.

Jan. 28·350	0	19	0	15	71·0	+7·7	+49·6
29·313	0	29	0	33	71·5	+7·1	+62·8
Means ...	...	...	0	24	71·25	+7·4	...

Group 3882.

A small spot, *a*, preceding Group 3884. A very small companion is seen near *a* on January 30. The group is not seen on February 4, but a pair of small faint spots are seen near its place on February 5.

Jan. 28·350	0	6	0	6	326·2	+12·5	−55·2
29·313	2	11	2	8	326·7	+12·1	−42·0
30·429	10	42	6	24	328·8	+12·2	−25·1
31·532	9	23	5	12	330·5	+12·6	−9·0
Feb. 1·223	4	10	2	5	331·5	+12·8	+1·1
2·205	4	15	2	8	333·0	+12·6	+15·5
3·182	7	18	5	11	334·0	+12·3	+29·4
4·275	0	0	0	0	...	...	...
5·445	0	16	0	16	329·7	+13·1	+54·9
Means ...	...	...	2	10	330·05	+12·53	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3883.

A regular spot, *a*, which slowly and steadily diminishes day by day. Some small spots have formed near it by January 31. These increase in number and area up to February 2. They diminish on the succeeding days, and *a* alone remains by February 5.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Jan. 28·350	0	38	0	97	301·4	−19·2	− 80·0
29·313	13	43	17	55	300·8	−18·9	− 67·9
30·429	10	61	8	50	301·3	−19·0	− 52·6
31·532	9	81	6	51	301·9	−18·8	− 37·6
Feb. 1·223	15	94	9	56	301·4	−17·8	− 29·0
2·205	22	162	13	86	301·2	−17·9	− 16·3
3·182	15	63	7	32	301·7	−18·4	− 2·9
4·275	7	50	3	26	301·6	−18·3	+ 11·6
5·445	0	14	0	8	301·0	−19·5	+ 26·2
Means ...	...	...	7	51	301·37	−18·64	...

Group 3884.

A large regular spot, *a*, followed by two smaller spots, *b* and *c*. Other spots have appeared by January 30, the entire group now forming an irregular stream, of which *a* and *c*, the first and last spots, are the largest. The spots, other than *a*, diminish rapidly after February 4, and only *a* and *c* remain by February 7, whilst *c* has disappeared by February 9.

Jan. 28·350	0	52	0	168	302·0	+13·5	− 79·4
29·313	59	284	81	441	299·8	+14·2	− 68·9
30·429	99	573	86	523	300·3	+13·9	− 53·6
31·532	149	779	101	528	301·2	+13·7	− 38·3
Feb. 1·223	177	906	109	561	302·0	+14·0	− 28·4
2·205	203	985	113	552	301·5	+14·5	− 16·0
3·182	209	984	113	529	301·9	+14·3	− 2·7
4·275	201	1028	113	566	301·8	+14·6	+ 11·8
5·445	131	541	81	333	303·1	+14·5	+ 28·3
6·533	76	391	57	296	304·1	+14·7	+ 43·5
7·449	51	267	52	273	305·6	+14·9	+ 57·1
8·446	13	149	23	251	305·5	+15·2	+ 70·2
9·265	0	47	0	250	307·1	+15·1	+ 82·6
Means ...	...	...	71	405	302·76	+14·39	...

Group 3885.

A very small spot.

Jan. 29·313	0	9	0	5	30·4	+14·1	+ 21·7
Means ...	...	...	0	5	30·4	+14·1	...

Group 3886.

A small spot.

1895. d					°	°	°
Jan. 29·313	3	13	2	9	331·7	+17·5	− 37·0
Means ...	...	...	2	9	331·7	+17·5	...

Group 3887.

A pair of small faint spots on January 29. A single small spot on January 30.

Jan. 29·313	0	19	0	16	321·4	+17·5	−47·3
30·429	2	9	1	6	320·7	+15·6	−33·2
Means ...	...	...	1	11	321·05	+17·05	...

Group 3888.

A few spots, mostly very small, in two clusters on January 31. The group increases on the succeeding days, and the preceding spots have united to form a large regular spot, *a*, by February 2.

Jan. 31·532	2	47	1	28	12·6	− 2·5	+33·1
Feb. 1·223	16	74	11	50	12·9	− 2·6	+42·5
2·205	21	270	19	242	13·8	− 3·2	+56·3
3·182	18	142	31	237	17·3	− 3·8	+72·7
Means ...	...	...	16	139	14·15	− 3·03	...

Group 3889.

A very small spot.

Jan. 31·532	0	8	0	4	344·0	− 8·9	+ 4·5
Means ...	...	...	0	4	344·0	− 8·9	...

Group 3890.

A small faint spot.

Feb. 3·182	0	15	0	9	325·4	+16·6	+ 20·8
Means ...	...	...	0	9	325·4	+16·6	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3891.

A very small faint spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Feb. 3·182	0	9	0	5	276·3	− 8·2	− 28·3
Means ...	...	...	0	5	276·3	− 8·2	...

Group 3892.

A very large irregular spot on February 3, with its major axis inclined at a great angle to the equator. The northern portion of the spot is much more strongly marked than the southern, and has become a separate regular spot, *a*, by February 5. The group on this and the succeeding days is an irregular stream, of which *a* is the leader, nearly perpendicular to the equator. The minor spots of the group undergo frequent changes, and *a* remains alone by February 13.

Feb. 3·182	122	378	213	659	233·3	+12·7	−71·3
4·275	167	660	164	649	233·4	+13·0	−56·6
5·445	125	800	89	568	234·2	+13·2	−40·6
6·533	146	849	87	506	234·5	+13·5	−26·1
7·449	142	690	79	382	235·3	+13·8	−13·2
8·446	129	721	70	389	235·8	+14·2	+ 0·5
9·265	143	673	79	371	236·2	+14·6	+11·7
10·218	131	586	77	347	236·9	+14·0	+24·9
11·481	99	454	72	330	236·8	+14·1	+41·5
12·311	80	418	73	381	237·4	+14·2	+53·0
13·278	58	271	80	373	237·7	+14·1	+66·1
14·175	17	79	54	249	238·7	+14·5	+78·8
Means ...	...	...	95	434	235·85	+13·83	...

Group 3893.

An irregular group forming suddenly near the central meridian. At first it is an irregular stream of spots, mostly small, *a*, the leader, being the largest. By February 8 the leading spots have coalesced to form a large triangular composite spot, which has become a triple spot by the succeeding day.

Feb. 4·275	21	179	11	97	278·3	+11·9	−11·7
5·445	59	225	32	119	278·6	+11·7	+ 3·8
6·533	55	259	31	146	278·9	+11·8	+18·3
7·449	51	251	32	157	280·6	+11·3	+32·1
8·446	47	202	36	154	281·1	+11·2	+45·8
9·265	15	148	14	144	281·4	+11·1	+56·9
10·218	13	81	20	127	281·6	+10·9	+69·6
Means ...	...	...	25	135	280·07	+11·41	...

Group 3894.

A small spot, *a*, on February 4; a pair of small spots on February 5. The group increases on the succeeding days, and has become a long straight stream by February 8; *a*, the leader, being at the intersection of the axis of the group, with the prolongation of that of Group 3892, the two axes being inclined to each other at an angle of 40°. The spots begin to coalesce, and the stream to become irregular after February 10.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Feb. 4·275	0	11	0	12	231·8	+19·5	−58·2
5·445	7	25	5	19	232·0	+19·1	−42·8
6·533	3	38	2	24	232·2	+19·1	−28·4
7·449	27	129	15	76	231·8	+18·8	−16·7
8·446	35	210	20	117	231·2	+18·2	− 4·1
9·265	12	147	6	83	232·1	+18·4	+ 7·6
10·218	31	159	18	94	231·7	+18·2	+19·7
11·481	10	147	7	105	233·0	+18·6	+37·7
12·311	30	260	25	215	231·7	+18·0	+47·3
13·278	11	152	13	187	233·4	+19·0	+61·8
14·175	0	56	0	182	238·0	+20·7	+78·1
Means ...	...	...	10	101	232·63	+18·87	...

Group 3895.

Two small faint spots.

Feb. 5·445	5	22	3	15	316·6	−24·0	+ 41·8
Means ...	...	...	3	15	316·6	−24·0	...

Group 3896.

A few very small unstable spots.

Feb. 7·449	4	25	2	13	237·2	− 8·1	−11·3
8·446	0	12	0	6	239·1	− 8·3	+ 3·8
Means ...	...	...	1	10	238·15	− 8·20	...

Group 3897.

A small spot, *a*, on February 9. A second has appeared by February 10. Other spots, small and unstable, have formed by February 11, and *a* is represented by two spots close together, *b* and *c*, of which *c* has disappeared by February 13.

Feb. 9·265	5	20	3	12	195·4	−17·5	− 29·1
10·218	2	22	1	11	195·1	−17·6	− 16·9
11·481	17	87	9	44	195·7	−17·7	+ 0·4
12·311	31	137	16	72	197·2	−17·5	+ 12·8
13·278	1	30	1	17	196·3	−18·2	+ 24·7
14·175	0	12	0	8	198·8	−17·7	+ 38·9
Means ...	...	...	5	27	196·42	−17·70	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3898.

A large regular spot, *a*, with one or two small companions on February 14, 16 and 17.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Feb. 9·265	11	90	32	271	142·9	− 9·3	− 81·6
10·218	28	171	37	226	143·5	− 9·6	− 68·5
11·481	44	267	35	212	144·1	− 9·7	− 51·2
12·311	52	338	34	220	144·0	− 9·3	− 40·4
13·278	58	302	32	169	144·3	− 9·5	− 27·3
14·175	66	310	34	161	144·5	− 9·8	− 15·4
15·194	64	325	32	163	144·5	−10·2	− 1·9
16·457	51	265	27	138	144·2	−10·2	+ 14·3
17·194	52	263	29	145	144·9	−10·4	+ 24·8
18·194	40	214	25	136	145·2	−10·2	+ 38·3
19·479	26	139	23	122	145·6	−10·0	+ 55·6
20·284	18	96	23	120	146·5	−10·2	+ 67·1
21·216	13	43	37	122	148·0	−10·1	+ 80·9
Means ...	...	...	31	170	144·78	− 9·88	...

Group 3899.

A very small faint spot.

Feb. 10·218	0	6	0	5	168·7	+13·6	− 43·3
Means ...	...	...	0	5	168·7	+13·6	...

Group 3900.

A small faint spot.

Feb. 10·218	0	13	0	13	155·1	+17·6	− 56·9
Means ...	...	...	0	13	155·1	+17·6	...

Group 3901.

A small spot, *a*, with a very small companion on February 11. The group has increased by February 12, and *a* is well defined and regular, and at the head of a short stream, almost perpendicular to the equator. *a* moves forward in longitude, bringing the axis of the group more nearly parallel to the equator.

Feb. 11·481	4	29	4	29	134·5	−18·3	− 60·8
12·311	13	96	11	74	134·9	−17·8	− 49·5
13·278	28	139	17	87	135·8	−18·3	− 35·8
14·175	41	134	23	74	136·8	−18·5	− 23·1
15·194	43	136	22	71	137·7	−19·2	− 8·7
16·457	24	132	12	69	138·3	−18·6	+ 8·4
17·194	27	124	14	67	139·1	−18·9	+ 19·0
18·194	17	98	10	60	139·7	−18·5	+ 32·8
19·479	0	36	0	28	140·1	−18·6	+ 50·1
Means ...	...	...	13	62	137·43	−18·52	...

Group 3902.

One or two small unstable spots.

1895. d					°	°	°
Feb. 14·175	0	7	0	4	161·7	+16·5	+ 1·8
15·194	0	32	0	18	159·7	+17·1	+ 13·3
16·457	6	47	4	31	162·2	+17·8	+ 32·3
Means ...	...	...	1	18	161·20	+17·13	...

Group 3903.

A large regular spot, *a*, closely followed by a smaller spot, *b*, and with a few other very small companions. A considerable development of small spots has taken place all round *a* by February 19 and 20, but diminishes again later. *a* lengthens out and its nucleus has become divided by February 21, and by February 22 *a* has completely separated into two spots, *c* and *d*. *b* has disappeared by February 20, and *d* by February 25. The smaller spots are very unstable.

Feb. 15·194	29	159	55	327	69·5	− 9·1	− 76·9
16·457	56	316	53	300	71·1	− 9·6	− 58·8
17·194	71	344	53	256	71·9	− 9·4	− 48·2
18·194	82	387	50	234	72·5	− 9·6	− 34·4
19·479	82	535	43	280	73·3	−10·0	− 16·7
20·284	116	583	58	308	73·0	−10·3	− 6·4
21·216	93	427	48	217	74·1	−10·4	+ 7·0
22·182	109	361	59	194	74·3	−10·5	+ 19·9
23·203	31	221	19	136	75·2	−11·1	+ 34·3
24·540	16	64	12	51	75·6	−10·6	+ 52·3
25·191	6	22	7	24	78·0	−10·8	+ 63·2
Means ...	...	...	42	212	73·50	−10·13	...

Group 3904.

A number of small spots in a straggling stream on February 16. The group increases on the succeeding days, and a considerable regular spot, *a*, has formed at the head of the stream by February 19. The group, especially the following part, diminishes after that date, and *a* alone remains by February 22.

Feb. 16·457	13	115	11	91	80·5	+ 4·9	− 49·4
17·194	34	174	22	114	83·0	+ 5·4	− 37·1
18·194	29	266	16	148	85·4	+ 5·9	− 21·5
19·479	33	168	17	87	85·5	+ 6·2	− 4·5
20·284	35	146	18	76	88·6	+ 6·4	+ 9·2
21·216	32	135	18	76	89·0	+ 6·4	+ 21·9
22·182	17	82	11	52	89·2	+ 6·2	+ 34·8
23·203	5	39	4	30	89·5	+ 5·9	+ 48·6
24·540	0	7	0	9	89·2	+ 6·0	+ 65·9
Means ...	...	...	13	76	86·66	+ 5·92	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3905.

A small faint spot on February 18 and 19. Others appear on the succeeding days, and the group is an irregular cluster of faint nebulous spots on February 22. The spots have become better defined, but are smaller and more separated by the succeeding day. A sudden increase has taken place by February 24, and the group is now a winding stream of spots, of which the largest, *a*, is a composite spot, usually the last in the group. *a* is seen in two parts on February 27.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Feb. 18·194	0	25	0	24	47·3	−12·8	− 59·6
19·479	5	39	3	27	47·1	−13·1	− 42·9
20·284	4	41	3	24	47·6	−12·8	− 31·8
21·216	18	121	10	64	48·6	−13·3	− 18·5
22·182	9	166	5	84	49·6	−12·9	− 4·8
23·203	20	142	11	73	50·2	−12·9	+ 9·3
24·540	52	282	30	157	50·3	−13·0	+ 27·0
25·191	52	276	32	170	50·5	−13·2	+ 35·7
26·189	32	256	24	192	49·7	−13·5	+ 48·0
27·424	12	145	13	157	48·7	−13·0	+ 63·3
28·323	8	65	14	120	49·0	−13·1	+ 75·5
Means ...	...	...	13	99	48·96	−13·05	...

Group 3906.

A large regular spot, *a*, which diminishes steadily from day to day. Two very small companions are seen closely following *a* on February 24, and a single one on February 28.

Feb. 18·194	6	32	20	101	25·7	− 4·0	− 81·2
19·479	20	84	22	92	26·7	− 4·5	− 63·3
20·284	28	116	23	95	27·0	− 4·2	− 52·4
21·216	37	146	24	95	27·5	− 4·1	− 39·6
22·182	49	153	28	87	27·8	− 4·2	− 26·6
23·203	25	124	13	64	28·2	− 4·5	− 12·7
24·540	12	75	6	39	28·5	− 4·4	+ 5·2
25·191	19	51	10	26	29·0	− 4·4	+ 14·2
26·189	17	42	10	24	29·3	− 4·3	+ 27·6
27·424	8	26	6	18	29·2	− 4·1	+ 43·8
28·323	4	25	4	22	29·6	− 4·2	+ 56·1
Mar. 1·615	0	8	0	14	30·0	− 3·9	+ 73·5
Means ...	...	...	14	56	28·21	− 4·23	...

Group 3907.

A very small faint spot preceding Group 3905.

Feb. 19·479	0	10	0	6	54·9	−12·7	−35·1
Means ...	...	...	0	6	54·9	−12·7	...

Group 3908.

A pair of very small faint nebulous spots, north of the place of Group 3907 and preceding Group 3905. Only one remains by February 21.

1895. d					°	°	°
Feb. 20·284	0	15	0	8	53·8	−10·6	−25·6
21·216	0	13	0	7	55·2	−10·1	−11·9
22·182	2	14	1	7	55·7	−10·8	+ 1·3
Means ...	...	...	1	7	54·90	−10·50	...

Group 3909.

A very small faint spot *sf* Group 3905.

Feb. 21·216	0	8	0	4	46·5	−17·4	− 20·6
22·182	0	10	0	5	44·8	−18·2	− 9·6
Means ...	...	...	0	5	45·65	−17·80	...

Group 3910.

A regular spot, *a*, with occasionally a very small companion. *a* has divided into two parts by February 23, and re-united again by February 25.

Feb. 21·216	8	30	14	55	354·5	+ 9·1	− 72·6
22·182	22	91	23	98	354·3	+ 9·4	− 60·1
23·203	23	120	17	91	355·1	+ 9·2	− 45·8
24·540	30	142	18	85	355·9	+ 9·3	− 27·4
25·191	24	131	13	73	356·3	+ 9·4	− 18·5
26·189	19	95	10	49	357·0	+ 9·5	− 4·7
27·424	16	57	8	30	357·3	+ 9·4	+ 11·9
28·523	5	39	3	22	357·2	+ 9·5	+ 23·7
Means ...	...	...	13	63	355·95	+ 9·35	...

Group 3911.

A double spot, *a*, which has become by February 26 the leader of an irregular stream. The group has greatly increased in size by February 27, and then forms a short broad stream, the most considerable part of which consists of *b* and *c*, two large irregular composite spots. A third, *d*, has formed to the north of them by March 1. *d* has disappeared by March 4.

Feb. 23·203	3	34	4	48	335·0	+13·7	− 65·9
24·540	18	56	15	45	335·3	+13·4	− 48·0
25·191	18	68	13	48	335·1	+13·5	− 39·7
26·189	31	138	19	84	334·3	+13·3	− 27·4
27·424	89	452	49	246	333·7	+13·1	− 11·7
28·523	157	851	84	458	333·6	+12·6	+ 0·1

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3911—*continued.*

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Mar. 1·615	200	1128	112	632	333·9	+13·0	+ 17·4
2·451	124	947	76	581	333·9	+12·9	+ 28·4
3·495	100	616	73	452	334·4	+12·9	+ 42·6
4·508	46	348	45	341	334·5	+12·5	+ 56·1
5·468	30	174	45	268	334·4	+12·2	+ 68·7
6·296	2	66	8	218	334·4	+11·5	+ 79·6
Means ...	...	...	45	285	334·38	+12·88	...

Group 3912.

A nebulous spot following Group 3911, which diminishes from day to day.

Feb. 23·203	0	23	0	46	327·5	+13·3	− 73·4
24·540	4	17	4	16	327·6	+12·2	− 55·7
25·191	8	31	6	24	327·7	+12·4	− 47·1
26·189	0	4	0	3	328·5	+12·4	− 33·2
Means ...	...	...	3	22	327·83	+12·58	...

Group 3913.

A number of spots in a short winding stream. The group appears suddenly just north of Group 3905, and close to it. The leader, *a*, is a regular spot, large after February 24. The following spots are smaller and diminish after February 25. *a* alone remains by February 28.

Feb. 24·540	41	226	24	128	52·3	− 8·5	+ 29·0
25·191	68	350	43	221	51·9	− 9·4	+ 37·1
26·189	62	282	49	223	52·6	− 9·4	+ 50·9
27·424	21	89	27	113	53·0	− 8·6	+ 67·6
28·323	9	37	25	104	54·2	− 8·4	+ 80·7
Means ...	...	...	34	158	52·80	− 8·86	...

Group 3914.

A very small faint spot.

Feb. 24·540	0	13	0	7	1·9	−22·7	− 21·4
Means ...	...	...	0	7	1·9	−22·7	...

Group 3915.

A few small unstable spots irregularly arranged.

1895. d					°	°	°
Feb. 24·540	4	29	3	26	325·5	−20·3	− 57·8
25·191	4	33	4	27	324·7	−19·6	− 50·1
26·189	6	59	4	37	323·6	−18·8	− 38·1
27·424	8	41	4	23	324·4	−18·9	− 21·0
28·323	18	96	9	50	324·3	−18·7	− 9·2
Means ...	...	...	5	33	324·50	−19·26	...

Group 3916.

A large regular spot, *a*, with occasionally a very small companion.

Feb. 24·540	10	78	23	179	308·1	+13·8	− 75·2
25·191	25	143	36	208	307·8	+14·1	− 67·0
26·189	54	245	50	227	308·2	+13·7	− 53·5
27·424	58	316	39	213	308·3	+13·0	− 37·1
28·323	62	366	37	219	308·7	+13·1	− 24·8
Mar. 1·615	66	397	35	213	308·6	+12·8	− 7·9
2·451	56	328	30	175	309·1	+12·8	+ 3·6
3·495	48	311	27	176	309·3	+12·7	+ 17·5
4·508	44	276	28	173	309·4	+12·7	+ 31·0
5·468	37	215	28	161	309·4	+12·7	+ 43·7
6·296	32	129	30	121	309·3	+12·4	+ 54·5
7·600	11	81	20	147	309·3	+12·7	+ 71·6
Means ...	...	...	32	184	308·79	+13·04	...

Group 3917.

A very small faint spot. Groups 3905, 3907, 3908, 3909, 3913 and 3917 are all closely connected.

Feb. 25·191	0	6	0	4	48·1	−16·5	+ 33·3
Means ...	...	...	0	4	48·1	−16·5	...

Group 3918.

A very small spot.

Feb. 25·191	0	11	0	7	347·7	+16·2	− 27·1
Means ...	...	...	0	7	347·7	+16·2	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3919.

One or two small faint spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Feb. 25·191	0	13	0	19	304·5	− 6·4	− 70·3
26·189	3	15	3	14	305·2	− 6·4	− 56·5
27·424	4	23	3	14	305·9	− 6·8	− 39·5
Means ...	...	...	2	16	305·20	− 6·53	...

Group 3920.

A small regular spot, *a*, followed by a few very small spots in a short stream. *a* alone remains by February 28.

Feb. 26·189	11	51	6	28	345·7	−22·7	− 16·0
27·424	21	72	11	38	346·6	−22·0	+ 1·2
28·323	8	34	4	19	348·5	−21·9	+ 15·0
Mar. 1·615	4	16	2	10	349·3	−21·2	+ 32·8
Means ...	...	...	6	24	347·53	−21·95	...

Group 3921.

A very small faint spot.

Feb. 26·189	0	10	0	6	326·1	− 7·9	− 35·6
Means ...	...	...	0	6	326·1	− 7·9	...

Group 3922.

A few small unstable spots. The leader on February 27, *a*, is the most stable.

Feb. 26·189	0	19	0	29	290·6	−23·7	− 71·1
27·424	2	22	2	18	292·8	−23·8	− 52·6
28·323	6	53	4	37	292·1	−23·7	− 41·4
Mar. 1·615	6	17	3	10	294·3	−23·2	− 22·2
Means ...	...	...	2	24	292·45	−23·60	...

Group 3923.

A large regular spot, *a*, followed by a number of smaller spots in a slightly wavy stream. The last spot of the stream, *b*, diminishes rapidly, and has disappeared by March 3. *a* alone remains by March 6.

1895. d					°	°	°
Feb. 26·189	3	49	8	125	282·5	− 6·3	−79·2
27·424	44	311	46	323	283·7	− 6·7	−61·7
28·323	82	495	62	381	284·1	− 6·2	−49·4
Mar. 1·615	109	643	64	376	285·1	− 6·1	−31·4
2·451	118	581	63	310	286·0	− 5·8	−19·5
3·495	98	607	50	306	286·8	− 5·5	− 5·0
4·508	98	564	50	289	286·9	− 5·5	+ 8·5
5·468	90	527	49	285	286·7	− 5·7	+21·0
6·296	86	401	51	239	286·9	− 5·9	+32·1
7·600	40	276	31	214	287·8	− 5·9	+50·1
8·484	11	151	12	158	287·9	− 5·7	+61·9
9·185	15	75	23	115	288·6	− 6·3	+71·8
Means ...	...	...	42	260	286·08	− 5·97	...

Group 3924.

A pair of ill-defined spots closely following Group 3906.

Mar. 1·615	13	63	16	80	23·4	− 3·8	+66·9
2·451	7	24	16	54	23·1	− 3·7	+77·6
Means ...	...	...	16	67	23·25	− 3·75	...

Group 3925.

A very small faint spot.

Mar. 1·615	2	7	1	6	11·4	− 6·6	+ 54·9
Means ...	...	...	1	6	11·4	− 6·6	...

Group 3926.

A very small faint spot, *a*, on March 1. Other small unstable spots are seen near *a* on March 2 and 3. Only one remains on March 4.

Mar. 1·615	0	8	0	5	355·1	−16·5	+38·6
2·451	11	38	9	30	354·4	−17·3	+48·9
3·495	9	31	10	33	355·1	−17·0	+63·3
4·508	0	9	0	14	352·2	−17·7	+73·8
Means ...	...	...	5	21	354·20	−17·13	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3927.

Two very small faint spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d Mar. 1·615	0	17	0	8	° 312·5	° − 5·8	° − 4·0
Means ...	...	...	0	8	312·5	− 5·8	...

Group 3928.

Two spots, *a* and *b*, close together, each with eccentrically placed umbra. They rapidly diminish after March 3. A few small companions are seen near them on March 3 and the succeeding days. *b* alone remains on March 8.

Mar. 1·615	8	68	20	169	241·4	+18·9	−75·1
2·451	16	115	23	167	240·0	+19·3	−65·5
3·495	20	179	18	165	240·5	+19·4	−51·3
4·508	21	152	14	108	241·0	+19·5	−37·4
5·468	18	122	11	77	240·9	+19·4	−24·8
6·296	10	71	6	41	241·3	+19·9	−13·5
7·600	6	28	3	16	241·2	+19·6	+ 3·5
8·484	2	14	1	8	240·5	+19·5	+14·5
Means ...	...	...	12	94	240·85	+19·44	...

Group 3929.

A number of spots, mostly small, in an irregular stream, first seen close to the West limb. The preceding portion of the group has passed out of view by the second day. The following portion seems to have increased considerably.

Mar. 4·508	10	54	14	79	348·7	− 2·7	+ 70·3
5·468	0	35	0	102	346·1	− 3·3	+ 80·4
Means ...	...	...	7	91	347·40	− 3·00	...

Group 3930.

Two small faint spots *sf* Group 3926.

Mar. 4·508	0	10	0	13	347·4	−21·9	+ 69·0
Means ...	...	...	0	13	347·4	−21·9	...

Group 3931.

A few small faint spots in an irregular cluster *sp* Group 3928.

1895. d Mar. 5·468	0	44	0	26	° 243·4	° +16·2	° −22·3
Means ...	...	...	0	26	243·4	+16·2	...

Group 3932.

A widely extended group, in general wedge shaped, the point of the wedge preceding. The individual spots are mostly small, and do not last more than two or three days. The more stable spots are distinguished by the letters *a*, *b*, *c* and *d*. The group rapidly diminishes after March 9, and assumes the form of two parallel straggling streams.

Mar. 5·468	0	24	0	72	188·7	+19·5	−77·0
6·296	0	71	0	108	188·4	+19·6	−66·4
7·600	43	192	40	172	187·6	+19·5	−50·1
8·484	79	372	60	274	187·0	+19·9	−39·0
9·185	89	508	57	331	187·8	+19·6	−29·0
10·511	60	300	34	171	186·8	+19·7	−12·5
11·408	31	248	17	143	185·9	+20·3	− 1·5
12·608	6	47	3	28	184·5	+21·3	+12·8
13·445	0	19	0	12	184·6	+19·7	+24·0
Means ...	...	...	23	146	186·81	+19·90	...

Group 3933.

A large regular spot, *a*, *sf* Group 3932. It is usually attended by some small unstable companions.

Mar. 6·296	42	158	77	306	182·3	+14·3	− 72·5
7·600	51	229	48	216	183·4	+14·0	− 54·3
8·484	64	341	48	253	183·0	+14·0	− 43·0
9·185	70	347	45	228	183·3	+14·4	− 33·5
10·511	70	386	40	217	183·2	+14·1	− 16·1
11·408	74	447	40	240	182·7	+13·8	− 4·7
12·608	74	380	41	210	183·6	+14·0	+ 11·9
13·445	56	314	33	184	183·7	+13·8	+ 23·1
14·179	52	294	33	189	184·0	+14·0	+ 33·1
15·228	48	269	38	215	184·4	+13·9	+ 47·3
16·256	49	167	55	189	184·3	+13·4	+ 60·8
17·469	16	69	41	176	184·0	+13·5	+ 76·4
Means ...	...	...	45	219	183·49	+13·93	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3934.

A large double spot, *a*, with a very small companion on March 9. *a* has divided into two regular spots, *b* and *c*, by March 10. Of these, *c* is much the larger. *b* and *c* both diminish, but *b* the more rapidly, and has disappeared by March 17. One or two small companions are often seen near the principal spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group Umbra.	Area for Group Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Mar. 6·296	0	60	0	289	172·5	+12·2	−82·3
7·600	31	234	41	301	172·6	+11·5	−65·1
8·484	60	342	54	308	172·8	+11·6	−53·2
9·185	65	395	49	297	172·7	+12·1	−44·1
10·511	91	449	54	266	172·8	+11·6	−26·5
11·408	107	505	58	276	172·9	+11·6	−14·5
12·608	88	455	47	240	173·4	+11·8	+ 1·7
13·445	78	378	43	205	173·6	+11·8	+13·0
14·179	55	340	32	197	173·9	+12·2	+23·0
15·228	49	233	33	158	174·4	+12·6	+37·3
16·256	29	153	25	131	174·7	+13·1	+51·2
17·469	11	84	17	122	174·9	+13·0	+67·3
18·425	7	30	25	109	175·1	+12·7	+80·1
Means ...	...	...	37	223	173·56	+12·14	...

Group 3935.

A very small faint spot *nf* Group 3928.

Mar. 7·600	0	12	0	7	240·1	+23·3	+ 2·4
8·484	0	7	0	4	240·0	+23·0	+14·0
Means ...	...	...	0	6	240·05	+23·15	...

Group 3936.

A small regular spot, *a*, with a small companion on March 11. The group is not seen on March 12, but a very small spot is seen on March 13.

Mar. 9·185	0	14	0	29	145·2	+21·9	−71·6
10·511	11	24	11	24	145·7	+20·9	−53·6
11·408	4	26	3	20	145·3	+20·8	−42·1
12·608	0	0	0	0	...	...	...
13·445	0	5	0	3	143·5	+20·9	−17·1
Means ...	...	...	3	15	144·93	+21·13	...

Group 3937.

Two very small faint spots.

Mar. 10·511	0	13	0	9	235·5	+18·1	+36·2
Means ...	...	...	0	9	235·5	+18·1	...

Group 3938.

A number of spots, mostly small, in a short irregular stream. The group appears suddenly on the central meridian, and is chiefly gathered in two close clusters.

1895. d					°	°	°
Mar. 10·511	22	61	12	32	198·8	−17·3	− 0·5
11·408	41	238	22	124	199·0	−17·2	+11·6
12·608	40	232	23	133	199·1	−17·1	+27·4
13·445	29	209	19	134	198·9	−17·4	+38·3
14·179	28	185	21	140	199·6	−17·4	+48·7
15·228	20	111	22	117	199·5	−17·2	+62·4
16·256	10	44	21	86	200·2	−17·1	+76·7
Means ...	...	...	20	109	199·30	−17·24	...

Group 3939.

A number of spots, mostly small, in a short irregular stream. The group appears suddenly *n* of Group 3938, close to the central meridian.

Mar. 10·511	5	19	3	10	193·9	−10·4	− 5·4
11·408	7	63	3	32	194·7	−10·7	+ 7·3
12·608	42	193	23	107	196·9	−11·0	+25·2
13·445	40	199	25	122	196·4	−11·1	+35·8
14·179	36	212	25	151	196·7	−11·2	+45·8
15·228	30	243	31	245	198·0	−11·5	+60·9
16·256	10	110	18	195	198·3	−11·5	+74·8
Means ...	...	...	18	123	196·41	−11·06	...

Group 3940.

A large regular spot, *a*. A small spot is separated from *a* on the following side, the separation having become complete by March 14, though the new spot is not measured separately until March 15. One or two small companions are seen near *a*, March 16–19.

Mar. 10·511	8	66	33	271	117·0	+ 4·4	−82·3
11·408	24	137	39	221	116·3	+ 4·5	−71·1
12·608	36	233	33	210	116·7	+ 4·6	−55·0
13·445	51	277	36	197	116·5	+ 4·4	−44·1
14·179	64	315	40	196	116·7	+ 4·8	−34·2
15·228	66	296	36	162	117·3	+ 4·7	−19·8
16·256	68	315	35	161	117·1	+ 4·5	− 6·4
17·469	48	289	25	150	117·5	+ 4·5	+ 9·9
18·425	34	261	19	145	117·8	+ 4·0	+22·8
19·198	37	230	23	141	117·9	+ 4·0	+33·1
20·118	22	165	19	138	118·4	+ 4·1	+52·3
21·626	13	103	16	126	117·9	+ 4·0	+65·2
22·503	8	47	19	112	118·4	+ 4·3	+77·1
Means ...	...	...	29	172	117·35	+ 4·37	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3941.

A very close pair of small spots, measured as one on March 13. Only one is seen on March 14.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Mar. 13·445	0	20	0	24	96·9	+ 6·6	−63·7
14·179	0	6	0	5	98·2	+ 6·5	−52·7
Means ...	...	...	0	15	97·55	+ 6·55	...

Group 3942.

A wide pair of spots, *a* and *b*, on March 15. *b* has disappeared by March 16, but other small spots have appeared south of *a*, making the group a short straight stream. A large spot, *c*, has appeared *up* of *a* by March 17, and increases rapidly on the succeeding days. *d*, the last spot of the group, also increases in size.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Mar. 15·228	0	38	0	22	158·6	+19·4	+ 21·5
16·256	0	43	0	30	160·0	+18·1	+ 36·5
17·469	26	173	25	167	161·1	+19·2	+ 53·5
18·425	32	298	47	439	161·0	+19·1	+ 66·0
19·198	34	234	80	559	159·6	+18·6	+ 74·8
Means ...	...	...	30	243	160·06	+18·88	...

Group 3943.

A very small faint spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Mar. 16·256	1	7	1	4	164·9	− 7·4	+41·4
Means ...	...	...	1	4	164·9	− 7·4	...

Group 3944.

A very small faint spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Mar. 16·256	0	11	0	6	144·6	−21·5	+ 21·1
Means ...	...	...	0	6	144·6	−21·5	...

Group 3945.

A pair of very small faint spots showing a strong drift towards the equator.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Mar. 16·256	1	11	1	5	107·9	− 5·5	− 15·6
17·469	0	15	0	8	108·1	− 4·2	+ 0·5
Means ...	...	...	1	7	108·00	− 4·85	...

Group 3946.

An irregular group which rapidly increases in size, and which has become by March 20 a large compact wedge-shaped stream, of which the largest spot, *a*, is the apex and leader. *a* coalesces with the spots immediately following it, and becomes very large. The remainder of the group narrows down.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Mar. 16·256	14	48	17	60	56·4	− 9·2	− 67·1
17·469	41	249	32	197	56·7	− 9·4	− 50·9
18·425	87	451	55	284	57·5	− 9·9	− 37·5
19·198	155	780	86	437	58·0	− 9·9	− 26·8
20·118	147	1070	75	539	59·2	−10·9	− 6·9
21·626	209	1254	108	667	60·4	−10·8	+ 7·7
22·503	197	1627	104	860	60·3	−10·8	+ 19·0
23·417	175	1571	103	924	60·1	−10·4	+ 30·9
24·225	166	1311	109	878	60·2	−10·4	+ 41·7
25·431	87	772	83	732	61·0	− 9·7	+ 58·4
26·486	31	330	49	544	61·8	− 9·4	+ 73·1
27·234	22	94	61	254	59·2	−10·3	+ 80·3
Means ...	...	...	74	531	59·23	−10·09	...

Group 3947.

Three small spots closely following each other.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Mar. 17·469	9	39	6	26	148·3	−12·7	+40·7
Means ...	...	...	6	26	148·3	−12·7	...

Group 3948.

A very small faint spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Mar. 18·425	0	12	0	6	99·2	+ 7·1	+ 4·2
Means ...	...	...	0	6	99·2	+ 7·1	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3949.

A pair of small spots on March 19. The group has expanded into a short stream by the succeeding day. The group increases rapidly until March 22, and two large spots, *a* and *b*, have formed by March 21. The group diminishes after March 22, *b* decreasing especially quickly. *a* has divided into three unequal portions by March 26. The letter is still retained for the largest part.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Mar. 19·198	5	36	6	42	19·5	− 5·5	− 65·3
20·118	58	242	41	172	20·1	− 6·0	− 46·0
21·626	134	722	79	423	21·2	− 5·4	− 31·5
22·503	186	965	99	510	22·1	− 5·4	− 19·2
23·417	144	876	73	446	22·4	− 5·0	− 6·8
24·225	103	683	52	344	23·8	− 4·9	+ 5·3
25·431	89	575	48	313	24·6	− 4·7	+ 22·0
26·486	75	347	47	219	25·7	− 4·7	+ 37·0
27·234	37	247	28	183	26·7	− 5·1	+ 47·8
28·464	15	106	18	119	26·7	− 4·9	+ 64·0
29·621	2	41	6	111	27·3	− 4·7	+ 79·9
Means ...	...	...	45	262	23·65	− 5·12	...

Group 3950.

A small spot.

Mar. 20·118	0	6	0	11	141·6	−20·8	+ 75·5
Means ...	...	...	0	11	141·6	−20·8	...

Group 3951.

A pair of very small spots on March 20. The group increases in size and has become a short stream of spots by March 21, but has decreased again after March 23. *a*, the largest spot, is the leader on March 21, 22 and 23.

Mar. 20·118	0	19	0	11	88·1	+12·5	+ 22·0
21·626	15	73	10	48	88·0	+11·9	+ 35·3
22·503	24	137	19	110	89·2	+12·0	+ 47·9
23·417	10	39	11	43	89·1	+11·5	+ 59·9
Means ...	...	...	10	53	88·60	+11·98	...

Group 3952.

A very small faint spot *f* Group 3946.

Mar. 20·118	0	12	0	6	45·0	− 6·3	− 21·1
Means ...	...	...	0	6	45·0	− 6·3	...

Group 3953.

A small spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Mar. 23·417	3	16	2	8	25·7	−17·6	− 3·5
Means ...	...	...	2	8	25·7	−17·6	...

Group 3954.

A small spot, *a*, with a very small companion on March 25.

Mar. 24·225	0	8	0	8	80·2	−14·5	+ 61·7
25·431	0	13	0	29	80·9	−13·9	+ 78·3
Means ...	...	...	0	19	80·55	−14·20	...

Group 3955.

A small regular spot.

Mar. 24·225	5	25	10	44	307·2	+12·6	− 71·3
25·431	8	23	8	22	307·5	+12·2	− 55·1
26·486	12	36	9	26	307·3	+12·3	− 41·4
27·234	12	45	7	28	307·7	+12·7	− 31·2
28·464	0	14	0	8	307·3	+12·7	− 15·4
Means ...	...	...	7	26	307·40	+12·50	...

Group 3956.

A small faint spot on March 25. A number of very small faint spots in an irregular stream on March 26. Only one very small spot remains on March 27.

Mar. 25·431	0	14	0	13	313·3	+21·0	−49·3
26·486	0	50	0	37	312·5	+21·5	−36·2
27·234	0	10	0	6	311·2	+22·6	−27·7
Means ...	...	...	0	15	312·33	+21·70	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3957.

A very small spot on March 26; three small spots on March 27. The group rapidly increases in size, and becomes a fine stream, its leader, *a*, being a large spot with very dark umbra. The stream becomes straighter after March 30, an extension to the south being last seen on that day. *b*, the last spot of the group on March 28, has divided into three parts, *c*, *d* and *e*, by March 31, and *e* into two parts by April 2, *f* and *g*. Only *a* and *f* remain on April 5.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Mar. 26·486	0	4	0	5	286·0	+17·7	−62·7
27·234	13	74	12	68	286·7	+18·3	−52·2
28·464	108	405	72	269	289·5	+17·6	−33·2
29·621	139	763	80	441	290·1	+17·7	−17·3
30·229	139	676	77	377	291·4	+18·4	−8·0
31·522	145	782	80	437	291·2	+18·4	+8·9
Apr. 1·460	135	807	80	481	291·4	+18·4	+21·5
2·212	100	504	65	333	292·4	+18·7	+32·4
3·470	73	317	62	270	292·5	+18·1	+49·1
4·417	51	282	61	344	292·8	+18·3	+61·9
5·414	10	172	25	389	292·0	+18·2	+74·3
Means ...	...	...	56	310	290·55	+18·16	...

Group 3958.

A very small spot on March 26. The group increases in size on the succeeding days, and on March 29 consists of several very small spots in a straight line followed by a large spot, *a*, with double nucleus, and a second stream of small spots at an angle to the first stream. The first stream has disappeared by March 31, and *a* has greatly diminished.

Mar. 26·486	1	5	1	6	284·2	−4·9	−64·5
27·234	0	23	0	21	282·1	−6·0	−56·8
28·464	43	165	27	107	283·9	−6·4	−38·8
29·621	51	275	28	151	284·1	−6·8	−23·3
30·229	35	276	18	142	283·6	−6·7	−15·8
31·522	24	117	12	59	282·3	−7·0	0·0
Apr. 1·460	23	80	12	41	283·1	−7·2	+13·2
2·212	19	65	10	36	284·1	−6·9	+24·1
Means ...	...	...	14	70	283·43	−6·49	...

Group 3959.

Two very close pairs of small spots on March 29. These pairs have both coalesced to form single spots, *a* and *b*, by the succeeding day. *a* and *b* increase up to March 31, and afterwards slowly diminish. A number of very small spots are frequently seen near them and make up with them a straight stream.

Mar. 29·621	6	61	7	53	245·3	+8·7	−62·1
30·229	37	127	33	113	245·4	+8·9	−54·0
31·522	60	320	39	209	245·3	+8·8	−37·0

Group 3959—*continued.*

1895. d					°	°	°
Apr. 1·460	53	282	30	162	245·5	+9·0	−24·4
2·212	61	242	33	129	245·3	+9·2	−14·7
3·470	42	126	22	65	245·9	+8·8	+2·5
4·417	27	121	15	66	244·8	+9·2	+13·9
5·414	20	119	11	68	243·2	+9·4	+25·5
6·125	0	13	0	8	240·8	+9·6	+32·5
Means ...	...	...	21	97	244·61	+9·07	...

Group 3960.

A single spot, *a*, which rapidly diminishes in size. As it approaches extinction, a number of small unstable spots in a short stream begin to form near it, and continue the group until April 9.

Mar. 31·522	0	33	0	110	199·5	−19·0	−82·8
Apr. 1·460	16	77	22	107	200·1	−19·2	−69·8
2·212	20	78	20	78	199·7	−19·1	−60·3
3·470	12	38	8	27	199·5	−19·0	−43·9
4·417	7	31	4	19	198·9	−19·7	−32·0
5·414	2	14	1	8	198·8	−19·1	−18·9
6·125	4	41	2	21	198·4	−18·4	−9·9
7·184	0	37	0	18	200·5	−18·3	+6·1
8·660	3	61	2	34	198·6	−18·5	+23·7
9·450	0	9	0	6	198·6	−18·6	+34·1
Means ...	...	...	6	43	199·26	−18·89	...

Group 3961.

A number of small unstable spots in two straight streams, which eventually merge into a single stream.

Apr. 2·212	13	42	8	24	248·7	−27·3	−11·3
3·470	34	127	18	67	247·8	−26·8	+4·4
4·417	32	149	18	84	247·0	−27·7	+16·1
5·414	23	116	15	72	247·5	−26·9	+29·8
6·125	20	100	14	68	248·2	−26·3	+39·9
7·184	11	59	10	51	247·5	−26·8	+53·1
Means ...	...	...	14	61	247·78	−26·97	...

Group 3962.

A very small spot.

Apr. 2·212	2	5	1	3	243·9	−5·5	−16·1
Means ...	...	...	1	3	243·9	−5·5	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3963.

A pair of small spots, *a* and *b*, on April 2. A third is seen preceding them on April 3. Only *b* remains on April 4.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Apr. 2·212	6	31	15	61	185·3	+ 6·4	− 74·7
3·470	2	29	2	27	186·3	+ 6·3	− 57·1
4·417	0	9	0	7	183·1	+ 7·4	− 47·8
Means ...	...	...	6	32	184·90	+ 6·70	...

Group 3964.

A large regular spot, *a*, *n* of Group 3963, and which steadily diminishes in area. A very small companion is seen near *a* on April 8.

Apr. 2·212	10	56	22	132	184·2	+12·7	− 75·8
3·470	15	89	15	93	184·5	+12·2	− 58·9
4·417	21	111	17	86	184·2	+11·9	− 46·7
5·414	21	125	14	80	184·0	+12·1	− 33·7
6·125	25	131	15	76	183·8	+12·4	− 24·5
7·184	19	110	10	59	184·2	+12·3	− 10·2
8·660	16	98	9	52	183·9	+12·3	+ 9·0
9·450	12	62	7	35	184·1	+12·0	+ 19·6
10·470	6	23	4	15	183·8	+12·1	+ 32·8
11·443	7	19	5	15	183·4	+12·1	+ 45·3
Means ...	...	...	12	64	184·11	+12·21	...

Group 3965.

A very small spot.

Apr. 4·417	0	6	0	5	285·4	+12·1	+ 54·5
Means ...	...	...	0	5	285·4	+12·1	...

Group 3966.

A number of very small spots in a semicircle. The group has become a straight stream by April 7.

Apr. 5·414	20	93	10	46	228·6	−12·6	+ 10·9
6·125	33	86	17	46	228·9	−12·9	+ 20·6
7·184	2	34	1	20	229·5	−13·0	+ 35·1
8·660	0	6	0	5	226·3	−13·3	+ 51·4
Means ...	...	...	7	29	228·33	−12·95	...

Group 3967.

A very small spot.

1895. d					°	°	°
Apr. 5·414	0	12	0	6	225·2	+ 6·0	+ 7·5
Means ...	...	...	0	6	225·2	+ 6·0	...

Group 3968.

A large regular spot, *a*, usually seen with one or two small companions.

Apr. 5·414	8	51	27	168	135·3	−13·6	− 82·4
6·125	24	116	43	203	133·8	−13·4	− 74·5
7·184	32	196	32	197	133·6	−13·9	− 60·8
8·660	33	260	21	173	133·7	−14·4	− 41·2
9·450	37	202	21	117	134·2	−14·4	− 30·3
10·470	35	217	18	115	134·0	−14·2	− 17·0
11·443	42	231	22	117	134·2	−14·2	− 3·9
12·434	42	222	22	114	134·4	−14·5	+ 9·3
13·399	41	207	22	114	134·5	−14·4	+ 22·2
14·497	26	170	16	107	134·5	−14·0	+ 36·7
15·470	17	117	14	91	135·1	−13·8	+ 50·1
16·499	12	82	14	91	135·1	−13·9	+ 63·7
17·456	6	43	13	90	135·9	−13·9	+ 77·1
Means ...	...	...	22	131	134·48	−14·05	...

Group 3969.

A very small faint spot on April 6. Others have formed near it by April 7, and the group rapidly increases, forming, by April 9, an irregular stream consisting chiefly of three spots, *a*, *b* and *c*, *c* being large.

Apr. 6·125	0	6	0	3	214·8	+ 5·9	+ 6·5
7·184	0	37	0	20	215·8	+ 6·4	+ 21·4
8·660	20	99	14	66	215·3	+ 7·5	+ 40·4
9·450	54	218	44	176	214·8	+ 7·3	+ 50·3
10·470	22	141	27	167	214·7	+ 7·5	+ 63·7
11·443	7	49	14	106	213·7	+ 7·7	+ 75·6
Means ...	...	...	17	90	214·85	+ 7·05	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3970.

A few very small spots, *s* of Group 3964, and *f* Group 3969. The group has expanded into a straight stream by April 7, *a* and *b*, the first and last spots, being the largest. *a* and *b* continue to increase and have become large well-defined spots by April 11, whilst the smaller intermediate spots have died out by April 12.

Date. Greenwich Civil Time.	Projected Area of: Umbra.	Projected Area of: Whole Spot.	Area for Group: Umbra.	Area for Group: Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Apr. 7·184	2	15	1	8	188·2	+ 5·9	− 6·2
8·660	37	140	20	74	190·4	+ 4·9	+ 15·5
9·450	86	325	49	185	191·4	+ 4·5	+ 26·9
10·470	75	392	51	263	191·2	+ 4·7	+ 40·2
11·443	57	300	49	258	191·3	+ 4·6	+ 53·2
12·434	20	105	28	145	193·0	+ 4·8	+ 67·9
13·399	0	23	0	78	193·2	+ 4·6	+ 80·9
Means ...	...	...	28	144	191·24	+ 4·86	...

Group 3971.

A few small spots in a short straight stream, suddenly appearing *p* Group 3968. The axis of the group is at first inclined at an angle of about 30° to the equator, but eventually becomes parallel to it.

Apr. 8·660	11	70	6	40	147·5	−12·0	− 27·4
9·450	8	30	4	16	148·1	−11·9	− 16·4
10·470	5	41	2	21	147·8	−12·3	− 3·2
11·443	0	13	0	7	150·2	−12·1	+ 12·1
Means ...	...	...	3	21	148·40	−12·08	...

Group 3972.

A few very small faint spots, first seen near the West limb.

Apr. 9·450	2	28	1	24	219·8	−10·1	+ 55·3
10·470	0	16	0	20	218·1	−10·9	+ 67·1
Means ...	...	...	1	22	218·95	−10·50	...

Group 3973.

Three small but well-defined spots in a straight line, suddenly appearing near the central meridian. The leader, *a*, alone remains by April 12.

Apr. 10·470	19	59	11	34	154·7	+20·4	+ 7·1
11·443	8	24	5	14	157·5	+19·0	+ 19·4
12·434	6	18	4	12	158·9	+18·5	+ 33·8
Means ...	...	...	7	20	157·03	+19·30	...

Group 3974.

A very small faint spot.

1895. d					°	°	°
Apr. 10·470	0	6	0	3	141·4	−20·7	− 9·6
11·443	0	5	0	3	141·7	−20·6	+ 3·6
Means ...	...	...	0	3	141·55	−20·65	...

Group 3975.

Two spots, *a* and *b*, the latter being a large spot with double nucleus. *a* has disappeared by April 13, and *b* has broken up by April 14, and the group nearly disappears. A fresh outburst has taken place by April 16.

Apr. 10·470	2	33	21	220	64·6	− 9·1	−86·4
11·443	20	122	32	190	66·3	− 9·7	−71·8
12·434	44	215	43	209	66·0	−10·0	−59·1
13·399	38	283	28	205	66·0	−10·0	−46·3
14·497	25	137	15	82	65·7	− 9·5	−32·1
15·470	9	74	5	39	66·0	− 9·3	−19·0
16·499	54	319	27	161	66·6	− 8·7	− 4·8
17·456	85	533	44	270	66·1	− 9·6	+ 7·3
18·482	48	456	26	244	66·4	− 9·6	+21·2
19·431	63	337	38	204	66·7	− 9·5	+34·0
20·444	29	231	21	167	66·0	−10·0	+46·7
21·234	26	145	23	135	66·6	−10·4	+57·7
22·353	10	69	15	104	65·3	−11·1	+71·2
Means ...	...	...	26	172	66·02	− 9·73	...

Group 3976.

A very small faint spot.

Apr. 11·443	0	4	0	3	187·3	+17·8	+49·2
Means ...	...	...	0	3	187·3	+17·8	...

Group 3977.

A pair of very small spots on April 11; another pair on April 13. The group is not seen on April 12.

Apr. 11·443	1	11	1	11	82·4	+16·8	−55·7
12·434	0	0	0	0	...	...	...
13·399	0	7	0	5	85·1	+17·0	−27·2
Means ...	...	...	1	5	83·75	+16·90	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3978.

A very small spot on April 11. A wide pair of small spots, *a* and *b*, on the succeeding days. A third spot is seen between *a* and *b* on April 14.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Apr. 11·443	1	6	1	6	73·8	−18·4	−64·3
12·434	12	45	10	36	74·0	−19·2	−51·1
13·399	8	35	5	23	73·7	−19·9	−38·6
14·497	0	24	0	14	74·1	−19·5	−23·7
Means ...	...	...	4	20	73·90	−19·25	...

Group 3979.

A fine group consisting chiefly of two large double spots, *a* and *b*, and a slight connecting stream of small spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 11·443	33	231	66	504	62·8	+10·9	−75·3
12·434	79	575	86	648	63·7	+10·9	−61·4
13·399	137	751	108	594	64·4	+10·6	−47·9
14·497	160	896	100	561	64·8	+11·0	−33·0
15·470	161	934	90	524	64·8	+11·1	−20·2
16·499	172	913	91	482	64·8	+11·2	− 6·6
17·456	168	910	90	477	64·7	+11·2	+ 5·9
18·482	119	802	66	446	65·1	+10·9	+19·9
19·431	105	674	64	419	65·1	+11·0	+32·4
20·444	85	530	65	399	64·9	+11·1	+45·6
21·234	64	376	63	365	65·7	+10·8	+56·8
22·353	53	205	80	339	64·9	+11·3	+70·8
Means ...	...	...	81	480	64·64	+11·00	...

Group 3980.

A few small unstable spots, irregularly scattered.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 12·434	9	57	5	29	119·7	+ 4·2	− 5·4
13·399	0	50	0	25	119·6	+ 4·2	+ 7·3
14·497	3	19	2	11	123·8	+ 4·1	+26·0
15·470	9	62	6	39	122·5	+ 3·6	+37·5
16·499	6	43	5	36	123·9	+ 3·8	+52·5
17·456	8	27	11	36	126·4	+ 3·3	+67·6
Means ...	...	...	5	29	122·65	+ 3·87	...

Group 3981.

A very small spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 13·399	2	8	2	7	164·3	+ 2·5	+ 52·0
Means ...	...	...	2	7	164·3	+ 2·5	...

Group 3982.

A few small unstable spots forming south of Group 3978.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Apr. 13·399	17	47	12	31	74·2	−24·8	−38·1
14·497	0	15	0	8	77·0	−24·0	−20·8
Means ...	...	...	6	20	75·60	−24·40	...

Group 3983.

A very small faint spot *np* Group 3968 on April 15. A pair of small spots on April 16.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 15·470	0	3	0	3	147·8	− 8·0	+62·8
16·499	0	11	0	22	147·9	− 8·2	+76·5
Means ...	...	...	0	13	147·85	− 8·10	...

Group 3984.

Three very small faint spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 15·470	0	22	0	12	102·8	− 7·9	+17·8
Means ...	...	...	0	12	102·8	− 7·9	...

Group 3985.

Three very small faint spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 17·456	0	25	0	14	36·7	−14·7	−22·1
Means ...	...	...	0	14	36·7	−14·7	...

Group 3986.

Three very small faint spots on April 18. The last only remains by April 19.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 18·482	7	29	4	15	52·0	−15·8	+ 6·8
19·431	0	4	0	2	50·7	−14·6	+18·0
Means ...	...	...	2	9	51·35	−15·20	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3987.

Some small spots *sp* Group 3988.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Apr. 19·431	2	14	2	14	334·9	+12·9	−57·8
20·444	2	35	2	27	335·1	+12·5	−44·2
21·234	2	8	1	5	336·4	+11·6	−32·5
Means ...	...	...	2	15	335·47	+12·33	...

Group 3988.

A number of spots in two straight parallel streams. The streams speedily intermingle and form one fine irregular stream, which tends to simplify by the coalescence of the individual spots, especially of the preceding spots, with *a*, the leader. *a* has in this way become a large composite spot by April 23, and continues to develop until April 26.

Apr. 19·431	13	95	24	165	322·1	+17·5	−70·6
20·444	34	246	35	267	320·2	+17·5	−59·1
21·234	98	599	83	507	319·8	+18·1	−49·1
22·353	134	738	86	487	320·3	+17·7	−33·8
23·599	133	814	74	460	321·5	+17·0	−16·2
24·410	145	870	79	472	321·6	+17·2	−5·4
25·648	147	958	80	525	322·2	+16·9	+11·5
26·645	136	791	81	473	323·6	+16·5	+26·2
27·137	140	803	89	514	323·7	+16·3	+32·8
28·175	125	712	99	560	324·0	+16·3	+46·8
29·665	39	311	57	455	325·0	+16·5	+67·5
30·415	14	119	41	315	324·9	+16·2	+77·3
Means ...	...	...	69	433	322·41	+16·98	...

Group 3989.

A fine group consisting principally of a very large regular spot, *a*, and a distant large companion, *b*. A few spots, mostly small, are seen round *b* and between *a* and *b*. Groups 3987, 3988 and 3989 form together one magnificent straight stream, inclined at an angle of 20° to the equator.

Apr. 20·444	36	229	86	551	304·6	+23·1	−74·7
21·234	113	572	170	918	301·4	+24·1	−67·5
22·353	180	949	172	920	301·5	+24·1	−52·6
23·599	220	1160	157	837	301·4	+23·9	−36·3
24·410	252	1284	159	817	301·1	+24·1	−25·9
25·648	248	1293	142	747	301·7	+24·1	−9·0
26·645	260	1273	147	723	301·6	+23·9	+4·2
27·137	284	1214	164	701	302·0	+23·9	+11·1
28·175	234	947	148	595	302·1	+23·5	+24·9
29·665	155	702	126	573	302·3	+23·9	+44·8
30·415	102	586	103	597	302·4	+24·1	+54·8
May 1·480	64	287	107	478	302·1	+23·8	+68·6
2·395	16	76	63	293	301·6	+23·6	+80·2
Means ...	...	...	134	673	301·98	+23·85	...

Group 3990.

A very close pair of small spots *s* Group 3989. The two spots are always measured as one.

1895. d					°	°	°
Apr. 21·234	0	14	0	46	290·2	+17·8	−78·7
22·353	8	64	11	84	289·7	+17·7	−64·4
23·599	7	45	6	37	289·5	+17·4	−48·2
24·410	7	37	5	25	289·5	+17·4	−37·5
25·648	7	31	4	18	289·5	+17·4	−21·2
Means ...	...	...	5	42	289·68	+17·54	...

Group 3991.

A small dark spot, *a*, generally attended by one or two small companions. *a* has divided into two parts by April 25.

Apr. 22·353	21	69	11	36	9·2	−14·8	+15·1
23·599	3	28	2	16	9·7	−13·4	+32·0
24·410	23	134	16	91	9·1	−13·2	+42·1
25·648	4	44	4	43	9·5	−12·9	+58·8
26·645	3	11	5	19	10·4	−12·8	+73·0
Means ...	...	...	8	41	9·58	−13·42	...

Group 3992.

A very small spot *f* Group 3991.

Apr. 22·353	0	12	0	6	357·5	−15·7	+3·4
Means ...	...	...	0	6	357·5	−15·7	...

Group 3993.

A few small spots in a short stream *sf* Group 3991.

Apr. 24·410	10	40	6	25	2·7	−17·2	+35·7
Means ...	...	...	6	25	2·7	−17·2	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 3994.

A few small faint spots in a short irregular stream.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Apr. 24·410	0	8	0	36	274·2	+10·2	−52·8
25·648	0	50	0	32	274·8	+10·7	−35·9
26·645	1	38	1	21	273·5	+11·1	−23·9
27·137	3	52	1	28	275·5	+10·3	−15·4
Means ...	...	...	1	29	274·50	+10·58	...

Group 3995.

A regular spot, *a*, with a small regular companion, *b*. *b* has disappeared by April 28. *a* steadily diminishes in size from day to day. It is accompanied by one or two very small unstable companions from April 29 to May 3.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 24·410	6	46	18	131	246·0	−25·3	−81·0
25·648	18	93	21	111	245·7	−25·2	−65·0
26·645	26	113	22	112	245·3	−25·0	−52·1
27·137	33	163	25	124	244·7	−24·8	−46·2
28·175	25	84	15	53	244·8	−24·5	−32·4
29·665	21	78	11	44	244·4	−24·9	−13·1
30·415	8	75	4	41	243·4	−25·1	−4·2
May 1·480	0	24	0	13	243·5	−24·5	+10·0
2·395	4	23	2	13	242·8	−25·5	+21·4
3·381	1	11	1	7	242·8	−25·3	+34·4
Means ...	...	...	12	65	244·34	−25·01	...

Group 3996.

A few very small spots in a straight stream on April 25. A second stream parallel to the first is seen with it on April 26. The second stream has disappeared by April 28, but the first stream has considerably increased in size, and consists, on April 29, mainly of four spots, *a*, *b*, *c* and *d*.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 25·648	6	41	4	22	293·2	−13·3	−17·5
26·645	16	78	8	40	293·9	−13·7	−3·5
27·137	6	77	3	39	295·0	−13·0	+4·1
28·175	49	271	26	144	295·0	−12·9	+17·8
29·665	85	383	53	244	294·3	−12·9	+36·8
30·415	58	364	44	269	294·3	−13·0	+46·7
May 1·480	45	174	48	186	295·6	−12·8	+62·1
2·395	14	104	29	189	295·7	−12·9	+74·3
Means ...	...	...	27	142	294·63	−13·06	...

Group 3997.

A spot, *a*, preceded on April 25 and 26 by a small companion. The group follows Group 3995.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Apr. 25·648	9	34	16	61	236·3	−27·5	−74·4
26·645	7	49	8	54	235·7	−27·4	−61·7
27·137	2	36	2	34	234·7	−27·3	−56·2
28·175	10	35	7	25	234·6	−27·1	−42·6
29·665	6	29	4	17	235·3	−27·0	−22·2
30·415	4	16	2	9	235·3	−26·8	−12·3
May 1·480	0	9	0	5	235·3	−26·6	+1·8
Means ...	...	...	6	29	235·31	−27·10	...

Group 3998.

Two small spots, *a* and *b*, with a few very small companions on April 26. The companions have disappeared by April 27; *a* and *b* have broken up by April 28; the group is not seen on April 29, and a very small spot is all that is visible on April 30.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 26·645	29	95	16	50	288·7	+10·7	−8·7
27·137	21	103	11	53	289·2	+10·6	−1·7
28·175	16	81	8	44	288·9	+10·6	+11·7
29·665	0	0	0	0	...	...	...
30·415	0	5	0	4	292·7	+10·4	+45·1
Means ...	...	...	7	30	289·88	+10·58	...

Group 3999.

Two regular spots, *a* and *b*, on April 26, 27 and 28. The group on April 29 and the succeeding days forms a tolerably straight stream, with four principal spots, *a*, *b*, *c* and *d*; *a* and *b* being the first and last spots. The group diminishes from day to day, and *b* has disappeared by May 1.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Apr. 26·645	19	75	37	153	223·0	+13·3	−74·4
27·137	29	114	37	153	224·6	+13·6	−66·3
28·175	42	215	38	190	224·4	+13·7	−52·8
29·665	59	366	37	230	224·9	+13·1	−32·6
30·415	67	397	38	229	225·2	+13·5	−22·4
May 1·480	59	203	31	108	225·2	+13·5	−8·3
2·395	34	179	17	94	224·6	+13·4	+3·2
3·381	20	99	11	54	225·1	+13·2	+16·7
4·398	7	17	4	10	225·4	+13·0	+30·5
5·553	3	18	2	13	225·2	+12·9	+45·5
Means ...	...	...	25	123	224·76	+13·32	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4000.

A very small faint spot, not seen on May 1.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Apr. 30·415	0	6	0	4	234·4	−29·4	− 13·2
May 1·480	0	0	0	0	...	...	...
2·395	0	6	0	3	235·7	−29·0	+ 14·3
Means ...	...	...	0	2	235·05	−29·20	...

Group 4001.

A very small faint spot.

Apr. 30·415	0	3	0	2	230·1	−33·5	− 17·5
Means ...	...	...	0	2	230·1	−33·5	...

Group 4002.

Three very small spots on May 1. The group has become a short stream, of which *a*, the leader, is the largest by May 2. Only *a* remains on May 4.

May 1·480	0	19	0	10	257·9	+ 2·7	+ 24·4
2·395	27	117	18	74	258·9	+ 2·6	+ 37·5
3·381	16	74	13	62	261·4	+ 2·4	+ 53·0
4·398	4	16	6	21	263·0	+ 2·7	+ 68·1
Means ...	...	...	9	42	260·30	+ 2·60	...

Group 4003.

A small spot on May 1; a small wedge-shaped stream of spots on May 2, which has become slightly elongated by May 3.

May 1·480	4	13	3	9	192·4	−10·3	− 41·1
2·395	15	82	8	48	190·8	−10·7	− 30·6
3·381	10	81	6	43	191·1	−11·0	− 17·3
Means ...	...	...	6	33	191·43	−10·67	...

Group 4004.

A pair of very small spots.

May 2·395	0	8	0	6	255·0	+16·8	+ 33·6
Means ...	...	...	0	6	255·0	+16·8	...

Group 4005.

A pair of large composite spots, *a* and *b*, with a number of small spots between them, forming altogether a fine stream. *b* has broken up after May 8.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
May 2·395	20	69	63	221	139·9	−14·2	− 81·5
3·381	41	210	57	290	139·5	−14·2	− 68·9
4·398	63	377	56	337	139·2	−14·3	− 55·7
5·553	96	690	65	463	139·1	−14·4	− 40·6
6·390	112	611	66	358	139·7	−14·3	− 28·8
7·406	126	637	66	338	139·7	−14·4	− 15·4
8·412	126	643	64	327	140·0	−14·3	− 1·8
9·401	80	451	42	235	140·9	−13·7	+ 12·1
10·417	62	370	35	209	141·0	−13·3	+ 25·6
11·386	52	324	34	210	140·7	−12·8	+ 38·2
12·420	33	232	27	190	140·9	−12·7	+ 52·1
13·521	17	111	21	137	140·5	−12·8	+ 66·2
14·402	3	25	8	61	141·2	−12·8	+ 78·5
Means ...	...	...	46	260	140·18	−13·71	...

Group 4006.

A very small spot.

May 3·381	0	2	0	1	203·3	−24·4	− 5·1
Means ...	...	...	0	1	203·3	−24·4	...

Group 4007.

A very small faint spot.

May 5·553	0	7	0	6	227·2	+16·9	+ 47·5
Means ...	...	...	0	6	227·2	+16·9	...

Group 4008.

A small spot.

May 7·406	2	11	3	16	223·9	+ 7·2	+ 68·8
Means ...	...	...	3	16	223·9	+ 7·2	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Group 4009. A number of small spots in a compact cluster.							
1895. d					°	°	°
May 7·406	11	94	6	59	189·9	+ 8·2	+ 34·8
8·412	2	8	2	6	188·9	+ 9·5	+ 47·1
Means ...	...	...	4	33	189·40	+ 8·85	...
Group 4010. Two small spots.							
May 7·406	0	14	0	16	94·7	+15·3	− 60·4
Means ...	...	...	0	16	94·7	+15·3	...
Group 4011. Three small widely separated spots in a straight line. The first has disappeared by May 9.							
May 8·412	2	16	3	23	72·0	− 6·6	− 69·8
9·401	3	14	3	13	70·4	− 6·1	− 58·4
Means ...	...	...	3	18	71·20	− 6·35	...
Group 4012. A small spot, not seen on May 11.							
May 8·412	0	7	0	23	61·9	+12·0	− 79·9
9·401	0	8	0	11	62·5	+11·7	− 66·3
10·417	0	5	0	5	62·2	+11·5	− 53·2
11·386	0	0	0	0	...	...	...
12·420	0	8	0	5	62·1	+11·1	− 26·7
Means ...	...	...	0	9	62·18	+11·58	...
Group 4013. A small spot with, on May 10, a very small distant companion.							
May 9·401	2	8	2	11	63·4	+14·4	− 65·4
10·417	0	16	0	14	63·5	+13·8	− 51·9
Means ...	...	...	1	13	63·45	+14·10	...
Group 4014. A few small unstable spots in a short irregular stream. *a*, the leader, is the most stable, and has a rapid forward motion in longitude.							
1895. d					°	°	°
May 10·417	14	54	9	33	83·3	+ 8·9	− 32·1
11·386	12	42	7	22	85·2	+ 8·6	− 17·3
12·420	4	23	2	12	87·3	+ 8·4	− 1·5
Means ...	...	...	6	22	85·27	+ 8·63	...
Group 4015. A pair of very small spots.							
May 11·386	3	16	2	8	119·8	−11·2	+ 17·3
Means ...	...	...	2	8	119·8	−11·2	...
Group 4016. Two or three very small faint unstable spots.							
May 12·420	3	21	2	11	92·8	−14·5	+ 4·0
13·521	0	9	0	5	94·0	−13·3	+ 19·7
Means ...	...	...	1	8	93·40	−13·90	...
Group 4017. A few very small faint unstable spots irregularly scattered.							
May 12·420	0	36	0	19	81·1	−11·2	− 7·7
13·521	0	23	0	12	82·1	−11·5	+ 7·8
14·402	0	27	0	14	82·4	−11·9	+ 19·7
Means ...	...	...	0	15	81·87	−11·53	...
Group 4018. A few very small faint unstable spots irregularly scattered.							
May 12·420	0	27	0	15	72·0	−11·2	− 16·8
13·521	0	27	0	14	70·5	−12·0	− 3·8
Means ...	...	...	0	15	71·25	−11·60	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4019.

A number of spots, mostly small, in a very irregular group. The spots are generally unstable, and the group diminishes in size from day to day. A short-lived revival is seen on May 16, and a second, principally in the preceding part of the group, on May 19.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
May 12·420	19	94	39	202	12·0	−17·9	− 76·8
13·521	25	119	27	135	11·4	−18·4	− 62·9
14·402	36	139	27	110	12·9	−17·9	− 49·8
15·637	26	111	16	68	13·1	−18·5	− 33·3
16·401	25	171	13	96	13·4	−18·8	− 22·8
17·295	14	96	7	51	12·1	−19·3	− 12·3
18·537	6	52	3	28	11·4	−19·4	+ 3·5
19·259	0	92	0	50	14·9	−19·3	+ 16·5
Means ...	...	...	17	93	12·65	−18·69	...

Group 4020.

Two very small faint spots *s* of Group 4017.

May 13·521	0	13	0	8	80·6	−14·4	+ 6·3
Means ...	...	...	0	8	80·6	−14·4	...

Group 4021.

A very small faint spot on May 13 and 14. It is not seen on May 15, but a small spot is seen near its place on May 16.

May 13·521	0	8	0	6	26·1	−11·6	− 48·2
14·402	0	7	0	4	26·3	−12·3	− 36·4
15·637	0	0	0	0	...	...	...
16·401	4	18	2	9	27·8	−11·3	− 8·4
Means ...	...	...	1	5	26·73	−11·73	...

Group 4022.

A small spot, *a*, followed at a considerable distance by a large spot, *b*, both apparently regular on May 14. *a* rapidly increases in size up till May 16. A number of spots appear round *b* on May 15 and 16, and form with it a short stream inclined at an angle of about 45° to the equator. This stream steadily diminishes in size and has disappeared by May 23. *a* has divided into two portions, *c* and *d*, by May 22.

May 13·521	6	36	31	196	350·4	+14·4	− 83·9
14·402	20	113	31	178	352·5	+14·3	− 70·2
15·637	57	468	49	401	354·5	+14·5	− 51·9
16·401	115	666	81	467	354·5	+14·6	− 41·7
17·295	154	641	93	387	355·1	+14·9	− 29·3

Group 4022—*continued.*

1895. d					°	°	°
May 18·537	106	564	56	303	356·0	+14·7	− 11·9
19·259	106	537	57	282	357·1	+14·5	− 1·3
20·168	92	477	49	255	357·6	+14·7	+ 11·2
21·386	52	365	31	217	357·8	+14·6	+ 27·6
22·429	46	280	33	198	358·3	+14·5	+ 41·9
23·395	27	136	25	125	359·0	+14·6	+ 55·3
24·515	0	60	0	94	359·4	+14·5	+ 70·5
Means ...	...	...	45	259	356·02	+14·57	...

Group 4023.

Two close pairs of small spots on May 18 *sf* Group 4022. The group expands on the succeeding days into two irregular clusters, both of which lengthen out, until on May 23 they form a single irregular stream.

May 18·537	13	66	8	38	341·9	+ 8·7	− 26·0
19·259	14	107	8	56	342·3	+ 8·9	− 16·1
20·168	19	100	10	51	343·9	+ 9·6	− 2·5
21·386	17	132	9	68	343·5	+ 9·9	+ 13·3
22·429	52	424	31	247	343·5	+10·1	+ 27·1
23·395	42	295	29	199	344·1	+10·0	+ 40·4
24·515	49	236	46	221	345·3	+10·4	+ 56·4
25·499	21	190	39	321	348·1	+ 9·9	+ 72·2
26·134	7	47	22	155	348·3	+ 9·3	+ 80·9
Means ...	...	...	22	151	344·54	+ 9·64	...

Group 4024.

A large regular spot, *a*. A very small companion is seen near it on May 21. Many others have formed by the next day. *a* has much diminished by May 24, but its companions have greatly increased in area. The group has developed yet further by May 25, covering a very large area, and being of very complex and irregular form.

May 18·537	43	252	65	382	299·8	+22·4	− 68·1
19·259	102	414	108	438	300·2	+22·4	− 58·2
20·168	133	551	109	451	299·4	+23·0	− 47·1
21·386	150	714	96	461	299·2	+22·5	− 31·0
22·429	160	921	92	532	299·1	+22·4	− 17·3
23·395	169	973	93	537	298·5	+22·3	− 5·2
24·515	146	1034	81	572	297·9	+22·0	+ 9·0
25·499	243	1527	144	903	297·5	+22·1	+ 21·6
26·134	296	1693	186	1064	297·8	+21·7	+ 30·4
27·431	243	1490	196	1198	297·6	+21·7	+ 47·3
28·402	114	1011	127	1102	297·3	+22·1	+ 59·8
29·400	77	580	149	1139	298·0	+22·0	+ 73·7
30·396	5	34	29	186	295·1	+23·2	+ 83·9
Means ...	...	...	113	690	298·26	+22·29	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4025.

A small regular spot, *a*, which diminishes from day to day. A very small companion is seen near it on May 27.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
May 18·537	12	35	18	52	298·1	−13·0	− 69·8
19·259	17	50	17	50	298·3	−12·9	− 60·1
20·168	14	52	10	39	298·2	−12·6	− 48·2
21·386	8	25	5	15	298·3	−13·2	− 31·9
22·429	9	36	5	20	298·2	−13·1	− 18·2
23·395	14	28	7	14	298·5	−13·1	− 5·2
24·515	8	21	4	11	298·8	−13·0	+ 9·9
25·499	5	23	3	13	298·7	−13·0	+ 22·8
26·134	5	20	3	12	298·6	−12·8	+ 31·2
27·431	1	10	1	7	297·6	−13·8	+ 47·3
Means ...	...	...	7	23	298·33	−13·05	...

Group 4026.

A very small faint spot.

May 19·259	0	6	0	4	316·7	−31·0	− 41·7
Means ...	...	...	0	4	316·7	−31·0	...

Group 4027.

A large regular spot, *a*, usually followed by a few very small spots in a short stream.

May 19·259	0	32	0	88	279·1	+ 3·0	− 79·3
20·168	27	101	37	139	277·9	+ 3·5	− 68·5
21·386	45	234	36	189	278·9	+ 2·9	− 51·3
22·429	52	325	33	208	278·9	+ 2·3	− 37·5
23·395	47	292	26	160	279·5	+ 2·1	− 24·2
24·515	46	273	23	139	280·1	+ 2·5	− 8·8
25·499	43	245	22	123	281·2	+ 2·3	+ 5·3
26·134	50	270	25	139	280·8	+ 2·4	+ 13·4
27·431	44	241	26	141	281·0	+ 2·5	+ 30·7
28·402	34	185	24	129	281·5	+ 2·3	+ 44·0
29·400	29	136	27	127	281·8	+ 2·1	+ 57·5
30·396	14	84	21	128	282·2	+ 2·0	+ 71·0
Means ...	...	...	25	143	280·24	+ 2·49	...

Group 4028.

A small spot, *a*, on May 20, which has become a large regular spot by May 21. It is followed by a number of small spots in an irregular stream. These latter have all disappeared by May 28. A few small spots are sometimes seen preceding *a*.

1895. d					°	°	°
May 20·168	0	9	0	17	272·4	−23·8	− 74·0
21·386	74	318	71	308	274·0	−24·0	− 56·2
22·429	91	549	65	397	275·2	−24·2	− 41·2
23·395	90	528	55	330	275·2	−24·4	− 28·5
24·515	82	556	46	312	275·8	−24·3	− 13·1
25·499	94	524	51	286	276·1	−24·3	+ 0·2
26·134	104	501	57	274	275·8	−24·3	+ 8·4
27·431	92	480	57	291	275·9	−24·0	+ 25·6
28·402	82	372	56	256	275·6	−24·0	+ 38·1
29·400	52	257	45	221	275·3	−23·5	+ 51·0
30·396	34	194	42	237	274·8	−23·7	+ 63·6
31·517	18	78	47	209	274·8	−23·4	+ 78·5
Means ...	...	...	49	262	275·08	−23·99	...

Group 4029.

A very small spot.

May 21·386	0	4	0	2	343·5	+16·9	+ 13·3
Means ...	...	...	0	2	343·5	+16·9	...

Group 4030.

A very small spot.

May 21·386	0	2	0	2	284·7	−17·1	− 45·5
Means ...	...	...	0	2	284·7	−17·1	...

Group 4031.

A very small spot.

May 21·386	1	3	1	3	270·6	− 1·9	−59·6
Means ...	...	...	1	3	270·6	− 1·9	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4032.

A few very small faint spots on May 22. The group has greatly increased in size by May 24, and has become an irregular stream of medium length. It diminishes again as quickly after May 25. The component spots are mostly unstable. *a*, the largest spot on May 24, is the darkest.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
May 22·429	4	37	2	21	293·1	−19·4	−23·3
23·395	15	72	8	39	292·5	−19·6	−11·2
24·515	25	321	13	170	293·7	−19·8	+ 4·8
25·499	68	340	38	190	294·3	−19·5	+18·4
26·134	27	217	17	129	295·0	−19·4	+27·6
27·431	8	55	7	43	297·7	−18·7	+47·4
28·402	2	11	2	13	300·0	−18·2	+62·5
Means ...	...	...	12	86	295·19	−19·23	...

Group 4033.

A very small spot.

May 23·395	0	7	0	4	317·0	+19·1	+13·3
Means ...	...	...	0	4	317·0	+19·1	...

Group 4034.

A few very small faint spots on May 23 south of Group 4024. The group has expanded into a small stream by May 24, after which it gradually diminishes.

May 23·395	7	27	4	15	299·4	+10·4	− 4·3
24·515	24	132	13	69	300·6	+11·3	+11·7
25·499	21	120	12	68	301·0	+11·3	+25·1
26·134	12	95	8	60	302·8	+11·4	+35·4
27·431	6	31	6	27	303·1	+11·5	+52·8
Means ...	...	...	9	48	301·38	+11·18	...

Group 4035.

A regular spot. *a*, diminishing steadily in size from day to day. On May 28 and the two succeeding days some very small spots are seen near *a*.

May 23·395	5	32	9	64	228·6	+ 4·7	− 75·1
24·515	8	31	8	32	228·9	+ 4·4	− 60·0
25·499	10	36	8	26	229·4	+ 4·5	− 46·5
26·134	14	34	9	22	229·2	+ 4·8	− 38·2
27·431	8	33	4	18	229·5	+ 4·0	− 20·8
28·402	0	30	0	15	230·2	+ 4·1	− 7·3
29·400	5	66	3	33	230·6	+ 5·0	+ 6·3
30·396	0	27	0	15	232·0	+ 5·7	+ 20·8
31·517	0	4	0	5	229·9	+ 3·6	+ 33·6
Means ...	...	...	5	26	229·81	+ 4·53	...

Group 4036.

A very small faint spot *nf* Group 4024.

1895. d					°	°	°
May 24·515	0	13	0	7	290·3	+28·4	+ 1·4
Means ...	...	...	0	7	290·3	+28·4	...

Group 4037.

Two compact clusters on May 24. These increase in size on the succeeding days and form one irregular and complex stream which undergoes continual change. The group diminishes after May 28, and breaks up again into two distinct clusters.

May 24·515	20	73	18	67	233·8	+15·3	− 55·1
25·499	46	260	33	184	234·0	+15·6	− 41·9
26·134	55	356	34	222	234·1	+15·9	− 33·3
27·431	103	534	58	290	234·0	+15·0	− 16·3
28·402	80	668	43	352	234·4	+14·8	− 3·1
29·400	68	403	36	215	234·3	+15·3	+ 10·0
30·396	44	185	24	105	233·8	+15·7	+ 22·6
31·517	29	124	20	84	236·0	+14·9	+ 39·7
June 1·232	7	70	6	56	235·8	+15·1	+ 49·1
Means ...	...	...	30	175	234·47	+15·29	...

Group 4038.

A small faint spot.

May 26·134	0	10	0	14	200·0	−19·3	− 67·4
27·431	0	6	0	5	201·3	−19·5	− 49·0
Means ...	...	...	0	10	200·65	−19·40	...

Group 4039.

A small faint spot *nf* Group 4024.

May 27·431	2	11	1	9	291·2	+28·6	+ 40·9
Means ...	...	...	1	9	291·2	+28·6	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4040.

A few very small faint spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
May 27·431	0	22	0	11	257·0	− 7·9	+ 6·7
Means ...	...	...	0	11	257·0	− 7·9	...

Group 4041.

A very small spot.

May 27·431	0	9	0	5	231·3	−22·4	− 19·0
Means ...	...	...	0	5	231·3	−22·4	...

Group 4042.

A spot, *a*, with double nucleus on May 27, which is followed by a short stream of small spots on May 28. *a* diminishes very quickly, and has disappeared by May 31.

May 27·431	13	74	13	77	189·4	− 7·7	− 60·9
28·402	8	43	6	34	189·0	− 7·8	− 48·5
29·400	11	85	6	55	187·4	− 7·2	− 36·9
30·396	6	37	4	21	186·5	− 6·7	− 24·7
31·517	7	26	4	13	186·2	− 6·5	− 10·1
June 1·232	0	17	0	8	186·0	− 6·2	− 0·7
2·463	0	6	0	3	186·4	− 6·2	+ 15·9
3·397	0	26	0	16	187·7	− 6·6	+ 29·6
Means ...	...	...	4	28	187·33	− 6·86	...

Group 4043.

A small faint spot.

May 27·431	0	7	0	14	178·6	+ 32·5	−71·7
28·402	0	10	0	12	178·3	+ 32·7	−59·2
Means ...	...	..	0	13	178·45	+32·60	...

Group 4044.

A disturbed area in which one or two very small unstable spots are occasionally seen from May 30 to June 4. A great outburst has taken place by June 5, and an irregular stream, chiefly in two clusters, is seen. The following cluster is the more important, and consists on June 6 and the succeeding days chiefly of a large double spot, *a*. The group diminishes after June 6. It is not seen on June 1 or 3.

1895. d					°	°	°
May 30·396	0	8	0	10	145·9	−11·9	− 65·3
31·517	0	8	0	7	144·8	−11·9	− 51·5
June 1·232	0	0	0	0	...	...	...
2·463	3	9	2	5	145·8	−11·6	− 24·7
3·397	0	0	0	0	...	...	...
4·300	2	6	1	3	148·4	−12·4	+ 2·2
5·607	75	325	41	176	148·6	−11·4	+ 19·7
6·488	100	472	60	283	148·1	−11·9	+ 30·9
7·429	61	398	43	277	147·7	−11·9	+ 43·0
8·399	35	219	30	194	146·6	−12·0	+ 54·7
9·506	11	82	15	115	146·0	−11·9	+ 68·7
10·174	8	37	19	90	145·9	−12·3	+ 77·5
Means ...	...	...	18	97	146·78	−11·92	...

Group 4045.

Several small spots, mostly unstable, in a short stream.

May 31·517	18	57	9	27	196·5	− 17·3	+ 0·2
June 1·232	24	119	12	63	196·0	− 17·6	+ 9·3
2·463	17	72	9	43	195·8	− 17·4	+ 25·3
3·397	7	42	4	29	195·2	− 17·3	+ 37·1
4·300	0	18	0	14	192·8	− 16·8	+ 46·6
Means ...	...	...	7	35	195·26	−17·28	...

Group 4046.

A large number of spots, mostly small and unstable, in an irregular straggling stream. The group diminishes from day to day.

May 31·517	22	142	38	266	122·4	+14·9	− 73·9
June 1·232	38	189	46	238	121·0	+15·4	− 65·7
2·463	41	202	33	163	121·9	+15·3	− 48·6
3·397	38	190	24	124	121·3	+15·2	− 36·8
4·300	34	201	20	113	122·4	+15·7	− 23·8
5·607	14	110	8	56	121·8	+16·1	− 7·1
6·488	4	59	2	30	119·0	+16·9	+ 1·8
7·429	3	36	2	19	120·9	+16·5	+ 16·2
8·399	0	34	0	21	120·3	+16·8	+ 28·4
9·506	2	24	1	16	119·6	+15·7	+ 42·3
Means ...	...	...	17	105	121·06	+15·85	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4047.

A small spot, *a*, with a few very small unstable companions *nf* Group 4046.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1894. d					°	°	°
June 2·463	4	22	7	36	99·9	+17·4	−70·6
3·397	3	12	3	12	100·9	+16·7	−57·2
4·300	0	18	0	13	100·1	+17·4	−46·1
5·607	7	30	4	18	101·0	+17·2	−27·9
6·488	4	28	2	15	101·0	+17·5	−16·2
Means ...	...	...	3	19	100·58	+17·24	...

Group 4048.

A fine irregular stream, with five principal spots, *a*, *b*, *c*, *d* and *e*, of which *d* is the only large spot. *b* and *c* are measured together on June 3. The group rapidly diminishes, and has disappeared by June 8. Two or three very small spots are seen near its place on June 8 and 10.

June 2·463	31	214	53	382	97·1	−11·9	−73·4
3·397	51	248	53	259	97·2	−12·1	−60·9
4·300	60	322	46	246	98·0	−11·6	−48·2
5·607	32	192	18	115	98·6	−12·0	−30·3
6·488	15	126	7	67	98·0	−12·0	−19·2
7·429	13	55	6	29	99·3	−11·7	−5·4
8·399	0	24	0	12	104·1	−9·6	+12·2
9·506	0	0	0	0	...	...	...
10·174	2	27	1	17	101·5	−12·7	+33·1
Means ...	...	...	20	125	99·23	−11·70	...

Group 4049.

A large regular spot, *a*, with occasionally one or two very small companions.

June 3·397	14	88	28	184	82·5	−18·0	−75·6
4·300	29	156	35	186	82·1	−17·5	−64·1
5·607	46	252	35	192	82·3	−17·7	−46·6
6·488	55	309	35	197	82·5	−17·4	−34·7
7·429	50	263	29	149	82·8	−17·1	−21·9
8·399	50	266	27	141	82·4	−17·4	−9·5
9·506	50	260	26	136	82·4	−17·6	+5·1
10·174	51	262	28	144	81·8	−18·2	+13·4
11·487	41	233	25	144	81·7	−18·3	+30·7
12·389	37	175	27	127	81·7	−18·5	+42·6
13·407	26	151	25	142	81·4	−18·6	+55·8
14·497	12	95	18	147	81·0	−18·1	+69·9
15·406	5	38	19	136	80·3	−18·1	+81·2
Means ...	...	...	27	156	81·92	−17·88	...

Group 4050.

A few very small spots near the West limb.

1894. d					°	°	°
June 5·607	6	29	5	21	175·1	−6·4	+46·2
6·488	0	15	0	14	176·3	−6·3	+59·1
Means ...	...	...	3	18	175·70	−6·35	...

Group 4051.

A small spot *nf* Group 4047.

June 5·607	1	17	1	11	94·1	+20·0	−34·8
Means ...	...	...	1	11	94·1	+20·0	...

Group 4052.

A fine compact stream of spots, which increase in number and size, and finally coalesce to form one very large complex spot, long and comparatively narrow, and inclined at an angle of about 40° to the equator. The group diminishes after June 10. The two principal parts of the group, *a* and *b*, are distinguishable through all its changes, and are measured, so far as possible, as if separate spots.

June 5·607	6	46	26	188	46·2	−14·3	−82·7
6·488	28	159	43	252	46·4	−14·7	−70·8
7·429	43	306	43	292	47·6	−15·4	−57·1
8·399	131	714	96	524	46·9	−15·0	−45·0
9·506	172	951	103	572	47·6	−15·4	−29·7
10·174	277	1414	155	792	47·9	−15·9	−20·5
11·487	251	1296	130	670	48·7	−15·5	−2·3
12·389	235	1274	124	672	49·1	−15·6	+10·0
13·407	205	1207	118	691	49·2	−15·7	+23·6
14·497	168	951	111	633	49·6	−15·6	+38·5
15·406	122	763	101	626	49·4	−16·0	+50·3
16·448	63	420	79	514	49·6	−16·4	+64·3
17·436	30	151	83	413	50·7	−16·4	+78·5
Means ...	...	...	93	526	48·38	−15·53	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4053.

A fine compact stream of spots, *f* and nearly at right angles to Group 4052. Like Group 4052 it diminishes after June 10, and gradually comes into the same straight line with it. The last spot on June 6, *a*, is then the largest, but a large spot, *b*, has formed in the centre of the group by June 8. *a* is measured in two parts on June 9, and shortly after breaks up and disappears. A number of very small spots are seen *sf* the main group on June 13, and are included in it.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
June 6·488	6	50	23	177	35·7	−15·2	− 81·5
7·429	28	205	37	270	37·9	−14·3	− 66·8
8·399	44	398	40	345	38·4	−13·8	− 53·5
9·506	94	534	62	352	38·6	−13·5	− 38·7
10·174	144	623	85	370	38·7	−13·3	− 29·7
11·487	69	480	36	250	39·5	−12·8	− 11·5
12·389	60	295	31	151	40·4	−12·8	+ 1·3
13·407	30	231	15	121	39·1	−13·4	+ 13·5
14·497	20	99	12	58	39·7	−12·9	+ 28·6
15·406	12	56	8	37	39·5	−13·0	+ 40·4
16·448	4	22	4	20	38·9	−13·5	+ 53·6
Means ...	...	...	32	196	38·76	−13·50	...

Group 4054.

A number of small unstable spots irregularly scattered. The group rapidly diminishes, and has disappeared by June 13, but a very small pair is seen *nf* its place.

June 9·506	4	84	2	46	54·7	+17·9	− 22·6
10·174	18	67	10	35	56·0	+18·2	− 12·4
11·487	5	16	3	8	59·4	+19·2	+ 8·4
12·389	6	16	3	9	58·6	+19·6	+ 19·5
13·407	0	8	0	5	56·7	+21·4	+ 31·1
Means ...	...	...	4	21	57·08	+19·26	...

Group 4055.

Two regular spots, *a* and *b*. *a* diminishes steadily from day to day; *b* undergoes a wonderful development, and has become very large by June 13. It is measured in two principal portions, *c* and *d*, on June 14, and *c* has definitely separated from *d* by June 15. Fresh spots form round *d* day by day, and often coalesce with it until June 17, after which the group begins to diminish.

June 10·174	6	79	12	240	347·9	+10·5	− 80·5
11·487	34	230	36	247	349·0	+10·2	− 62·0
12·389	65	387	52	305	348·8	+10·2	− 50·3
13·407	147	876	94	558	347·0	+10·5	− 38·6
14·497	195	1042	108	574	348·0	+10·7	− 23·1
15·406	202	1232	104	633	347·9	+10·6	− 11·2
16·448	248	1324	125	668	348·0	+10·5	+ 2·7

Group 4055—*continued.*

1895. d					°	°	°
June 17·436	170	1364	89	716	348·5	+10·6	+ 16·3
18·440	127	1048	75	612	348·2	+10·6	+ 29·3
19·144	245	885	160	579	348·8	+10·4	+ 39·2
20·412	81	503	71	443	348·1	+10·3	+ 55·2
21·402	51	291	72	406	348·4	+10·5	+ 68·7
22·252	23	184	62	519	348·6	+ 9·5	+ 80·1
Means ...	...	...	82	500	348·25	+10·39	...

Group 4056.

A pair of small spots, *a* and *b*, with a very small companion between them on June 13. *b* has disappeared by June 15, *a* by June 16, but two or three very unstable spots are seen near.

June 13·407	8	36	5	21	351·6	− 6·0	− 34·0
14·497	2	17	1	9	353·4	− 5·9	− 17·7
15·406	6	41	3	21	355·1	− 5·6	− 4·0
16·448	8	103	4	52	354·1	− 4·8	+ 8·8
Means ...	...	...	3	26	353·55	− 5·58	...

Group 4057.

A spot, *a*, followed by a few irregular companions, forming a short straight stream. *a* has become large and regular by June 21, and its companions have all disappeared.

June 13·407	8	49	18	112	308·7	+21·8	− 76·9
14·497	18	97	20	105	310·0	+21·4	− 61·1
15·406	25	161	21	129	310·0	+21·2	− 49·1
16·448	36	227	23	147	309·9	+21·1	− 35·4
17·436	35	233	20	134	309·5	+21·2	− 22·7
18·440	44	198	24	105	309·3	+21·4	− 9·6
19·144	53	188	28	101	309·4	+21·7	− 0·2
20·412	48	221	27	122	308·8	+21·6	+ 15·9
21·402	48	239	30	147	309·0	+21·7	+ 29·3
22·252	41	211	28	147	309·0	+21·0	+ 40·5
23·445	20	153	19	147	309·1	+21·4	+ 56·4
24·621	9	67	16	110	308·9	+21·4	+ 71·8
25·427	3	20	11	72	308·7	+21·5	+ 82·2
Means ...	...	...	22	121	309·25	+21·42	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4058.

A large irregular spot, *a*, on June 13, closely following Group 4057. Several small spots, of which *b* is the largest, have formed preceding *a* by June 14. On June 15 the group consists only of *a* and *b*, of which *b* is now the larger. The group is a close but irregular cluster until June 18, when only *b* remains.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
June 13·407	0	17	0	102	300·0	+22·5	−85·6
14·497	12	94	17	140	301·8	+22·5	−69·3
15·406	20	112	19	111	301·9	+23·0	−57·2
16·448	28	174	21	127	302·2	+23·2	−43·1
17·436	17	96	10	61	302·1	+23·8	−30·1
18·440	8	30	5	17	301·5	+23·7	−17·4
19·144	6	19	3	11	301·6	+23·8	−8·0
Means ...	...	...	11	81	301·59	+23·21	...

Group 4059.

A small spot *f* Group 4058.

June 14·497	0	8	0	18	295·2	+21·2	−75·9
15·406	3	13	3	15	294·7	+21·5	−64·4
16·448	0	12	0	10	294·8	+21·5	−50·5
17·436	0	7	0	5	295·4	+21·2	−36·8
Means ...	...	...	1	12	295·03	+21·35	...

Group 4060.

An irregular stream forming just *n* of Group 4055. It rapidly increases in size, forming two large clusters. *a*, the principal spot in the preceding cluster, absorbs the other members of the cluster, and becomes a very large spot. The following cluster also for a time consists of a large irregular composite spot, *b*, but has broken up by June 18 into a stream of discrete spots, following each other closely, of which *c*, *d*, *e* and *f* are the principal. These are however all unstable.

June 15·406	53	253	28	135	346·6	+16·9	−12·5
16·448	137	825	70	425	347·2	+16·0	+1·9
17·436	192	961	101	514	347·3	+16·3	+15·1
18·440	177	751	105	443	347·5	+15·9	+28·6
19·144	220	1012	144	670	348·1	+15·8	+38·5
20·412	99	667	89	611	349·1	+15·0	+56·2
21·402	47	410	76	619	350·0	+15·1	+70·3
22·252	0	157	0	573	350·9	+14·5	+82·4
Means ...	...	...	77	499	348·34	+15·69	...

Group 4061.

A regular spot, *a*, which diminishes steadily from day to day after June 19. It is attended by one very small companion on June 19, and by two on June 23.

1895. d					°	°	°
June 16·448	8	58	15	103	274·1	−25·1	−71·2
17·436	17	90	18	96	274·1	−24·6	−58·1
18·440	29	122	23	96	274·1	−24·1	−44·8
19·144	35	158	24	109	273·8	−23·7	−35·8
20·412	34	146	20	85	273·6	−23·3	−19·3
21·402	34	122	19	68	273·4	−23·2	−6·3
22·252	11	68	6	38	272·9	−23·4	+4·4
23·445	12	59	7	35	272·3	−23·8	+19·6
24·621	8	29	6	20	272·5	−23·3	+35·4
25·427	5	18	3	14	272·6	−23·0	+46·1
Means ...	...	...	14	66	273·34	−23·75	...

Group 4062.

A very small faint spot.

June 18·440	0	4	0	2	322·8	+25·1	+3·9
Means ...	...	...	0	2	322·8	+25·1	...

Group 4063.

A large irregular composite spot, *a*, with some small companions on June 18. It has become the leader of a fine irregular stream by June 21. The group undergoes constant change, the following spots rapidly diminishing, and *a* breaking up after June 26. *a* is measured in two parts, *b* and *c*, after June 26.

June 18·440	22	89	34	141	248·5	+16·0	−70·4
19·144	53	238	58	258	248·0	+17·1	−61·6
20·412	72	426	53	308	248·4	+16·5	−44·5
21·402	117	641	71	392	248·2	+16·4	−31·5
22·252	145	708	81	393	247·8	+16·7	−20·7
23·445	159	1095	87	581	247·0	+17·0	−5·7
24·621	118	819	62	437	247·8	+16·9	+10·7
25·427	87	566	49	320	249·1	+17·0	+22·6
26·386	44	631	28	402	249·1	+17·1	+35·3
27·609	36	261	31	218	249·6	+16·6	+51·9
28·434	18	217	20	245	249·7	+16·9	+62·9
29·380	10	136	21	270	250·2	+16·7	+75·9
Means ...	...	...	50	330	248·62	+16·74	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4064.

A few small spots, seen on a single day, *nf* Group 4060.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d June 19·144	8	65	4	36	° 293·3	° +25·0	° − 16·3
Means ...	...	...	4	36	293·3	+25·0	...

Group 4065.

A small spot.

June 20·412	2	16	2	11	247·8	+11·3	− 45·1
Means ...	...	...	2	11	247·8	+11·3	...

Group 4066.

Two very small spots nearly in the same place as Group 4059.

June 21·402	0	15	0	9	296·9	+23·0	+ 17·2
Means ...	...	...	0	9	296·9	+23·0	...

Group 4067.

A very small spot.

June 22·252	0	7	0	4	294·0	+ 5·5	+ 25·5
Means ...	...	...	0	4	294·0	+ 5·5	...

Group 4068.

A few very small spots irregularly scattered.

June 23·445	2	50	1	27	259·7	−14·7	+ 7·0
24·621	7	55	4	32	261·0	−14·0	+ 23·9
25·427	5	28	3	17	261·6	−13·9	+ 35·1
26·386	0	8	0	7	264·0	−14·1	+ 50·2
Means ...	...	...	2	21	261·58	−14·18	...

Group 4069.

A few very small unstable spots irregularly scattered, *s* of Group 4063.

1895. d June 23·445	11	47	6	24	° 247·6	° +11·2	° − 5·1
24·621	2	48	1	25	248·2	+11·1	+ 11·1
25·427	2	27	1	15	249·1	+11·2	+ 22·6
26·386	3	19	2	12	250·1	+10·8	+ 36·3
Means ...	...	...	3	19	248·75	+11·08	...

Group 4070.

A few very small spots irregularly scattered, *sf* Group 4063.

June 23·445	0	33	0	18	236·4	+13·8	− 16·3
Means ...	...	...	0	18	236·4	+13·8	...

Group 4071.

A few very small spots irregularly scattered, *nf* Group 4063.

June 23·445	3	58	2	32	233·5	+20·9	− 19·2
Means ...	...	...	2	32	233·5	+20·9	...

Group 4072.

A regular spot, *a*, with a pair of very small companions on June 29.

June 23·445	7	34	19	85	173·9	+11·6	− 78·8
24·621	23	80	26	89	174·0	+11·0	− 63·1
25·427	24	110	20	91	174·6	+11·3	− 51·9
26·386	19	148	12	96	175·0	+11·2	− 38·8
27·609	26	121	14	66	175·9	+11·3	− 21·8
28·434	14	100	7	52	176·4	+11·5	− 10·4
29·380	17	54	9	27	177·0	+11·3	+ 2·7
30·514	7	20	4	11	177·5	+11·1	+ 18·4
Means ...	...	...	14	65	175·55	+11·29	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4073.

A number of spots, mostly unstable and small, in a short irregular stream. *a*, the leader on June 24, is the largest and most stable.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
June 24·621	0	15	0	26	164·9	−10·7	− 72·2
25·427	23	95	28	110	163·1	−10·8	− 63·4
26·386	24	165	21	136	163·3	−10·8	− 50·5
27·609	23	133	15	84	164·1	−10·9	− 33·6
28·434	17	119	9	66	165·6	−10·4	− 21·2
29·380	28	125	15	64	166·1	−10·1	− 8·2
30·514	12	37	6	19	165·6	−10·1	+ 6·4
July 1·406	8	33	5	17	165·6	−10·6	+ 18·2
2·407	4	11	3	6	166·3	− 9·2	+ 32·1
Means ...	...	...	11	59	164·95	−10·40	...

Group 4074.

A few very small spots on June 26, *nf* Group 4063, and nearly in the place of Group 4071. The group rapidly increases in size, and becomes a considerable stream. The last spot on June 28, *a*, is the most stable and becomes eventually a large regular spot. The group on June 29 and 30 consists chiefly of *a* and two smaller spots, *b* and *c*.

June 26·386	0	20	0	11	232·8	+22·5	+ 19·0
27·609	9	72	7	47	233·0	+21·8	+ 35·3
28·434	11	77	8	49	232·1	+22·2	+ 45·3
29·380	60	261	62	273	234·3	+22·5	+ 60·0
30·514	18	139	31	239	232·1	+22·6	+ 72·9
July 1·406	4	28	15	103	229·9	+23·3	+ 82·5
Means ...	...	...	21	120	232·37	+22·48	...

Group 4075.

Several unstable spots, mostly small, irregularly scattered, and undergoing constant change. The group precedes Group 4073.

June 26·386	0	18	0	11	184·8	− 9·3	− 29·0
27·609	3	48	2	26	182·7	− 9·5	− 15·0
28·434	6	63	3	33	181·3	− 8·4	− 5·5
29·380	56	180	30	92	181·8	− 8·1	+ 7·5
30·514	11	103	6	55	182·1	− 8·6	+ 22·9
July 1·406	36	167	23	108	184·1	− 8·4	+ 36·7
2·407	18	110	15	90	185·3	− 8·0	+ 51·1
3·391	14	74	18	94	186·2	− 8·3	+ 65·6
Means ...	...	...	12	64	183·54	− 8·58	...

Group 4076.

A small spot, *a*, on June 28. Several other spots, mostly small and unstable, are seen preceding *a* on the succeeding days, and forming with it a short stream. *a* becomes a regular spot and increases in size up to June 30, after which it diminishes again.

1895. d					°	°	°
June 28·434	0	9	0	9	132·3	−10·4	− 54·5
29·380	41	110	28	75	133·4	−10·3	− 40·9
30·514	36	158	21	91	133·0	− 9·8	− 26·2
July 1·406	38	155	20	84	133·5	− 9·9	− 13·9
2·407	22	97	12	50	132·8	− 9·7	− 1·4
3·391	17	65	9	32	132·9	− 9·9	+ 12·3
4·645	9	92	6	55	134·6	− 9·6	+ 30·0
5·381	8	45	5	30	133·8	− 9·9	+ 39·0
Means ...	...	...	13	53	133·41	− 9·94	...

Group 4077.

A small regular spot, *a*. A number of very small companions are seen near it on July 6 and 7.

June 30·514	0	11	0	43	77·6	−18·4	− 81·6
July 1·406	8	25	14	41	77·2	−18·6	− 70·2
2·407	13	42	13	42	77·5	−18·6	− 56·7
3·391	20	68	15	51	77·2	−18·8	− 43·4
4·645	17	54	10	33	77·2	−18·6	− 27·4
5·381	19	55	11	31	77·0	−18·4	− 17·8
6·384	12	43	6	24	75·9	−18·7	− 5·6
7·532	12	46	6	26	76·7	−18·2	+ 10·4
8·426	9	29	6	17	76·4	−18·1	+ 21·9
9·419	8	26	6	18	76·7	−18·2	+ 35·3
10·430	5	13	4	10	76·5	−18·2	+ 48·6
11·471	0	4	0	4	76·1	−18·1	+ 61·9
Means ...	...	...	8	28	76·83	−18·41	...

Group 4078.

Three very small spots between Groups 4073 and 4076.

July 1·406	4	23	2	11	153·6	−10·9	+ 6·2
Means ...	...	...	2	11	153·6	−10·9	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4079.

A composite spot. *a*, with its major axis inclined at a considerable angle to the equator. It has begun to break up by July 5 into a short straight stream of small spots, of which *b* is the leader.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
July 2·407	4	25	13	80	52·9	+13·0	−81·3
3·391	12	77	16	105	52·1	+12·7	−68·5
4·645	14	95	11	78	52·4	+12·8	−52·2
5·381	15	86	10	59	52·2	+12·8	−42·6
6·384	6	43	3	26	51·9	+12·6	−29·6
7·532	5	39	3	20	51·4	+12·5	−14·9
8·426	4	20	2	10	52·3	+13·9	− 2·2
9·419	0	21	0	11	51·9	+12·1	+ 10·5
Means ...	...	...	7	49	52·14	+12·80	...

Group 4080.

A large composite spot, *a*, which rapidly diminishes in size, and has broken up by July 7 into a few small unstable spots in a straight stream.

July 2·407	0	56	0	268	51·5	−16·5	− 82·7
3·391	20	103	33	172	50·0	−16·8	− 70·6
4·645	22	151	21	143	49·7	−16·6	− 54·9
5·381	30	194	23	149	49·6	−16·8	− 45·2
6·384	36	206	23	131	49·5	−16·9	− 32·0
7·532	25	130	14	74	49·4	−17·2	− 16·9
8·426	16	90	9	49	47·5	−17·3	− 7·0
9·419	0	47	0	26	47·4	−17·5	+ 6·0
Means ...	...	...	15	127	49·33	−16·95	...

Group 4081.

A very small faint spot.

July 3·391	0	4	0	2	111·0	− 4·8	− 9·6
Means ...	...	...	0	2	111·0	− 4·8	...

Group 4082.

A very small spot *f* Group 4079; not seen on July 4 and 5.

July 3·391	2	4	3	8	45·7	+14·0	− 74·9
4·645	0	0	0	0	...	...	...
5·381	0	0	0	0	...	...	...
6·384	0	4	0	3	46·8	+14·6	− 34·7
Means ...	...	...	1	3	46·25	+14·30	...

Group 4083.

Two spots, *a* and *b*. *a* has disappeared at the West limb by July 9. A very small spot is seen between *a* and *b* on July 7.

1895. d					°	°	°
July 7·532	17	55	16	53	122·7	−15·3	+ 56·4
8·426	8	38	12	54	121·8	−15·6	+ 67·3
9·419	0	17	0	61	122·1	−15·6	+ 80·7
Means ...	...	...	9	56	122·20	−15·50	...

Group 4084.

Two very close pairs of spots on July 7. These have become two spots, *a* and *b*, by July 8, and a few very small companions are seen with them. *a* increases in size, and has become a large regular spot by July 9; *b* has broken up by that day, and the group consists of *a* followed by a number of small spots in a straggling stream. The small spots rapidly disappear and *a* remains alone, save occasionally for two or three very small companions after July 10.

July 7·532	23	101	31	138	358·6	− 7·4	− 67·7
8·426	34	235	31	219	358·2	− 7·0	− 56·3
9·419	66	405	46	281	359·4	− 6·6	− 42·0
10·430	71	368	40	212	0·3	− 6·5	− 27·6
11·471	48	302	26	159	1·1	− 6·0	− 13·1
12·423	61	319	31	164	1·4	− 5·9	− 0·1
13·397	50	281	27	149	1·8	− 5·9	+ 13·2
14·488	42	256	24	148	2·0	− 5·8	+ 27·7
15·679	28	209	20	148	1·9	− 5·7	+ 43·4
16·373	39	159	33	135	2·2	− 5·8	+ 52·9
17·450	16	97	21	128	1·9	− 5·6	+ 66·9
18·433	7	42	22	128	2·0	− 5·7	+ 79·9
Means ...	...	...	29	167	0·90	− 6·16	...

Group 4085.

A large spot, *a*, with one or two small companions. *a* has suddenly broken up into a number of small unstable spots by July 11. It has revived again by July 12, but diminishes rapidly afterwards.

July 7·532	15	90	23	146	354·0	+13·0	− 72·3
8·426	18	138	19	142	354·0	+12·9	− 60·5
9·419	22	154	16	115	354·4	+13·3	− 47·0
10·430	25	77	15	73	354·1	+13·2	− 33·8
11·471	28	127	16	68	354·7	+12·9	− 19·5
12·423	36	219	19	114	354·9	+12·6	− 6·6
13·397	12	85	6	43	355·2	+13·0	+ 6·6
14·488	0	84	0	46	354·9	+12·0	+ 20·6
Means ...	...	...	14	93	354·53	+12·86	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4086.

A few small unstable spots *nf* Group 4085. The group is not seen on July 12.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
July 7·532	0	20	0	39	350·8	+17·4	−75·5
8·426	2	25	2	29	351·5	+18·5	−63·0
9·419	0	17	0	14	350·6	+18·5	−50·8
10·430	7	23	5	15	348·8	+17·9	−39·1
11·471	0	21	0	13	347·7	+17·8	−26·5
12·423	0	0	0	0	...	...	...
13·397	0	4	0	2	348·8	+17·3	+ 0·2
14·488	12	58	6	31	348·8	+17·0	+ 14·5
15·679	4	20	3	12	348·6	+16·7	+ 30·1
16·373	2	17	2	11	348·6	+17·9	+ 39·3
Means ...	...	...	2	17	349·36	+17·67	...

Group 4087.

A number of small spots, very irregularly scattered, suddenly appearing on July 8. The group has greatly developed by July 9, and forms a straight stream, consisting chiefly of four spots, *a*, *b*, *c* and *d*, of which *a* and *d* are large composite spots. The group continues to increase and shows an extension on July 11, a short compact stream following the main stream, but inclined to it at a considerable angle. This extension is reduced by July 12 to little more than one composite spot, *c*. The group diminishes after July 12, and *d* is measured in two parts on that day.

July 8·426	33	142	17	74	46·2	− 9·6	− 8·3
9·419	118	809	62	422	48·1	− 8·6	+ 6·7
10·430	213	1364	118	754	48·7	− 8·3	+ 20·8
11·471	203	1320	127	828	48·1	− 8·4	+ 33·9
12·423	193	1194	147	920	48·9	− 8·0	+ 47·4
13·397	103	818	107	857	48·5	− 7·8	+ 59·9
14·488	49	398	103	791	48·7	− 8·0	+ 74·4
15·679	4	32	12	143	41·3	− 8·6	+ 82·8
Means ...	...	...	87	599	47·31	− 8·41	...

Group 4088.

A very small faint spot *p* Group 4085.

July 8·426	0	8	0	6	13·2	+12·2	−41·3
Means ...	...	...	0	6	13·2	+12·2	...

Group 4089.

A small faint spot *sp* Group 4085.

1895. d					°	°	°
July 9·419	0	14	0	9	4·3	+ 8·7	−37·1
Means ...	...	...	0	9	4·3	+ 8·7	...

Group 4090.

A pair of small faint spots *p* Group 4085.

July 9·419	1	20	1	14	0·5	+12·2	−40·9
Means ...	...	...	1	14	0·5	+12·2	...

Group 4091.

Two spots, *a* and *b*. They are followed by a third, *c*, on July 10, but all are then small Only *a* remains by July 11.

July 9·419	5	55	7	77	331·8	+13·7	−69·6
10·430	6	45	5	41	331·5	+13·5	−56·4
11·471	8	17	6	11	334·5	+13·0	−39·7
Means ...	...	...	6	43	332·60	+13·40	...

Group 4092.

Two small spots, *a* and *b*, on July 10. Only *b* remains on July 11.

July 10·430	8	21	8	21	87·2	+16·5	+ 59·3
11·471	2	9	3	14	84·5	+17·1	+ 70·3
Means ...	...	...	6	18	85·85	+16·80	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4093.

A few very small unstable spots *p* Group 4086. On July 15 the two largest spots, *a* and *b*, are dark and distinct. The group is not seen on July 17.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
July 11·471	0	13	0	7	355·4	+18·3	−18·8
12·423	0	6	0	3	355·4	+18·2	− 6·1
13·397	0	18	0	9	355·8	+18·1	+ 7·2
14·488	2	18	1	10	359·6	+16·5	+ 25·3
15·679	14	58	9	39	359·2	+18·3	+ 40·7
16·373	3	23	3	19	0·3	+18·0	+ 51·0
17·450	0	0	0	0	...	...	...
18·433	0	4	0	9	1·0	+17·6	+ 78·9
Means ...	...	...	2	12	358·10	+17·86	...

Group 4094.

Two spots, *a* and *b*. Only *a* remains after July 13.

July 11·471	7	29	18	69	296·0	+25·2	− 78·2
12·423	11	81	13	104	295·3	+25·0	− 66·2
13·397	17	48	15	42	296·3	+25·3	− 52·3
14·488	8	21	6	14	299·8	+26·8	− 34·5
15·679	12	29	7	17	299·4	+27·3	− 19·1
16·373	5	20	3	11	299·5	+27·9	− 9·8
Means ...	...	...	10	43	297·71	+26·25	...

Group 4095.

A short stream consisting mainly of two regular spots, *a* and *b*, and a few small companions between them. *a* is the largest member of the group, and remains alone after July 20.

July 13·397	15	80	15	76	294·5	−16·3	− 54·1
14·488	39	225	28	158	295·3	−16·5	− 39·0
15·679	56	258	34	152	294·9	−16·3	− 23·6
16·373	64	253	36	140	295·0	−16·1	− 14·3
17·450	44	263	24	141	295·3	−15·7	+ 0·3
18·433	39	237	21	132	296·4	−15·3	+ 14·3
19·417	26	212	16	130	296·8	−14·8	+ 27·7
20·530	37	182	28	135	297·2	−14·3	+ 42·9
21·217	30	101	27	91	298·2	−14·4	+ 53·1
22·409	8	46	13	73	299·0	−13·7	+ 69·6
23·382	0	11	0	59	299·7	−13·6	+ 83·2
Means ...	...	...	22	117	296·57	−15·18	...

Group 4096.

A regular spot, which diminishes from day to day. The group is not seen on July 19.

1895. d					°	°	°
July 13·397	4	23	10	57	271·5	−11·6	− 77·1
14·488	10	50	12	59	271·6	−11·4	− 62·7
15·679	11	46	8	35	271·9	−11·5	− 46·6
16·373	11	27	8	18	271·7	−11·3	− 37·6
17·450	6	18	4	10	272·3	−11·1	− 22·7
18·433	0	9	0	5	272·7	−11·5	− 9·4
19·417	0	0	0	0	...	...	...
20·530	0	3	0	2	271·5	−12·1	+ 17·2
Means ...	...	...	5	23	271·89	−11·50	...

Group 4097.

A very small spot.

July 17·450	2	7	1	4	318·7	+ 7·2	+ 23·7
Means ...	...	...	1	4	318·7	+ 7·2	...

Group 4098.

A very small spot.

July 17·450	0	7	0	4	280·4	+26·8	−14·6
Means ...	...	...	0	4	280·4	+26·8	...

Group 4099.

A very small spot.

July 17·450	0	15	0	9	267·0	−11·9	− 28·0
Means ...	...	...	0	9	267·0	−11·9	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4100.

A number of small spots appearing suddenly near the West limb, and scattered irregularly over a considerable area.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
July 20·530	10	56	8	42	299·8	+21·9	+ 45·5
21·217	38	120	34	111	301·3	+22·2	+ 56·2
22·409	24	127	41	213	302·7	+22·7	+ 73·3
23·382	1	8	4	25	298·4	+23·1	+ 81·9
Means ...	...	...	22	98	300·55	+22·48	...

Group 4101.

A small faint spot.

July 20·530	0	25	0	13	248·7	+21·1	— 5·6
Means ...	...	...	0	13	248·7	+21·1	...

Group 4102.

Three very small spots.

July 23·382	1	9	1	5	212·7	+17·8	— 3·8
Means ...	...	...	1	5	212·7	+17·8	...

Group 4103.

Several very small unstable spots.

July 23·382	18	50	9	27	198·5	+18·8	+18·0
24·483	13	70	7	37	200·1	+18·7	— 1·8
Means ...	...	...	8	32	199·30	+18·75	...

Group 4104.

An irregular group, undergoing constant change, composed of spots mostly small and unstable, and forming a stream sharply inclined to the equator. The last spot, *a*, is the most stable.

July 24·483	7	21	13	36	129·9	—11·1	— 72·0
25·195	0	16	0	18	129·3	—10·7	— 63·2
26·497	11	48	9	39	128·2	—11·6	— 47·1
27·207	50	208	34	139	127·3	—12·2	— 38·6

Group 4104—*continued.*

1895. d					°	°	°
July 28·203	46	198	27	115	126·8	—11·9	— 26·0
29·628	92	422	49	226	125·6	—14·1	— 8·4
30·235	33	197	17	104	126·9	—13·2	+ 1·0
31·533	29	156	17	86	126·5	—13·6	+ 17·7
Aug. 1·527	5	33	3	20	125·2	—13·7	+ 29·6
2·535	0	6	0	4	125·2	—13·7	+ 43·0
3·205	0	26	0	24	127·9	—13·6	+ 54·5
Means ...	...	...	15	74	127·16	—12·67	...

Group 4105.

Two close pairs of small spots on July 26. The group undergoes continual change on the succeeding days, but always consists of a few small unstable spots irregularly distributed. The group is not seen on July 30.

July 26·497	5	26	3	13	165·9	+16·1	— 9·4
27·207	7	61	3	31	167·2	+16·1	+ 1·3
28·203	11	53	6	27	165·6	+16·0	+ 12·8
29·628	4	33	3	21	170·5	+16·3	+ 36·5
30·235	0	0	0	0	...	...	...
31·533	4	41	4	38	166·2	+16·6	+ 57·4
Means ...	...	...	3	22	167·08	+16·22	...

Group 4106.

A large regular spot, *a*, with a very small companion on July 31 and August 2.

July 29·628	19	83	32	141	62·1	— 7·1	— 71·9
30·235	18	108	22	129	61·7	— 6·5	— 64·2
31·533	25	171	19	130	61·7	— 6·9	— 47·1
Aug. 1·527	30	212	19	133	61·2	— 7·0	— 34·4
2·535	34	234	19	129	61·9	— 7·1	— 20·3
3·205	33	228	17	119	61·9	— 7·3	— 11·5
4·439	37	208	19	107	62·3	— 7·6	+ 5·2
5·263	42	191	22	102	62·3	— 7·9	+ 16·2
6·603	20	152	12	95	62·5	— 8·1	+ 34·1
7·412	15	116	11	85	62·9	— 8·1	+ 45·1
8·388	16	77	16	77	62·8	— 8·3	+ 57·9
9·425	8	46	15	80	63·1	— 8·5	+ 72·0
Means ...	...	...	19	111	62·20	— 7·53	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4107.

A small spot *p* Group 4106. The group increases in size very rapidly during the two succeeding days, and becomes a fine stream, consisting chiefly of two large composite spots, *a* and *b*, and a few small spots between them.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
July 30·235	0	11	0	9	74·2	− 8·0	− 51·7
31·533	120	542	74	338	75·4	− 8·4	− 33·4
Aug. 1·527	184	1056	101	587	74·6	− 8·6	− 21·0
2·535	272	1433	141	747	75·3	− 8·6	− 6·9
3·205	191	1507	99	781	75·3	− 8·9	+ 1·9
4·439	235	1354	131	746	76·2	− 9·1	+ 19·1
5·263	258	1153	154	691	76·0	− 9·3	+ 29·9
6·603	100	713	80	563	76·7	− 9·5	+ 48·3
7·412	79	454	81	470	76·8	− 9·5	+ 59·0
8·388	40	276	65	475	76·4	− 9·8	+ 71·5
9·425	4	48	15	174	71·9	−10·1	+ 80·8
Means ...	...	...	86	507	75·35	− 9·07	...

Group 4108.

A pair of very small faint spots.

Aug. 1·527	0	9	0	5	109·6	− 3·5	+ 14·0
Means ...	...	...	0	5	109·6	− 3·5	...

Group 4109.

A pair of very small faint spots on August 1. The group is not seen on August 2. A very small spot is seen near the place of the group on August 3, and is joined by a second on August 4.

Aug. 1·527	5	23	2	12	98·5	−16·4	+ 2·9
2·535	0	0	0	0	...	...	...
3·205	1	11	1	6	100·7	−15·1	+ 27·3
4·439	2	18	2	14	102·2	−15·7	+ 45·1
Means ...	...	...	1	8	100·47	−15·73	...

Group 4110.

A great number of spots forming a fine irregular stream of great complexity. The leader, *a*, becomes a very large spot. The group increases in size up to August 8, after which it diminishes, first by the disappearance of the smaller spots, rendering the group much more simple in appearance. The principal following spots are lettered on August 6, *b*, *c*, *d* and *e*. *e* has divided into three parts, *f*, *g* and *h*, by the succeeding day.

Aug. 1·527	19	120	36	271	17·6	+10·1	− 78·0
2·535	33	243	38	283	17·3	+10·0	− 64·9
3·205	44	400	37	341	18·7	+10·3	− 54·7
4·439	128	742	79	477	18·8	+11·0	− 38·3

Group 4110—*continued.*

1895. d					°	°	°
Aug. 5·263	182	937	101	524	20·1	+11·2	− 26·0
6·603	349	2182	177	1104	23·3	+10·6	− 5·1
7·412	484	2409	247	1224	24·8	+10·8	+ 7·0
8·388	547	2823	292	1505	24·9	+10·4	+ 20·0
9·425	408	2308	246	1399	24·9	+10·3	+ 33·8
10·474	227	1630	171	1234	24·7	+10·3	+ 47·5
11·513	162	1053	171	1092	25·1	+10·2	+ 61·6
12·423	100	595	166	979	24·6	+10·3	+ 73·1
13·323	7	140	13	481	22·2	+10·3	+ 82·6
Means ...	...	...	136	840	22·08	+10·45	...

Group 4111.

A short compact wedge-shaped stream of spots, the point coming last, following Groups 4107 and 4106, and forming with them one superb straight stream. The group undergoes continual change; in particular it has greatly increased by August 6, but along a line inclined at a wide angle to the general axis of the three groups. *a*, *b* and *c* are the three principal spots.

Aug. 2·535	19	123	12	79	45·2	− 6·9	− 37·0
3·205	56	371	33	216	45·4	− 7·0	− 28·0
4·439	71	435	36	225	46·8	− 6·3	− 10·3
5·263	107	453	55	231	47·7	− 5·8	+ 1·6
6·603	159	984	87	538	48·3	− 5·0	+ 19·9
7·412	102	515	62	312	49·7	− 5·3	+ 31·9
8·388	47	292	36	217	51·3	− 5·1	+ 46·4
9·425	26	179	29	190	51·9	− 5·3	+ 60·8
10·474	9	66	22	149	53·6	− 4·9	+ 76·4
Means ...	...	...	41	240	48·88	− 5·73	...

Group 4112.

A regular spot, *a*, usually with one or two small companions.

Aug. 2·535	4	34	12	97	3·2	− 6·2	− 79·0
3·205	16	70	25	108	3·1	− 6·3	− 70·3
4·439	27	119	24	105	3·1	− 5·9	− 54·0
5·263	35	142	25	100	2·8	− 6·2	− 43·3
6·603	29	140	17	80	3·4	− 6·6	− 25·0
7·412	28	142	15	75	3·7	− 6·6	− 14·1
8·388	23	136	12	70	3·6	− 7·3	− 1·3
9·425	22	131	12	69	3·7	− 7·5	+ 12·6
10·474	16	94	9	54	3·5	− 7·5	+ 26·3
11·513	13	71	8	48	3·1	− 7·6	+ 39·6
12·423	13	37	10	30	2·7	− 7·6	+ 51·2
13·323	4	23	5	27	2·6	− 7·8	+ 63·0
14·407	0	4	0	10	2·1	− 7·8	+ 76·9
Means ...	...	...	13	67	3·12	− 6·99	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4113.

A few small unstable spots in a short stream. *a*, a small regular spot seen on August 4 and 5, and *b*, a similar spot seen after August 5, are the most stable members of the group.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Aug. 4·439	4	34	3	28	6·9	−15·2	− 50·2
5·263	8	27	5	18	8·6	−15·5	− 37·5
6·603	21	113	13	66	7·6	−16·3	− 20·8
7·412	20	155	11	84	7·9	−16·2	− 9·9
8·388	12	72	6	39	7·1	−16·6	+ 2·2
9·425	10	41	6	23	6·4	−17·4	+ 15·3
Means ...	...	...	7	43	7·42	−16·20	...

Group 4114.

A large regular spot, *a*, with a very variable accompaniment of small spots. Up to August 6 the companions lie mostly to the *n* of *a*. From August 7 to 11 they principally constitute a straight stream *s* of *a*. On August 12 they form a ring *p a*, after which they rapidly diminish.

Aug. 4·439	15	140	31	315	338·7	+17·3	− 78·4
5·263	38	245	49	318	337·8	+17·5	− 68·3
6·603	55	401	43	313	338·1	+16·9	− 50·3
7·412	66	471	43	305	338·8	+16·7	− 39·0
8·388	77	398	44	228	338·5	+16·7	− 26·4
9·425	105	577	54	300	338·6	+15·6	− 12·5
10·474	123	812	63	414	339·3	+14·9	+ 2·1
11·513	129	645	67	338	339·2	+14·9	+ 15·7
12·423	118	537	69	308	339·9	+15·3	+ 28·4
13·323	55	316	35	208	340·0	+15·3	+ 40·4
14·407	44	193	37	165	339·4	+15·5	+ 54·2
15·486	16	60	20	75	338·2	+15·2	+ 67·2
16·215	10	33	20	67	338·5	+15·5	+ 77·2
Means ...	...	...	44	258	338·85	+15·95	...

Group 4115.

A few very small unstable spots *p* Group 4112.

Aug. 5·263	0	23	0	15	7·4	− 4·7	− 38·7
6·603	10	28	5	15	7·7	− 4·5	− 20·7
7·412	0	4	0	2	10·0	− 4·7	− 7·8
8·388	0	5	0	3	8·7	− 5·8	+ 3·8
Means ...	...	...	1	9	8·45	− 4·93	...

Group 4116.

Two very small faint spots.

1895. d					°	°	°
Aug. 7·412	0	14	0	7	9·0	+ 9·0	− 8·8
Means ...	...	...	0	7	9·0	+ 9·0	...

Group 4117.

A very small faint spot.

Aug. 8·388	0	6	0	4	25·1	−17·2	+ 20·2
Means ...	...	...	0	4	25·1	−17·2	...

Group 4118.

A pair of very small spots on August 9. A short stream has formed by August 10. The group has greatly increased by August 11, and consists of an irregular stream, of which the first and last spots, *a* and *b*, are the largest. *a* is a large composite spot. *b* is a pear-shaped spot, which has divided into two portions by August 12.

Aug. 9·425	0	10	0	5	4·5	+16·8	+ 13·4
10·474	4	31	2	16	0·6	+18·6	+ 23·4
11·513	66	350	42	223	0·4	+18·7	+ 36·9
12·423	74	473	55	369	1·2	+18·7	+ 49·7
13·323	46	296	53	330	3·5	+18·2	+ 63·9
14·407	26	148	61	347	4·2	+18·1	+ 79·0
Means ...	...	...	36	215	2·40	+18·18	...

Group 4119.

A very small spot *nf* Group 4114.

Aug. 9·425	0	9	0	5	332·5	+23·7	− 18·6
Means ...	...	...	0	5	332·5	+23·7	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4120.

A small regular spot, *a*, usually followed by one or two very small companions.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Aug. 11·513	6	23	6	24	264·8	−13·6	− 58·7
12·423	10	35	8	27	266·8	−13·6	− 44·7
13·323	5	22	3	13	268·5	−13·6	− 31·1
14·407	2	12	1	7	269·8	−13·9	− 15·4
Means ...	...	...	5	18	267·48	−13·68	...

Group 4121.

A small spot.

Aug. 12·423	5	22	4	17	260·5	+ 9·1	− 51·0
13·323	0	10	0	6	261·7	+ 8·8	− 37·9
Means ...	...	...	2	12	261·10	+ 8·95	...

Group 4122.

A few small spots on August 14 and 15. The group increases rapidly on the succeeding days, and becomes a fine complex stream, which changes its shape continually. Two large composite spots, *a* and *b*, are the chief features of the group on August 17, but these break up at once. The group diminishes after August 19, especially in the following portion; two spots, *c* and *d*, fragments of *a*, alone showing much stability.

Aug. 14·407	9	42	12	54	217·4	+ 8·2	− 67·8
15·486	16	64	13	54	217·3	+ 8·5	− 53·7
16·215	27	111	18	76	218·1	+ 8·9	− 43·2
17·403	122	692	69	395	217·9	+ 8·8	− 27·8
18·460	153	823	79	418	217·7	+ 8·7	− 14·0
19·387	206	1148	106	580	217·7	+ 8·6	− 1·8
20·487	111	804	58	411	218·0	+ 8·8	+ 13·0
21·382	93	724	51	400	218·1	+ 8·9	+ 25·0
22·508	59	304	39	200	219·4	+ 9·1	+ 41·1
23·416	20	219	17	178	219·8	+ 9·5	+ 53·5
24·401	10	96	13	119	220·1	+ 9·3	+ 66·9
Means ...	...	...	43	262	218·32	+ 8·85	...

Group 4123.

A number of spots in a fine stream. The two principal spots are *a*, the leader, a very large spot, and *b*, the last, a large spot. Both have become regular by August 22, by throwing off the extensions lying towards the centre of the group. *a* has divided into two parts by August 25, though it is still measured as one. A companion of considerable size has formed close to *b* by August 24, and is measured with it on August 25. The group diminishes in size after August 17, the smaller spots disappearing.

1895. d					°	°	°
Aug. 14·407	12	133	45	485	201·5	+17·5	− 83·7
15·486	70	590	118	963	197·6	+18·0	− 73·4
16·215	102	769	115	865	197·0	+18·3	− 64·3
17·403	152	1171	116	897	197·1	+18·8	− 48·6
18·460	239	1305	149	819	196·9	+19·2	− 34·8
19·387	228	1501	128	836	197·4	+19·5	− 22·1
20·487	236	1280	122	659	197·8	+19·8	− 7·2
21·382	216	1234	112	637	197·8	+19·6	+ 4·7
22·508	173	814	96	446	198·8	+19·6	+ 20·5
23·416	138	747	84	456	199·5	+19·7	+ 33·2
24·401	124	693	89	499	198·7	+19·6	+ 45·5
25·511	74	456	77	461	199·6	+19·5	+ 61·0
26·213	24	221	37	353	202·4	+19·4	+ 73·1
27·490	0	3	0	6	188·7	+17·8	+ 76·3
Means ...	...	...	92	599	197·91	+19·02	...

Group 4124.

A very small spot on August 16. Two very small companions precede it on August 17.

Aug. 16·215	2	8	2	8	207·2	−20·4	− 54·1
17·403	1	16	1	11	208·7	−20·8	− 37·0
Means ...	...	...	2	10	207·95	−20·60	...

Group 4125.

A pair of small spots.

Aug. 17·403	12	52	10	42	289·8	−20·5	+ 44·1
Means ...	...	...	10	42	289·8	−20·5	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Date. Greenwich Civil Time.	Projected Area of		Area for Group.		Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
	Umbra.	Whole Spot.	Umbra.	Whole Spot.			
Group 4126. A small spot.							
1895. d					°	°	°
Aug. 17·403	5	17	3	10	220·5	−10·3	− 25·2
18·460	2	5	1	3	222·2	−10·2	− 9·5
Means ...	...	...	2	7	221·35	−10·25	...
Group 4127. A very small spot.							
Aug. 18·460	2	9	1	5	210·6	− 9·7	− 21·1
Means ...	...	...	1	5	210·6	− 9·7	...
Group 4128. A very small spot.							
Aug. 19·387	0	8	0	4	227·9	+23·3	+ 8·4
Means ...	...	...	0	4	227·9	+23·3	...
Group 4129. A very small spot on August 23. The group has greatly increased in size by August 24, and become a large number of spots in an irregular stream.							
Aug. 23·416	1	6	1	5	208·1	−22·1	+ 41·8
24·401	31	150	33	159	208·4	−23·0	+ 55·2
25·511	13	77	26	145	208·5	−23·2	+ 69·9
Means ...	...	...	20	103	208·33	−22·77	...
Group 4130. A pair of very small spots, *a* and *b*, on August 23. *a* has increased by August 24, but diminished again by August 25. *b* has disappeared by August 25.							
Aug. 23·416	1	7	1	4	193·4	− 9·6	+ 27·1
24·401	3	31	2	22	194·6	− 9·9	+ 41·4
25·511	0	4	0	4	195·3	−10·1	+ 56·7
Means ...	...	...	1	10	194·43	− 9·87	...
Group 4131. A pair of small spots.							
1895. d					°	°	°
Aug. 23·416	0	32	0	18	157·5	−17·0	− 8·8
Means ...	...	...	0	18	157·5	−17·0	...
Group 4132. A very small spot.							
Aug. 23·416	2	11	1	7	138·6	− 8·4	− 27·7
Means ...	...	...	1	7	138·6	− 8·4	...
Group 4133. A regular spot, *a*. It throws off a small fragment on August 28. Two very small companions are seen near it on August 30, and a number on September 1. After this date the group rapidly diminishes in size.							
Aug. 24·401	9	63	19	126	79·2	− 8·9	− 74·0
25·511	30	125	31	130	79·1	− 8·8	− 59·5
26·213	30	157	25	131	78·7	− 8·8	− 50·6
27·490	31	188	20	118	78·8	− 8·6	− 33·6
28·383	37	202	21	113	79·2	− 8·5	− 21·4
29·382	32	218	17	113	79·2	− 8·5	− 8·2
30·380	30	148	16	77	79·3	− 8·2	+ 5·0
31·388	23	139	13	76	79·3	− 8·4	+ 18·3
Sept. 1·438	23	201	14	124	78·8	− 7·8	+ 31·7
2·433	18	53	13	39	79·8	− 8·2	+ 45·3
3·516	5	37	6	40	79·9	− 8·2	+ 60·3
4·470	0	5	0	9	79·5	− 7·8	+ 72·5
Means ...	...	...	16	91	79·23	− 8·39	...
Group 4134. A few spots, mostly very small, in a straggling stream. The last spot, *a*, is the largest.							
Aug. 25·511	17	66	10	38	121·9	−16·6	− 16·7
26·213	0	20	0	11	120·3	−17·1	− 9·0
Means ...	...	...	5	25	121·1	−16·85	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4135.

A regular spot, *a*, which rapidly diminishes in size. A very small companion is seen near it on August 25 and 28.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Aug. 25·511	5	20	14	62	58·4	− 5·5	− 80·2
26·213	4	27	7	43	58·4	− 5·2	− 70·9
27·490	4	29	4	25	59·5	− 5·2	− 52·9
28·383	3	11	2	8	59·6	− 5·8	− 41·0
29·382	0	7	0	4	60·4	− 5·5	− 27·0
Means ...	...	...	5	28	59·26	− 5·44	...

Group 4136.

A few small spots, of which *a* is the leader, in a short stream.

Aug. 26·213	8	41	4	23	148·8	− 9·9	+ 19·5
27·490	6	55	4	36	149·3	− 10·2	+ 36·9
28·383	0	15	0	12	149·8	− 10·7	+ 49·2
Means ...	...	...	3	24	149·30	− 10·27	...

Group 4137.

A small spot *nf* Group 4135.

Aug. 27·490	2	10	2	12	49·1	− 1·2	− 63·3
28·383	0	2	0	2	50·6	− 1·4	− 50·0
Means ...	...	...	1	7	49·85	− 1·30	...

Group 4138.

A small faint spot on August 27. The group has very greatly increased in size by the succeeding day, and has become a short broad irregular stream. The two principal spots, *a* and *b*, are stable, but show large proper motion. The other members of the group are mostly unstable, and the group changes in its general appearance, but always remains with its principal axis inclined at a wide angle to the equator. *a* alone remains by September 5.

Aug. 27·490	0	7	0	9	47·6	− 10·2	− 64·8
28·383	33	153	27	124	52·0	− 9·6	− 48·6
29·382	70	376	45	241	52·7	− 9·8	− 34·7
30·380	67	414	37	231	53·8	− 9·6	− 20·5
31·388	65	319	33	167	54·7	− 9·8	− 6·3

Group 4138—*continued.*

1895. d					°	°	°
Sept. 1·438	72	392	38	207	55·7	− 10·2	+ 8·6
2·433	59	330	34	189	56·3	− 10·9	+ 21·8
3·516	52	278	35	185	56·6	− 11·2	+ 37·0
4·470	30	129	25	106	56·7	− 11·3	+ 49·7
5·386	16	83	18	96	57·1	− 10·8	+ 62·2
6·318	6	42	12	92	57·2	− 10·7	+ 74·6
Means ...	...	...	28	150	54·58	− 10·37	...

Group 4139.

A very large regular spot, *a*. Several small companions are usually seen near it.

Aug. 27·490	29	131	154	695	26·4	+ 11·0	− 86·0
28·383	94	437	153	712	27·5	+ 11·0	− 73·1
29·382	156	822	152	798	27·6	+ 10·9	− 59·8
30·380	203	995	147	723	27·5	+ 11·1	− 46·8
31·388	240	1169	145	706	27·3	+ 11·0	− 33·7
Sept. 1·438	268	1303	142	692	27·7	+ 11·1	− 19·4
2·433	269	1170	137	593	27·6	+ 10·7	− 6·9
3·516	269	1145	137	581	27·8	+ 10·5	+ 8·2
4·470	237	1099	127	590	27·8	+ 10·7	+ 20·8
5·386	195	942	117	564	28·0	+ 10·6	+ 33·1
6·318	182	804	129	570	28·3	+ 10·8	+ 45·7
7·419	97	554	95	540	27·9	+ 10·7	+ 59·8
8·463	43	319	72	527	27·6	+ 10·8	+ 73·3
9·413	13	87	65	417	26·8	+ 10·7	+ 85·1
Means ...	...	...	127	622	27·56	+ 10·83	...

Group 4140.

Three very small faint spots.

Aug. 28·383	0	11	0	6	108·8	+ 11·5	+ 8·2
Means ...	...	...	0	6	108·8	+ 11·5	...

Group 4141.

A small faint spot.

Aug. 29·382	0	15	0	9	106·3	− 17·6	+ 18·9
30·380	0	4	0	3	104·1	− 17·8	+ 29·8
Means ...	...	...	0	6	105·20	− 17·70	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Date. Greenwich Civil Time.	Projected Area of		Area for Group.		Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
	Umbra.	Whole Spot.	Umbra.	Whole Spot.			
Group 4142. A very small faint spot.							
1895. d Aug. 29·382	0	5	0	3	° 97·1	° −14·4	° + 9·7
Means ...	...	...	0	3	97·1	−14·4	...
Group 4143. A very small faint spot.							
Aug. 29·382	0	7	0	4	61·4	+23·3	− 26·0
Means ...	...	...	0	4	61·4	+23·3	...
Group 4144. A small spot.							
Aug. 30·380	0	16	0	17	131·1	−24·0	+ 56·8
Means ...	...	...	0	17	131·1	−24·0	...
Group 4145. A pair of very small faint spots on August 30. A single small spot is seen *f* the place of the pair on August 31.							
Aug. 30·380	0	19	0	15	120·5	−15·0	+ 46·2
31·388	0	6	0	6	115·2	−16·8	+ 54·2
Means ...	...	...	0	11	117·85	−15·90	...
Group 4146. Three very small spots *p* Group 4133.							
Aug. 30·380	0	18	0	10	85·0	−10·3	+ 10·7
Means ...	...	...	0	10	85·0	−10·3	...
Group 4147. A pair of very small faint spots.							
1895. d Aug. 30·380	0	13	0	6	° 78·7	° +20·1	° + 4·4
Means ...	...	...	0	6	78·7	+20·1	...
Group 4148. Three very small faint spots *f* Group 4138.							
Aug. 30·380	0	34	0	21	46·2	−12·9	− 28·1
Means ...	...	...	0	21	46·2	−12·9	...
Group 4149. A number of very small spots irregularly scattered.							
Aug. 31·388	7	41	4	29	107·1	+ 8·3	+ 46·1
Means ...	...	...	4	29	107·1	+ 8·3	...
Group 4150. Four very small spots *f* Group 4138.							
Aug. 31·388	1	18	1	10	40·4	− 5·3	− 20·6
Means ...	...	...	1	10	40·4	− 5·3	...
Group 4151. A small faint spot, *a*, on September 1. *a* is followed by a short stream of similar spots on September 2. *a* and one companion alone remain on September 3.							
Sept. 1·438	0	13	0	14	344·9	+20·8	− 62·2
2·433	9	31	7	24	342·8	+22·3	− 51·7
3·516	1	21	1	13	344·1	+21·5	− 35·5
Means ...	...	...	3	17	343·93	+21·53	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4152.

A segmented spot, *a*, and a few small companions. The segments of *a* are sometimes all measured together, sometimes in two or more parts. The group is just perceptible as a very slight notch in the limb on September 1, but it is not measurable.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Sept. 2·433	21	121	38	217	319·5	+12·0	−75·0
3·516	26	159	25	153	320·4	+11·6	−59·2
4·470	28	161	21	116	320·5	+11·5	−46·5
5·386	28	165	17	101	320·9	+11·7	−34·0
6·318	33	187	18	100	321·3	+11·8	−21·3
7·419	24	123	12	62	321·4	+11·3	−6·7
8·463	17	53	8	27	322·1	+11·2	+7·8
9·413	7	63	4	33	320·7	+11·8	+19·0
Means ...	...	...	18	101	320·85	+11·61	...

Group 4153.

A small faint spot *sp* Group 4151.

Sept. 3·516	0	7	0	4	348·4	+13·9	−31·2
Means ...	...	...	0	4	348·4	+13·9	...

Group 4154.

A small spot, *a*, on September 4, preceded by two very small companions. The group rapidly increases in size up to September 7, when *a* is a large spot at the head of a considerable stream.

Sept. 4·470	7	30	3	15	356·5	+18·2	−10·5
5·386	12	72	6	37	354·8	+18·2	−0·1
6·318	87	296	47	154	356·1	+18·2	+13·5
7·419	61	411	36	239	357·0	+18·0	+28·9
8·463	46	232	33	160	357·4	+17·8	+43·1
9·413	24	132	22	118	358·2	+17·8	+56·5
10·223	13	75	17	97	359·2	+17·5	+68·1
11·540	0	23	0	92	358·5	+16·9	+84·8
Means ...	...	...	21	114	357·21	+17·83	...

Group 4155.

A very small faint spot *sf* Group 4154.

Sept. 6·318	0	9	0	4	348·0	+15·3	+5·4
Means ...	...	...	0	4	348·0	+15·3	...

Group 4156.

A few small spots in a straight stream. *a*, the leader, is usually the largest.

1895. d					°	°	°
Sept. 6·318	2	9	4	17	270·2	−15·6	−72·4
7·419	6	25	6	27	268·9	−15·3	−59·2
8·463	15	76	12	60	268·2	−15·3	−46·1
9·413	13	95	8	60	270·3	−14·7	−31·4
10·223	18	45	10	26	272·0	−14·9	−19·1
Means ...	...	...	8	38	269·92	−15·16	...

Group 4157.

A small regular spot *p* Group 4158.

Sept. 6·318	2	7	4	14	266·6	+10·0	−76·0
7·419	6	17	6	17	267·1	+9·3	−61·0
8·463	7	22	5	16	267·1	+9·2	−47·2
9·413	2	12	1	7	267·0	+8·9	−34·7
Means ...	...	...	4	14	266·95	+9·35	...

Group 4158.

A small spot, *a*, on September 6. Several spots, mostly small, in a straight sparse stream on the succeeding days. The group is quite small from September 11 to September 14. There is a short-lived revival after this, and a short nearly continuous stream of small spots has formed by September 16.

Sept. 6·318	0	41	0	14	260·2	+11·3	−82·4
7·419	9	77	12	100	260·1	+10·9	−68·0
8·463	23	127	21	115	258·0	+10·9	−56·3
9·413	34	186	24	129	257·9	+10·7	−43·8
10·223	40	195	24	116	258·8	+11·0	−32·3
11·540	15	63	8	33	260·9	+10·7	−12·8
12·535	11	66	7	34	259·1	+10·7	−1·4
13·399	6	47	3	24	260·8	+9·3	+11·7
14·424	22	83	13	44	256·5	+10·7	+20·9
15·235	26	114	16	67	256·3	+11·3	+31·4
16·444	24	155	18	112	256·2	+10·8	+47·3
17·540	0	74	0	56	257·4	+10·5	+62·9
18·398	0	7	0	12	256·5	+10·2	+73·4
Means ...	...	...	11	66	258·36	+10·69	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Date. Greenwich Civil Time.	Projected Area of		Area for Group.		Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
	Umbra.	Whole Spot.	Umbra.	Whole Spot.			
Group 4159. A very small faint spot.							
1895. d Sept. 7·419	0	3	0	4	° 261·1	° − 3·3	° − 67·0
Means ...	...	...	0	4	261·1	− 3·3	...
Group 4160. A very small faint spot.							
Sept. 10·223	0	9	0	6	252·8	− 4·0	− 38·3
Means ...	...	...	0	6	252·8	− 4·0	...
Group 4161. A regular spot, which diminishes from day to day.							
Sept. 10·223	0	29	0	75	216·1	−21·1	− 75·0
11·540	8	45	9	52	215·5	−21·5	− 58·2
12·535	11	25	10	21	214·9	−21·7	− 45·6
13·399	6	30	4	21	214·9	−22·3	− 34·2
14·424	0	15	0	9	214·4	−21·7	− 21·2
Means ...	...	...	5	36	215·16	−21·66	...
Group 4162. A few very small unstable spots irregularly scattered.							
Sept. 12·535	0	9	0	5	249·7	+24·5	− 10·8
13·399	6	56	3	30	249·2	+24·4	+ 0·1
14·424	0	13	0	7	248·3	+24·2	+ 12·7
15·235	1	8	1	5	248·5	+24·2	+ 23·6
Means ...	...	...	1	12	248·93	+24·33	...
Group 4163. A number of spots in a straight compact stream, suddenly appearing near the West limb, and rapidly increasing in size.							
Sept. 13·399	34	173	28	142	300·7	+23·3	+ 51·6
14·424	48	274	55	330	302·0	+22·7	+ 66·4
15·235	47	199	85	391	301·8	+22·5	+ 76·9
16·444	0	18	0	84	295·5	+23·6	+ 86·6
Means ...	...	...	42	237	300·00	+23·03	...

Date. Greenwich Civil Time.	Projected Area of		Area for Group.		Mean Longitude of Group.	Mean Latitude of Group.	Longitu from Centr Meridi
	Umbra.	Whole Spot.	Umbra.	Whole Spot.			
Group 4164. A few small spots irregularly scattered on September 13. The group has greatl increased in size by September 14, and has become an irregular strean It undergoes constant change. It consists chiefly of a pair of spots, *a* and *b* on September 18 and 19.							
1895. d Sept. 13·399	26	109	15	62	° 220·8	° + 9·5	° − 28·
14·424	71	380	36	193	221·5	+ 9·6	− 14·
15·235	63	247	32	125	221·2	+ 9·7	− 3·
16·444	31	225	16	115	221·6	+ 9·4	+ 12·
17·540	24	184	14	105	222·4	+ 9·3	+ 27·
18·398	42	265	27	171	222·5	+ 9·4	+ 39·
19·323	10	77	8	62	222·6	+ 9·6	+ 51·
Means ...	...	...	21	119	221·80	+ 9·5	...
Group 4165. Three very small spots *s* Group 4158.							
Sept. 15·235	0	11	0	7	260·9	+ 3·4	+ 36·0
Means ...	...	...	0	7	260·9	+ 3·4	...
Group 4166. A few small spots irregularly scattered.							
Sept. 16·444	5	27	4	23	259·1	−18·7	+ 50·2
Means ...	...	...	4	23	259·1	−18·7	...
Group 4167. A pair of very small faint spots.							
Sept. 16·444	0	8	0	4	224·7	− 4·0	+ 15·8
Means ...	...	...	0	4	224·7	− 4·0	...
Group 4168. A few very small faint spots irregularly scattered.							
Sept. 16·444	3	37	2	20	202·5	+ 23·5	− 6·4
17·540	0	50	0	27	201·1	+ 26·1	+ 6·6
Means ...	...	...	1	24	201·80	+ 24·80	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4169.

A very small faint spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Sept. 16·444	0	4	0	2	193·7	−10·0	−15·2
Means ...	...	...	0	2	193·7	−10·0	...

Group 4170.

Two or three very small faint unstable spots.

Sept. 16·444	0	21	0	11	190·8	+17·1	−18·1
17·540	0	11	0	6	187·9	+20·5	−6·6
Means ...	...	...	0	9	189·35	+18·80	...

Group 4171.

A large spot, *a*, with double nucleus. Usually several small unstable companions are seen round and near *a*.

Sept. 16·444	16	95	51	296	130·3	−15·1	−78·6
17·540	35	230	46	300	130·3	−15·1	−64·2
18·398	45	303	42	284	129·5	−15·3	−53·6
19·323	60	387	44	284	129·3	−15·0	−41·6
20·415	73	495	44	303	129·5	−15·0	−27·0
21·450	88	476	49	264	129·8	−15·4	−13·1
22·448	96	415	52	224	129·8	−14·8	+0·1
23·435	87	416	49	231	129·8	−14·8	+13·2
24·429	79	339	48	205	129·7	−14·7	+26·2
25·439	39	270	28	191	130·0	−14·7	+39·8
26·394	30	140	28	128	130·2	−14·6	+52·6
27·433	8	77	11	106	129·9	−14·6	+66·0
Means ...	...	...	41	235	129·84	−14·93	...

Group 4172.

A few very small faint spots.

Sept. 17·540	0	45	0	23	206·4	+17·7	+11·9
Means ...	...	...	0	23	206·4	+17·7	...

Group 4173.

Two very small faint spots. The group is not seen on September 18, but has revived by the succeeding day, and increased very rapidly, developing into a compact stream, the first and last spots of which, *a* and *b*, are the largest.

1895. d					°	°	°
Sept. 17·540	0	16	0	8	173·6	−11·5	−20·9
18·398	0	0	0	0	...	...	...
19·323	0	8	0	4	175·2	−11·2	+4·3
20·415	15	122	8	69	178·7	−11·2	+22·2
21·450	31	194	20	130	179·9	−11·6	+37·0
22·448	31	372	26	312	180·1	−11·2	+50·4
23·435	38	331	44	392	179·2	−11·4	+62·6
24·429	0	33	0	76	179·3	−11·0	+75·8
Means ...	...	...	12	124	178·00	−11·30	...

Group 4174.

A few small spots in a short straight stream.

Sept. 20·415	14	59	7	31	153·0	+16·8	−3·5
21·450	10	51	5	27	153·3	+16·0	+10·4
22·448	0	16	0	10	153·1	+16·4	+23·4
Means ...	...	...	4	23	153·13	+16·40	...

Group 4175.

A small double spot, with a very small companion.

Sept. 20·415	3	41	2	32	112·8	−17·2	−43·7
Means ...	...	...	2	32	112·8	−17·2	...

Group 4176.

A small regular spot on September 22 and 23. The group is not seen on September 24, but a pair of very small spots is seen near its place on September 25.

Sept. 22·448	5	24	4	23	69·2	+13·3	−60·5
23·435	0	5	0	4	69·5	+13·4	−47·1
24·429	0	0	0	0	...	...	...
25·439	0	28	0	15	67·8	+15·4	−22·4
Means ...	...	...	1	11	68·83	+14·03	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4177.

A few very small faint spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Sept.23·435	0	9	0	5	117·7	+13·2	+ 1·1
24·429	0	5	0	3	119·6	+12·7	+ 16·1
25·439	4	36	2	20	118·9	+12·2	+ 28·7
Means ...	...	...	1	9	118·73	+12·70	...

Group 4178.

A pair of small double spots, *a* and *b*, on September 23. A short straight stream on September 25. *a* alone remains by September 26.

Sept.23·435	19	63	12	38	81·2	+ 1·1	− 35·4
24·429	15	72	8	40	81·5	+ 0·8	− 22·0
25·439	8	60	4	30	82·6	+ 0·1	− 7·6
26·394	0	8	0	4	84·6	+ 1·1	+ 7·0
27·433	2	4	1	2	84·9	+ 0·9	+ 21·0
Means ...	...	...	5	23	82·96	+ 0·80	...

Group 4179.

A pair of very small spots.

Sept.24·429	6	20	5	14	147·5	− 8·6	+ 44·0
Means ...	...	...	5	14	147·5	− 8·6	...

Group 4180.

A large regular spot, *a*, with occasionally a small companion.

Sept.24·429	38	174	80	366	26·2	+12·2	− 77·3
25·439	67	364	74	403	26·3	+12·2	− 63·9
26·394	91	472	72	375	26·3	+12·0	− 51·3
27·433	119	591	75	373	26·0	+11·8	− 37·9
28·428	135	696	75	385	26·2	+11·7	− 24·5
29·521	137	763	70	393	26·2	+11·7	− 10·1
30·468	131	793	66	400	26·2	+11·3	+ 2·4
Oct. 1·429	133	755	65	392	26·1	+11·2	+ 15·0
2·489	126	645	72	367	26·2	+11·3	+ 29·1
3·497	92	462	62	310	26·1	+11·1	+ 42·3
4·383	72	375	60	313	25·9	+11·1	+ 53·8
5·226	77	287	88	329	26·0	+11·0	+ 65·0
6·261	36	150	83	343	25·7	+10·6	+ 78·4
Means ...	...	...	72	365	26·11	+11·48	...

Group 4181.

Three small faint spots.

1895. d					°	°	°
Sept.25·439	0	55	0	29	87·9	−13·6	− 2·3
Means ...	...	...	0	29	87·9	−13·6	...

Group 4182.

A few very small spots on September 25. The group increases in size and has become a short stream, the leader of which, *a*, is a regular spot by September 26. *a* remains alone on September 28, but one or two companions are occasionally seen near it later.

Sept.25·439	0	37	0	24	51·3	+14·9	− 38·9
26·394	28	119	16	66	52·6	+15·6	− 25·0
27·433	46	251	24	131	52·9	+15·5	− 11·0
28·428	31	119	16	61	53·7	+15·5	+ 3·0
29·521	28	160	15	87	53·8	+15·6	+ 17·5
30·468	17	108	10	64	53·6	+15·3	+ 29·8
Oct. 1·429	22	73	15	50	54·3	+15·4	+ 43·2
2·489	15	72	14	66	55·0	+15·6	+ 57·9
3·497	6	45	9	66	54·5	+15·5	+ 70·7
4·383	0	6	0	21	55·0	+15·3	+ 82·9
Means ...	...	...	12	64	53·67	+15·42	∴

Group 4183.

A fine irregular stream *f* Group 4180. *a*, the leader on September 26, quickly diminishes, and two large composite spots, *b* and *c*, connected by a chain of small spots, form the chief feature of the group up to October 1, but it undergoes continual change, and *c* has broken up chiefly into two spots, *d* and *e*, by October 3, whilst *b* has disappeared by October 4.

Sept.25·439	0	21	0	55	9·5	+15·2	− 80·7
26·394	46	256	85	491	1·6	+15·3	− 76·0
27·433	71	490	77	527	1·1	+15·3	− 62·8
28·428	94	626	74	484	1·4	+15·6	− 49·3
29·521	141	774	87	474	2·0	+15·3	− 34·3
30·468	89	737	48	404	2·3	+15·4	− 21·5
Oct. 1·429	137	890	71	461	2·6	+15·4	− 8·5
2·489	157	1044	80	532	1·8	+15·5	+ 4·7
3·497	99	544	52	289	2·4	+14·9	+ 18·6
4·383	117	556	70	319	0·9	+14·8	+ 28·8
5·226	74	494	50	320	0·5	+14·7	+ 39·5
6·261	26	227	22	184	359·8	+13·9	+ 52·5
7·428	6	88	7	106	358·1	+13·2	+ 66·2
8·298	3	23	7	48	357·7	+12·8	+ 77·2
Means ...	...	...	52	335	1·55	+14·81	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4184.

A small regular spot, *a*, with occasionally one or two very small companions.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Sept. 25·439	0	7	0	32	9·2	−16·6	− 81·0
26·394	6	33	10	55	8·3	−17·2	− 69·3
27·433	10	65	10	64	9·2	−17·2	− 54·7
28·428	12	70	9	52	10·0	−17·4	− 40·7
29·521	16	55	10	34	10·2	−17·6	− 26·1
30·468	14	39	8	22	10·3	−17·6	− 13·5
Oct. 1·429	10	26	6	14	10·0	−17·7	− 1·1
2·489	9	23	5	13	10·0	−17·5	+ 12·9
3·497	3	16	2	10	10·5	−17·7	+ 26·7
Means ...	...	...	7	33	9·74	−17·39	...

Group 4185.

A few small spots *p* Group 4184 on September 26. The group rapidly increases and becomes a very fine complicated stream, principally consisting, on September 28, of three large composite spots, *a*, *b* and *c*, radiating from a common centre. By the succeeding day the group is practically one very large composite spot, the *p* portion tending to be regular, the *f* portion to be exceedingly complex. *a*, *b* and *c* are still recognisable, and new large spots, *d* and *e*, become defined later. The group continues to change, and disintegration sets in after October 2.

Sept. 26·394	4	34	4	32	23·9	−14·7	− 53·7
27·433	80	362	58	256	24·8	−15·0	− 39·1
28·428	260	1507	157	913	24·4	−14·7	− 26·3
29·521	372	2202	206	1223	24·3	−14·8	− 12·0
30·468	363	1991	198	1085	23·8	−15·2	0·0
Oct. 1·429	341	1952	191	1091	23·9	−15·4	+ 12·8
2·489	423	2824	258	1722	24·1	−15·5	+ 27·0
3·497	276	2075	199	1487	24·2	−15·8	+ 40·4
4·383	204	1483	184	1336	24·4	−16·0	+ 52·3
5·226	209	1016	268	1275	24·4	−16·0	+ 63·4
6·261	21	425	43	1226	25·0	−16·4	+ 77·7
Means ...	...	...	161	1059	24·29	−15·41	...

Group 4186.

A few very small faint spots.

Sept. 27·433	0	11	0	8	103·6	−16·2	+ 39·7
Means ...	...	...	0	8	103·6	−16·2	...

Group 4187.

A few very small spots in an irregular stream *f* Group 4183 on September 29. The group rapidly increases up to October 2, after which it declines again. Its general aspect is that of a very irregular stream of spots, without any dominant or stable members. It extends almost to touch Group 4183.

1895. d					°	°	°
Sept. 28·428	5	50	7	60	344·6	+18·1	− 66·1
29·521	6	77	5	63	344·5	+17·4	− 51·8
30·468	21	115	14	76	344·1	+17·4	− 39·7
Oct. 1·429	72	434	41	246	344·8	+16·7	− 26·3
2·489	90	780	46	403	346·5	+16·1	− 10·6
3·497	56	425	30	216	346·1	+16·1	+ 2·3
4·383	53	353	27	185	347·5	+15·5	+ 15·4
5·226	34	279	19	157	348·3	+15·3	+ 27·3
6·261	41	167	26	109	345·9	+15·4	+ 38·6
7·428	40	160	34	141	347·1	+15·5	+ 55·2
8·298	5	62	7	78	347·5	+15·2	+ 67·0
Means ...	...	...	23	158	346·08	+16·25	...

Group 4188.

Two very small faint spots.

Sept. 30·468	0	14	0	8	4·7	− 0·6	− 19·1
Means ...	...	...	0	8	4·7	− 0·6	...

Group 4189.

A number of distinct irregular spots in a stream short, broad and nearly continuous. *a*, the leader, is a large irregular composite spot. *b*, the last spot on October 4, is similar but smaller. The group undergoes many changes, *a* having divided into two parts, *c* and *d*, by October 7. *c* and *d* have become large and nearly regular by October 10, and make up the chief part of the group.

Sept. 30·468	4	38	10	91	304·0	+22·2	− 79·8
Oct. 1·429	27	111	32	136	304·6	+21·3	− 66·5
2·489	59	409	48	333	305·2	+21·4	− 51·9
3·497	65	350	42	228	305·0	+21·2	− 38·8
4·383	87	496	50	286	304·9	+21·3	− 27·2
5·226	154	748	83	402	304·8	+21·5	− 16·2
6·261	180	848	92	437	304·5	+21·0	− 2·8
7·428	130	652	69	345	305·3	+20·9	+ 13·4
8·298	121	613	69	347	305·7	+20·9	+ 25·2
9·206	107	535	68	344	306·1	+21·2	+ 37·6
10·221	84	395	69	318	306·4	+20·8	+ 51·3
11·467	21	136	28	176	306·5	+21·2	+ 67·9
12·524	0	19	0	55	306·2	+21·8	+ 81·5
Means ...	...	...	51	269	305·32	+21·28	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4190.

A pair of very small spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d Oct. 4·383	0	8	0	10	° 272·5	° −23·9	° − 59·6
Means ...	...	...	0	10	272·5	−23·9	...

Group 4191.

A few very small spots.

Oct. 5·226	1	41	1	23	295·6	+22·8	− 25·4
Means ...	...	...	1	23	295·6	+22·8	...

Group 4192.

A few small spots appearing suddenly near the central meridian on October 6. The group has greatly increased by the succeeding day, and become two parallel straight streams of spots. The group then diminishes, the two streams become irregular and confused with each other, all the spots become very small, except *a*, the leader on October 9, and finally, on October 11, *a* remains alone.

Oct. 6·261	29	153	14	76	311·4	− 1·5	+ 4·1
7·428	124	514	67	279	313·0	− 1·4	+ 21·1
8·298	67	290	40	175	313·9	− 2·0	+ 33·4
9·206	46	206	35	149	314·3	− 2·0	+ 45·8
10·221	18	100	19	104	315·7	− 2·6	+ 60·6
11·467	3	14	7	39	317·6	− 3·1	+ 79·0
Means ...	...	...	30	137	314·32	− 2·1	...

Group 4193.

A small spot *sf* Group 4189.

Oct. 12·524	6	14	5	12	278·3	+18·4	+ 53·6
Means ...	...	...	5	12	278·3	+18·4	...

Group 4194.

Three very small faint spots.

Oct. 12·524	0	25	0	17	261·9	−15·5	+ 37·2
Means ...	...	...	0	17	261·9	−15·5	...

Group 4195.

A small spot, *a*, followed by a few small companions on October 12 and 13.

1895. d Oct. 12·524	9	33	5	18	° 228·0	° −17·2	° + 3·3
13·221	20	77	11	43	228·7	−16·8	+ 13·1
14·530	4	14	3	9	231·3	−16·9	+ 33·0
Means ...	...	...	6	23	229·33	−16·97	...

Group 4196.

One or two very small unstable spots.

Oct. 12·524	8	25	4	14	208·2	−19·5	− 16·5
13·221	4	12	2	7	208·6	−19·0	− 7·0
14·530	2	7	1	4	209·7	−18·3	+ 11·4
15·533	1	6	1	3	209·5	−18·3	+ 24·4
Means ...	...	...	2	7	209·00	−18·78	...

Group 4197.

A regular spot, *a*, followed, October 14–19, by a few very small spots in a straight stream.

Oct. 12·524	9	26	12	36	155·5	+14·3	− 69·2
13·221	13	39	13	39	155·1	+14·1	− 60·5
14·530	18	156	13	106	156·2	+13·6	− 42·1
15·533	25	178	15	103	156·9	+13·8	− 28·2
16·665	30	190	16	100	156·5	+13·7	− 13·6
17·435	44	191	23	97	158·1	+13·7	− 1·8
18·539	29	135	15	71	158·4	+13·3	+ 13·0
19·242	23	63	12	35	158·6	+13·5	+ 22·5
20·181	11	44	7	27	158·8	+13·3	+ 35·1
21·223	10	30	7	23	158·5	+13·1	+ 48·6
22·278	0	22	0	24	158·2	+13·0	+ 62·2
Means ...	...	...	12	60	157·35	+13·58	...

Group 4198.

Four very small spots in a straight stream.

Oct. 13·221	0	19	0	16	268·2	+ 8·5	+ 52·6
Means ...	...	...	0	16	268·2	+ 8·5	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4199.

Three faint ill-defined spots on October 14. The last has disappeared by October 15.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Oct. 14·530	0	66	0	35	219·4	+ 7·8	+21·1
15·533	2	15	1	9	219·7	+ 7·5	+34·6
Means ...	...	...	1	22	219·55	+ 7·65	...

Group 4200.

A diminishing spot, *a*, with a small companion on October 15.

Oct. 15·533	5	37	7	50	119·2	−15·2	− 65·9
16·665	4	22	3	19	120·5	−15·3	− 49·6
17·435	4	14	3	10	120·9	−15·1	− 39·0
Means ...	...	...	4	26	120·20	−15·20	...

Group 4201.

A pair of small spots, *a* and *b*, on October 19. The group rapidly increases in size on the succeeding days, and becomes a fine stream, of which *a* and *b*, now two large composite spots, are the first and last. Later, *a* becomes regular, and *b* divides into two spots, *c* and *d*. On October 29 the group consists almost entirely of six well-defined spots, *a*, *c*, *d*, *e*, *f* and *g*.

Oct. 19·242	8	34	9	43	68·6	+11·1	− 67·5
20·181	93	310	79	261	70·0	+10·9	− 53·7
21·223	208	1029	135	669	70·6	+11·1	− 39·3
22·278	312	1318	175	735	71·0	+11·0	− 25·0
23·204	306	1514	157	783	71·4	+11·3	− 12·5
24·436	275	1504	139	763	71·8	+11·3	+ 4·2
25·434	228	1313	120	694	72·0	+11·0	+ 17·5
26·173	220	1203	123	679	71·9	+10·8	+ 27·2
27·199	178	956	118	636	71·8	+11·0	+ 40·6
28·453	117	690	109	645	72·5	+10·5	+ 57·9
29·200	90	478	118	621	72·5	+ 9·7	+ 67·7
30·517	0	42	0	138	69·4	+11·1	+ 82·0
Means ...	...	...	107	556	71·13	+10·90	...

Group 4202.

A very small spot, *a*, on October 20 *n* of Group 4201. A second, *b*, forms a pair with it on October 21. *b* remains alone on October 22. The group has expanded into a short stream by October 24, after which it diminishes again.

Oct. 20·181	0	4	0	4	70·0	+15·7	−53·7
21·223	8	22	5	15	69·7	+15·8	−40·2
22·278	2	10	1	6	68·4	+15·9	−27·6

Group 4202—*continued.*

1895. d					°	°	°
Oct. 23·204	4	18	2	10	68·7	+16·5	−15·2
24·436	9	62	4	32	70·2	+16·2	+ 2·6
25·434	7	35	4	18	69·9	+16·7	+15·4
26·173	0	22	0	12	69·7	+16·3	+25·0
Means ...	...	...	2	14	69·51	+16·16	...

Group 4203.

Three small spots, *a*, *b* and *c*. *a* has disappeared by October 23, *b* by October 24. Two very small spots precede *c* on October 25.

Oct. 21·223	0	9	0	22	33·2	−15·3	− 76·7
22·278	5	24	7	31	31·6	−14·2	− 64·4
23·204	3	31	3	28	31·5	−13·9	− 52·4
24·436	7	30	5	20	31·1	−13·9	− 36·5
25·434	2	17	1	9	34·3	−14·3	− 20·2
Means ...	...	...	3	22	32·34	−14·32	...

Group 4204.

A very small spot.

Oct. 22·278	0	2	0	1	88·3	− 9·8	− 7·7
Means ...	...	...	0	1	88·3	− 9·8	...

Group 4205.

A large double spot, *a*. It has divided into two large spots, *b* and *c*, by October 24. *b* becomes more regular day by day. *c* tends to disintegrate, and a number of small spots are thrown off from it, or form round it.

Oct. 22·278	37	237	66	423	24·7	−16·6	− 71·3
23·204	52	311	57	339	24·5	−16·5	− 59·4
24·436	78	460	58	341	24·9	−16·2	− 42·7
25·434	87	566	55	353	24·7	−16·5	− 29·8
26·173	138	662	79	381	24·1	−16·6	− 20·6
27·199	93	643	51	349	24·4	−16·8	− 6·8
28·453	97	572	53	313	24·4	−16·6	+ 9·8
29·200	89	445	51	255	24·3	−16·9	+ 19·5
30·517	69	377	46	254	24·4	−16·7	+ 37·0
31·223	69	303	55	240	24·4	−17·3	+ 46·4
Nov. 1·437	36	212	43	251	24·2	−17·2	+ 62·2
2·166	14	164	26	291	24·0	−17·5	+ 71·5
Means ...	...	...	53	316	24·42	−16·78	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4206.

An irregular but fairly compact cluster of somewhat unstable spots. The group undergoes frequent change, and diminishes very rapidly after October 27. The measures on October 25 and 27 are uncertain, as the group appears blurred on the photographs on those days.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Oct. 22·278	20	156	29	332	24·6	+14·1	−71·4
23·204	25	188	23	184	24·8	+14·3	−59·1
24·436	36	230	23	155	25·1	+13·9	−42·5
25·434	33	188	19	109	25·4	+14·0	−29·1
26·173	63	265	34	143	25·0	+13·8	−19·7
27·199	66	515	34	265	24·9	+14·5	− 6·3
28·453	29	163	14	84	25·7	+13·8	+11·1
29·200	13	61	7	33	25·9	+13·8	+21·1
30·517	2	11	1	7	25·7	+14·0	+38·3
31·223	0	8	0	6	26·7	+13·4	+48·7
Means ...	...	...	18	132	25·38	+13·96	...

Group 4207.

An irregular cluster immediately *s* of Group 4206. *a*, *b* and *c* are the principal spots. *b* increases in size and becomes a large composite spot, measured in two portions on October 31. The other spots diminish and die out. The measures on October 25 are uncertain, as the group appears blurred on the photograph on that day.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Oct. 22·278	22	217	37	267	22·5	+10·5	−73·5
23·204	26	203	26	207	23·0	+10·5	−60·9
24·436	35	228	24	156	24·2	+10·2	−43·4
25·434	29	169	17	98	24·8	+10·2	−29·7
26·173	66	336	34	178	25·2	+ 9·5	−19·5
27·199	80	327	40	165	26·7	+ 9·1	− 4·5
28·453	62	371	32	191	27·1	+ 8·6	+12·5
29·200	55	301	30	163	27·4	+ 8·4	+22·6
30·517	40	145	27	97	29·3	+ 8·0	+41·9
31·223	35	116	29	93	29·9	+ 7·9	+51·9
Nov. 1·437	20	98	27	130	30·1	+ 8·8	+68·1
2·166	11	67	26	164	31·2	+ 8·9	+78·7
Means ...	...	...	29	159	26·78	+ 9·22	...

Group 4208.

A fine but broken stream, consisting usually of two distinct clusters. *a*, the leader, is a large regular spot. Other principal spots are *b*, *c* and *d*, of which *d* is the largest. *b* and *c* soon break up and disappear, and after October 30 the group consists of *a*, followed at a distance by a long but very sparse and scattered stream of small spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Oct. 24·436	51	447	73	760	354·1	+17·5	−73·5
25·434	112	688	108	687	354·9	+17·8	−59·6
26·173	177	840	138	666	354·4	+17·8	−50·3

Group 4208—*continued.*

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Oct. 27·199	117	696	75	443	356·0	+17·8	−35·2
28·453	137	801	75	437	355·8	+18·1	−18·8
29·200	123	677	64	354	356·4	+18·0	− 8·4
30·517	125	909	67	362	356·1	+18·4	+ 8·7
31·223	133	575	74	315	357·1	+17·9	+19·1
Nov. 1·437	99	505	64	319	357·0	+17·8	+35·0
2·166	99	449	72	324	357·1	+17·7	+44·6
3·220	55	231	57	234	358·7	+17·9	+60·1
4·212	35	136	71	269	1·3	+17·9	+75·8
Means ...	...	...	78	431	356·63	+17·68	...

Group 4209.

A small spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Oct. 24·436	0	11	0	17	356·5	− 1·7	−71·1
25·434	2	13	2	12	356·7	− 2·9	−57·8
Means ...	...	...	1	15	356·60	− 2·30	...

Group 4210.

A very small spot on October 28. The group rapidly increases in size and becomes a fine stream, which undergoes constant and striking change. On October 30 it consists chiefly of two large spots, *a* and *b*, connected by a chain of small spots. Other well-defined spots, *c*, *d*, *e*, *f* and *g*, form on the succeeding days. *e* is measured as two large spots on November 2 and 3. The stream is wedge-shaped on November 2. On November 5 the group consists chiefly of two very large spots, *a*, and a spot formed by the temporary union of *b* and *e*.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Oct. 28·453	0	2	0	2	319·9	+ 9·0	−54·7
29·200	29	152	20	104	321·8	+ 9·7	−43·0
30·517	95	500	54	277	323·6	+10·3	−23·8
31·223	138	615	73	319	323·4	+10·0	−14·6
Nov. 1·437	154	938	80	474	323·9	+ 9·7	+ 1·9
2·166	256	1225	131	630	324·0	+ 9·7	+11·5
3·220	369	1367	210	769	324·6	+ 9·3	+26·0
4·212	295	1601	195	1047	325·3	+ 9·5	+39·8
5·248	169	1239	142	1034	324·9	+ 8·7	+53·1
6·423	70	455	102	675	326·7	+ 8·8	+70·4
7·291	10	169	19	464	324·8	+ 8·9	+79·9
Means ...	...	...	93	527	323·90	+ 9·42	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4211.

A fine stream which undergoes constant and striking change. The leader, *a*, is throughout the principal member of the group, and has become very large by November 6. It is usually regular in shape. The following spots are generally small and numerous, following *a* in a straight stream.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Oct. 29·200	13	66	26	166	285·5	+12·0	−79·3
30·517	49	331	47	325	287·9	+12·0	−59·5
31·223	113	598	86	459	288·8	+11·7	−49·2
Nov. 1·437	106	634	62	377	290·2	+11·5	−31·8
2·166	136	677	74	370	290·0	+11·4	−22·5
3·220	220	997	112	512	289·8	+11·7	−8·8
4·212	235	1367	119	695	290·8	+11·6	+5·3
5·248	297	1370	160	735	291·8	+10·8	+20·0
6·423	131	816	85	523	293·9	+10·7	+37·6
7·291	144	742	110	566	293·5	+11·0	+48·6
8·229	121	588	128	615	293·8	+11·0	+61·2
9·447	43	207	94	454	293·9	+11·5	+77·4
Means ...	...	...	92	483	290·83	+11·41	...

Group 4212.

A few small spots in an irregular stream. The group undergoes constant change as to the size, number, and arrangement of its members. It is not seen on November 2.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Oct. 31·223	0	8	0	12	268·5	−12·1	−69·5
Nov. 1·437	0	15	0	13	269·7	−12·1	−52·3
2·166	0	0	0	0	...	...	...
3·220	23	50	14	31	265·2	−11·2	−33·4
4·212	36	109	20	60	266·2	−11·2	−19·3
5·248	58	176	31	91	266·8	−11·3	−5·0
6·423	19	134	10	73	268·0	−11·5	+11·7
7·291	63	178	36	101	267·5	−11·0	+22·6
8·229	17	73	10	46	268·8	−11·3	+36·2
Means ...	...	...	13	47	267·59	−11·46	...

Group 4213.

Four very small spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Nov. 2·166	2	21	1	11	308·7	−7·3	−3·8
Means ...	...	...	1	11	308·7	−7·3	...

Group 4214.

A small spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Nov. 2·166	0	13	0	29	236·7	−13·6	−75·8
3·220	3	12	5	14	235·7	−13·8	−62·9
4·212	0	4	0	3	235·6	−14·3	−49·9
Means ...	...	...	2	15	236·00	−13·90	...

Group 4215.

A few very small unstable spots *s* Group 4213. The group is not seen November 5–7.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Nov. 3·220	2	17	3	26	230·8	−18·0	−67·8
4·212	0	8	0	7	233·1	−18·7	−52·4
5·248	0	0	0	0	...	...	...
6·423	0	0	0	0	...	...	...
7·291	0	0	0	0	...	...	...
8·229	4	22	2	12	229·2	−18·6	−3·4
Means ...	...	...	1	8	231·03	−18·43	...

Group 4216.

A few small unstable spots irregularly arranged. The group undergoes constant change, and is not seen on November 16 and 18.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Nov. 10·223	2	4	2	6	138·1	+16·2	−68·1
11·404	3	28	3	23	139·1	+15·3	−51·6
12·623	0	15	0	10	138·9	+17·8	−35·8
13·416	16	101	10	56	141·4	+17·1	−22·8
14·416	7	53	4	27	141·7	+16·4	−9·3
15·271	4	22	2	11	143·2	+17·1	+3·5
16·469	0	0	0	0	...	...	...
17·570	2	21	1	12	140·4	+16·1	+30·9
18·510	0	0	0	0	...	...	...
19·491	4	15	4	14	140·1	+15·9	+56·0
20·311	2	12	3	15	139·5	+16·0	+66·2
Means ...	...	...	3	16	140·27	+16·43	...

Group 4217.

A small spot.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
Nov. 12·623	4	31	2	19	140·3	−3·0	−34·4
Means ...	...	...	2	19	140·3	−3·0	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4218.

A large regular spot, *a*, followed by a few small spots in a short irregular stream. *b* is the most stable spot of the following stream. *a* has become a double spot by November 18, and has thrown off a portion *c* by November 19.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Nov. 13·416	19	119	35	215	90·6	− 5·2	− 73·6
14·416	46	282	48	294	90·0	− 5·7	− 61·0
15·271	72	344	56	270	89·8	− 5·4	− 49·9
16·469	62	374	38	228	90·8	− 5·6	− 33·1
17·570	72	401	38	213	91·1	− 5·7	− 18·4
18·510	60	329	30	168	92·0	− 5·5	− 5·1
19·491	54	307	27	158	92·5	− 5·3	+ 8·4
20·311	55	207	30	111	92·4	− 5·3	+ 19·1
21·311	41	184	24	110	92·7	− 5·4	+ 32·6
22·327	35	173	26	125	92·7	− 5·5	+ 46·0
23·171	15	101	14	94	93·0	− 5·8	+ 57·5
24·234	10	50	16	81	93·1	− 6·2	+ 71·6
Means ...	...	...	32	172	91·73	− 5·55	...

Group 4219.

A small spot, *a*, with a few very unstable small companions.

Nov. 14·416	5	43	3	27	119·4	− 9·9	− 31·6
15·271	33	100	19	54	120·5	−10·9	− 19·2
16·469	7	41	4	21	120·4	−12·3	− 3·5
17·570	2	17	1	9	120·8	−12·3	+ 11·3
Means ...	...	...	7	28	120·28	−11·35	...

Group 4220.

A few small unstable spots irregularly scattered. The group undergoes constant change, and is not seen on November 21.

Nov. 14·416	6	35	11	71	75·0	+10·6	− 76·0
15·271	9	52	10	61	75·2	+11·3	− 64·5
16·469	6	73	5	55	75·8	+11·2	− 48·1
17·570	16	64	10	40	73·1	+11·4	− 36·4
18·510	2	19	1	10	74·5	+11·4	− 22·6
19·491	0	24	0	13	74·0	+10·4	− 10·1
20·311	0	16	0	8	75·7	+11·6	+ 2·4
21·311	0	0	0	0	...	...	...
22·327	17	88	9	52	77·1	+14·1	+ 30·4
23·171	0	5	0	4	75·3	+15·2	+ 39·8
Means ...	...	...	5	31	74·08	+11·91	...

Group 4221.

A large regular spot, *a*, usually with a few small unstable companions.

1895. d					°	°	°
Nov. 14·416	22	99	68	306	70·4	− 2·4	− 80·6
15·271	72	224	103	321	70·3	− 2·1	− 69·4
16·469	54	317	45	265	70·8	− 2·6	− 53·1
17·570	86	471	55	305	70·3	− 2·7	− 39·2
18·510	82	422	46	238	71·2	− 3·0	− 25·9
19·491	86	445	44	231	71·8	− 3·2	− 12·3
20·311	94	458	47	228	72·1	− 2·8	− 1·2
21·311	108	457	55	235	72·2	− 2·8	+ 12·1
22·327	81	357	46	200	72·9	− 2·8	+ 26·2
23·171	78	316	50	200	73·3	− 2·7	+ 37·8
24·234	45	219	37	180	74·0	− 2·8	+ 52·5
25·213	30	146	37	179	74·4	− 2·9	+ 65·8
26·476	10	59	36	216	73·9	− 2·6	+ 82·0
Means ...	...	...	51	239	72·12	− 2·72	...

Group 4222.

A pair of small spots.

Nov. 16·469	4	48	2	28	147·9	−17·1	+ 24·0
Means ...	...	...	2	28	147·9	−17·1	...

Group 4223.

Three very small spots near the place of Group 4217.

Nov. 17·570	0	29	0	18	143·2	− 2·9	+ 33·7
Means ...	...	...	0	18	143·2	− 2·9	...

Group 4224.

Three very small spots.

Nov. 17·570	0	33	0	17	105·7	+ 2·5	− 3·8
Means ...	...	...	0	17	105·7	+ 2·5	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4225.

Four very small spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Nov. 17·570	4	47	2	24	96·8	−15·0	− 12·7
Means ...	...	...	2	24	96·8	−15·0	...

Group 4226.

A large regular spot, *a*, with a very small companion on November 27.

Nov. 18·510	8	74	17	159	21·6	−16·2	− 75·5
19·491	21	123	24	144	21·3	−15·9	− 62·8
20·311	32	171	28	149	20·7	−15·5	− 52·6
21·311	45	220	30	149	20·9	−15·3	− 39·2
22·327	54	223	31	130	20·6	−15·6	− 26·1
23·171	52	236	28	128	20·5	−15·4	− 15·0
24·234	46	240	24	125	20·5	−15·4	− 1·0
25·213	50	205	27	110	20·8	−15·6	+ 12·2
26·476	43	188	26	113	20·9	−15·3	+ 29·0
27·192	22	143	15	96	21·4	−15·7	+ 38·7
28·212	17	87	14	73	21·1	−15·5	+ 51·9
29·316	7	54	10	68	20·4	−15·4	+ 65·8
30·191	0	12	0	28	20·1	−15·6	+ 77·0
Means ...	...	...	21	113	20·83	−15·57	...

Group 4227.

A very small spot *np* Group 4221.

Nov. 20·311	0	4	0	2	81·0	− 1·5	+ 7·7
Means ...	...	...	0	2	81·0	− 1·5	...

Group 4228.

A small spot *s* Group 4221.

Nov. 20·311	4	24	2	13	70·9	−18·7	− 2·4
Means ...	...	...	2	13	70·9	−18·7	...

Group 4229.

A regular spot, *a*, with one or two very small companions after November 23.

1895. d					°	°	°
Nov. 20·311	7	50	14	92	359·3	+19·2	−74·0
21·311	14	67	14	70	0·1	+19·0	−60·0
22·327	19	89	15	67	0·1	+18·6	−46·6
23·171	17	76	11	49	359·8	+18·7	−35·7
24·234	20	71	11	40	359·8	+18·8	−21·7
25·213	19	87	10	46	359·5	+18·4	− 9·1
26·476	15	51	8	28	359·4	+18·7	+ 7·5
27·192	8	51	4	28	0·0	+19·0	+17·3
28·212	10	20	6	12	0·0	+18·9	+30·8
29·316	3	16	2	12	359·9	+19·2	+45·3
Means ...	...	...	10	44	359·79	+18·85	...

Group 4230.

An irregular spot, *a*, with a close companion, *b*, on November 23, and a second companion which is very faint. *a* diminishes from day to day, and has become regular by November 25. A very small companion is seen near it on November 28.

Nov. 22·327	6	45	13	93	330·4	+ 8·9	− 76·3
23·171	11	87	12	102	330·5	+ 9·3	− 65·0
24·234	19	68	15	54	330·9	+ 9·1	− 50·6
25·213	18	55	11	34	331·3	+ 9·0	− 37·3
26·476	11	36	6	19	331·5	+ 8·4	− 20·4
27·192	6	35	3	18	331·9	+ 8·1	− 10·8
28·212	5	25	2	12	331·7	+ 8·3	+ 2·5
29·316	1	13	1	7	332·1	+ 8·0	+ 17·5
Means ...	...	...	8	42	331·29	+ 8·64	...

Group 4231.

Two regular spots, *a* and *b*, close together. They are accompanied by a small companion on November 25, and by two very small ones on November 28. *a* and *b* are measured together on November 29. They diminish rapidly after that date, and *a* has disappeared by December 2.

Nov. 25·213	29	117	52	211	294·7	+12·0	−73·9
26·476	47	206	42	188	295·7	+11·8	−56·2
27·192	56	234	42	174	296·3	+11·6	−46·4
28·212	67	279	41	169	296·3	+12·1	−32·9
29·316	60	342	32	184	296·6	+11·9	−18·0
30·191	59	300	30	154	297·0	+11·7	− 6·1
Dec. 1·221	51	248	26	128	297·6	+11·9	+ 8·1
2·477	37	197	21	111	298·1	+11·4	+25·1
3·222	36	128	23	80	298·4	+11·4	+35·3
4·280	9	27	7	21	298·9	+11·3	+49·7
5·216	3	19	3	21	298·8	+11·2	+62·0
Means ...	...	...	29	131	297·13	+11·66	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4232.

A pair of very small faint spots.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d Nov. 26·476	0	17	0	9	° 0·2	° +12·6	° + 8·3
Means ...	...	...	0	9	0·2	+12·6	...

Group 4233.

A pair of very small faint spots.

Dec. 1·221	0	10	0	15	219·1	− 8·7	− 70·4
Means ...	...	...	0	15	219·1	− 8·7	...

Group 4234.

An irregular stream forming suddenly, increasing rapidly, and diminishing as quickly. *a*, the leader, is a large spot; *b*, the last spot, is of considerable size on December 3.

Dec. 2·477	33	254	20	151	302·4	−13·9	+29·4
3·222	73	476	50	321	303·0	−13·8	+39·9
4·280	44	262	40	239	304·4	−13·8	+55·2
5·216	22	111	31	155	305·1	−13·5	+68·3
Means ...	...	...	35	217	303·73	−13·75	...

Group 4235.

A pair of very small spots on December 2. The group rapidly increases in size, and has become by December 3 a number of spots closely following each other in a straight stream. The two principal spots, *a* and *b*, are stable. The smaller spots between them soon die out.

Dec. 2·477	2	24	1	12	265·4	+ 2·9	− 7·6
3·222	33	168	17	84	267·4	+ 2·0	+ 4·3
4·280	72	288	37	153	267·9	+ 2·1	+18·7
5·216	46	200	28	119	269·2	+ 1·8	+32·4
6·498	29	137	24	112	271·9	+ 2·3	+52·0
7·470	20	99	25	119	272·8	+ 2·5	+65·6
8·273	9	54	23	137	275·2	+ 2·3	+78·6
Means ...	...	...	22	105	269·97	+ 2·27	...

Group 4236.

A pair of small spots on December 5. On December 6 two small spots close together, *a* and *b*, and a small regular spot, *c*, the latter corresponding to the pair seen the previous day. *b* alone remains by December 8. It is followed by some very small companions on December 10 and 11, and undergoes several changes as to its area.

1895. d Dec. 5·216	2	19	2	21	° 174·3	° − 6·5	° − 62·5
6·498	20	88	14	61	177·1	− 6·8	− 42·8
7·470	23	93	13	54	178·4	− 6·8	− 28·8
8·273	6	28	3	14	182·1	− 6·3	− 14·5
9·240	18	40	9	20	183·6	− 6·0	− 0·2
10·372	9	34	4	18	183·7	− 6·6	+ 14·8
11·272	18	92	10	53	186·1	− 5·9	+ 29·1
12·430	12	101	8	72	186·5	− 5·9	+ 44·7
13·474	9	46	9	45	186·6	− 6·0	+ 58·6
14·236	12	45	16	62	186·7	− 6·1	+ 68·7
Means ...	...	...	9	42	182·51	− 6·29	...

Group 4237.

A small faint spot on December 5 *s* of Group 4236. Another spot, *a*, on December 6 and 7. *a* is followed by a few very small companions on December 8.

Dec. 5·216	0	21	0	29	169·0	−11·4	− 67·8
6·498	2	17	1	13	172·4	−11·9	− 47·5
7·470	0	10	0	7	172·8	−12·9	− 34·[illegible]
8·273	0	22	0	12	170·8	−12·5	− 25·8
Means ...	...	...	1	15	171·25	−12·18	...

Group 4238.

A long irregular straggling group, in three principal clusters, none of which are large, but of which the first is the most important, and alone remains by December 10. The individual spots are nearly all small and unstable.

Dec. 5·216	13	36	33	94	158·4	−14·4	− 78·4
6·498	16	92	18	106	157·0	−15·3	− 62·9
7·470	22	199	17	160	157·2	−15·3	− 50·0
8·273	20	166	13	113	155·9	−15·4	− 40·7
9·240	20	95	12	56	156·0	−15·5	− 27·8
10·372	18	61	10	32	157·8	−15·3	− 11·1
11·272	11	38	6	20	158·0	−15·3	+ 1·0
Means ...	...	...	16	83	157·19	−15·21	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4239.

A large composite spot, *a*, followed at first by a few small spots in a straggling stream. *a* has become regular, and the smaller spots have disappeared by December 12. *a* is again attended by a small companion on December 13 and 18.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Dec. 6·498	7	49	16	116	142·4	−10·0	−77·5
7·470	35	164	43	203	141·5	−11·4	−65·7
8·273	52	245	46	223	140·9	−11·5	−55·7
9·240	66	308	47	212	141·6	−11·4	−42·2
10·372	84	383	48	220	141·9	−12·3	−27·0
11·272	75	304	40	161	143·2	−12·4	−13·8
12·430	59	313	30	161	143·7	−12·6	+ 1·9
13·474	53	298	28	157	143·3	−12·8	+15·3
14·236	49	260	28	148	143·5	−12·8	+25·5
15·275	47	206	31	135	143·4	−13·0	+39·1
16·201	40	165	33	136	143·7	−13·3	+51·7
17·193	17	124	20	145	143·3	−13·3	+64·3
18·201	5	49	13	122	144·1	−13·8	+78·4
Means ...	...	...	33	165	142·81	−12·35	...

Group 4240.

A number of spots in an irregular stream, mostly divided into two clusters. The leader, *a*, is a composite spot. A second composite spot, *b*, has formed at the end of the stream by December 9. The other spots are small, and the group as a whole undergoes much change.

Dec. 6·498	5	26	15	77	139·9	−18·7	− 80·0
7·470	15	72	20	95	140·7	−18·8	− 66·5
8·273	13	111	12	112	138·0	−19·0	− 58·6
9·240	33	212	26	167	136·0	−19·0	− 47·8
10·372	47	294	31	188	134·5	−20·1	− 34·4
11·272	33	323	19	187	134·1	−20·2	− 22·9
12·430	16	163	9	88	134·1	−20·8	− 7·7
13·474	15	117	8	63	136·4	−20·6	+ 8·4
14·236	17	75	10	43	137·0	−19·7	+ 19·0
Means ...	...	...	17	113	136·74	−19·66	...

Group 4241.

A fine but irregular and straggling stream. Three large spots, *a*, *b* and *c*, slightly connected by lines of very small spots, are its chief features. *b* has broken up by December 13, and *c* by December 14, but the principal portion of *c* is still recognisable. *a* has become regular by December 14. The small spots disappear, and *a* alone remains by December 17.

Dec. 7·470	13	69	33	178	129·1	+18·7	− 78·1
8·273	37	124	56	190	127·0	+19·1	− 69·6
9·240	66	329	80	391	120·9	+19·2	− 62·9

Group 4241—*continued.*

1895. d					°	°	°
Dec. 11·272	161	743	106	492	120·9	+19·5	− 36·1
12·430	79	636	46	365	121·5	+19·1	− 20·3
13·474	87	656	47	353	122·0	+18·8	− 6·0
14·236	86	434	46	234	123·2	+19·0	+ 5·2
15·275	55	289	31	165	125·8	+18·2	+ 21·5
16·201	47	231	30	148	125·9	+18·5	+ 33·9
17·193	30	155	24	124	126·9	+18·7	+ 47·9
18·201	22	112	25	124	126·8	+18·7	+ 61·1
19·310	4	49	10	116	127·6	+18·9	+ 76·5
Means ...	...	...	49	260	124·43	+18·89	...

Group 4242.

A slowly diminishing regular spot, *a*. It is attended by one very small companion on December 10 and 16, and by several on December 14.

Dec. 8·273	4	28	8	55	122·1	−21·9	− 74·5
9·240	15	73	16	80	123·1	−21·9	− 60·7
10·372	17	85	13	66	122·7	−22·6	− 46·2
11·272	19	77	12	50	123·3	−22·3	− 33·7
12·430	18	66	10	38	123·9	−22·8	− 17·9
13·474	11	50	6	27	123·8	−22·8	− 4·2
14·236	13	83	7	44	120·9	−24·5	+ 2·9
15·275	14	39	8	22	123·5	−22·5	+ 19·2
16·201	10	36	6	22	124·1	−21·8	+ 32·1
17·193	2	14	2	10	123·5	−22·4	+ 44·5
Means ...	...	...	9	41	123·09	−22·55	...

Group 4243.

A spot, *a*, which, at times regular, undergoes several changes of shape and size. It is frequently accompanied by a small companion. The group has undergone a sudden revival by December 16, and is then a short irregular stream of small spots, *b* and *c* being the principal.

Dec. 9·240	19	54	44	125	107·1	−21·2	− 76·7
10·372	21	76	24	86	106·8	−21·7	− 62·1
11·272	23	85	19	70	107·7	−21·4	− 49·3
12·430	24	99	15	64	108·2	−21·9	− 33·6
13·474	26	91	15	52	107·9	−22·2	− 20·1
14·236	23	82	13	45	106·8	−22·4	− 11·2
15·275	0	45	0	24	106·6	−22·3	+ 2·3
16·201	24	130	13	71	107·9	−20·7	+ 15·9
17·193	21	158	13	96	108·8	−20·6	+ 29·8
18·201	7	49	6	36	109·5	−20·4	+ 43·8
19·310	0	17	0	18	110·8	−20·4	+ 59·7
Means ...	...	...	15	62	108·01	−21·38	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Date. Greenwich Civil Time.	Projected Area of		Area for Group.		Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
	Umbra.	Whole Spot.	Umbra.	Whole Spot.			
Group 4244. A small faint spot *of* Group 4238. The Groups 4238, 4240, 4242, 4243, 4244 follow each other in one almost continuous stream.							
1895. d Dec. 10·372	0	16	0	9	° 148·3	° −19·3	° − 20·6
Means ...	...	...	0	9	148·3	−19·3	...
Group 4245. A few small spots in a short straight stream.							
Dec. 11·272	5	42	3	26	190·4	−13·9	+ 33·4
Means ...	...	...	3	26	190·4	−13·9	...
Group 4246. A pair of small spots on December 11. The group is not seen on December 12 and 13, but a single very small spot is seen on December 14.							
Dec. 11·272	0	34	0	19	135·0	−13·2	− 22·0
12·430	0	0	0	0	...	...	...
13·474	0	0	0	0	...	...	...
14·236	0	8	0	4	136·9	−13·5	+ 18·9
Means ...	...	...	0	6	135·95	−13·35	...
Group 4247. A fine group appearing suddenly near the central meridian. It consists of two principal spots, *a* and *b*, connected by a sparse stream of small spots. *a* is a large elliptical spot, *b* tends to divide.							
Dec. 12·430	46	274	26	153	116·3	+ 4·2	− 25·5
13·474	97	554	50	285	117·2	+ 4·1	− 10·8
14·236	110	586	55	295	117·3	+ 4·3	− 0·7
15·275	105	512	54	265	118·2	+ 4·3	+ 13·9
16·201	66	419	38	237	118·8	+ 4·3	+ 26·8
17·193	63	305	42	201	118·7	+ 4·4	+ 39·7
18·201	43	236	38	204	119·7	+ 4·4	+ 54·0
19·310	5	103	8	151	120·9	+ 4·5	+ 69·8
Means ...	...	...	39	224	118·39	+ 4·31	...
Group 4248. A small spot, *a*, on December 13. It has thrown off a small fragment, and is followed by a short stream of small spots by December 14. By December 16 *a* alone remains, but it is again attended by two very small companions on December 19.							
1895. d Dec. 13·474	4	23	4	24	° 67·1	° +10·6	° − 60·9
14·236	16	61	14	53	64·8	+11·5	− 53·2
15·275	5	38	3	25	66·2	+11·6	− 38·1
16·201	5	25	3	14	67·8	+11·3	− 24·2
17·193	14	26	7	13	67·5	+11·4	− 11·5
18·201	9	18	4	9	68·0	+11·7	+ 2·3
19·310	0	30	0	17	68·7	+11·8	+ 17·6
Means ...	...	...	5	22	67·16	+11·41	...
Group 4249. A very small faint spot.							
Dec. 16·201	0	7	0	4	90·3	+ 6·7	− 1·7
Means ...	...	...	0	4	90·3	+ 6·7	...
Group 4250. A large regular spot, *a*, usually attended by one or two small companions.							
Dec. 16·201	0	122	0	289	15·2	+15·8	− 76·8
17·193	38	247	47	300	14·6	+16·2	− 64·4
18·201	71	346	59	285	15·5	+16·3	− 50·2
19·310	77	345	50	224	16·0	+16·5	− 35·1
20·273	72	363	41	208	16·1	+16·7	− 22·4
21·188	66	375	35	201	16·5	+16·7	− 9·9
22 268	68	362	36	190	16·3	+16·5	+ 4·2
23·519	59	301	34	171	16·6	+16·2	+ 20·8
24·324	48	275	30	172	16·8	+16·0	+ 31·7
25·191	46	224	33	163	17·0	+15·6	+ 43·3
26·152	36	163	35	155	16·9	+15·6	+ 55·5
27·266	22	92	38	154	17·7	+15·4	+ 71·3
Means ...	...	...	37	209	16·27	+16·13	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4251.

A number of small spots in a short stream on December 18. The group has greatly increased by the succeeding day, when it consists chiefly of two large composite spots, *a* and *b*. *b* is the less compact, and is measured in four parts. *a* has become a large regular spot by December 21, and *b* has greatly diminished, and is represented by a pair of spots, *c* and *d*, which have disappeared by December 23, when *a* remains alone.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Dec. 18·201	26	92	18	60	28·2	−12·7	− 37·5
19·310	148	601	83	331	29·5	−12·7	− 21·6
20·273	128	837	67	432	29·7	−12·9	− 8·8
21·188	124	637	64	327	31·1	−13·1	+ 4·7
22·268	92	548	51	295	31·6	−13·6	+ 19·5
23·519	71	349	45	221	32·4	−13·6	+ 36·6
24·324	61	305	46	229	32·1	−14·1	+ 47·0
25·191	48	233	47	229	32·6	−14·7	+ 58·9
26·152	15	121	23	191	32·4	−14·6	+ 71·4
27·266	0	21	0	157	31·8	−14·1	+ 85·4
Means ...	...	...	44	247	31·14	−13·61	...

Group 4252.

A small spot on December 18. The group has greatly increased by the succeeding day, when it consists of a short stream, the two chief members of which are *a* and *b*, regular spots. *b* has become a large composite spot by December 21; it has divided into two parts, *c* and *d*, by December 23, after which the group rapidly declines.

Dec. 18·201	7	24	6	19	17·7	− 7·1	− 48·0
19·310	69	189	43	116	16·0	− 7·1	− 35·1
20·273	59	245	32	134	15·4	− 7·2	− 23·1
21·188	43	256	22	132	15·4	− 7·5	− 11·0
22·268	40	330	20	166	14·6	− 8·1	+ 2·5
23·519	72	320	39	168	14·6	− 8·6	+ 18·8
24·324	33	193	19	112	14·4	− 9·3	+ 29·3
25·191	20	110	13	73	14·4	−10·0	+ 40·7
26·152	5	33	5	28	14·6	− 9·7	+ 53·6
27·266	0	6	0	9	15·2	−10·3	+ 68·8
Means ...	...	...	20	96	15·23	− 8·49	...

Group 4253.

A very small spot.

Dec. 20·273	0	4	0	2	52·8	−13·3	+ 14·3
Means ...	...	...	0	2	52·8	−13·3	...

Group 4254.

A few small unstable spots, irregularly scattered. The group changes from day to day until after December 23. *a*, the leader on that day, remains alone on December 24 as a small regular spot, and persists as such till December 30. A very small companion is seen near it on December 26.

1895. d					°	°	°
Dec. 20·273	0	13	0	9	351·8	+11·5	− 46·7
21·188	4	60	3	38	352·8	+11·2	− 33·6
22·268	0	13	0	6	357·7	+10·4	− 14·4
23·519	14	52	8	27	358·8	+ 9·9	+ 3·0
24·324	11	44	6	23	0·7	+10·2	+ 15·6
25·191	6	18	3	11	1·9	+ 9·9	+ 28·2
26·152	8	26	5	18	1·3	+10·0	+ 40·3
27·266	2	11	2	10	2·9	+ 9·9	+ 56·5
28·293	0	4	0	7	3·2	+10·0	+ 70·4
Means ...	...	...	3	17	359·01	+10·33	...

Group 4255.

A fine stream. On and after December 22 it consists of a large regular spot, *a*, followed by a long sparse stream of spots, mostly small, of which *b*, *c* and *d* are the principal. The stream diminishes from day to day up to December 29, when *a* remains alone. *a* increases slightly after this date.

1895.							
Dec. 20·273	0	143	0	352	320·2	−10·0	− 78·3
21·188	114	393	142	532	318·2	−10·0	− 68·2
22·268	119	655	97	547	319·4	− 9·8	− 52·7
23·519	134	742	84	463	320·4	−10·3	− 35·4
24·324	143	775	78	427	321·1	− 9·9	− 24·0
25·191	137	689	71	356	321·9	−10·2	− 11·8
26·152	142	595	72	302	322·1	−10·5	+ 1·1
27·266	117	568	61	297	322·0	−10·6	+ 15·6
28·293	96	442	56	255	321·9	−10·9	+ 29·1
29·157	80	354	53	236	322·4	−10·9	+ 41·0
30·263	68	305	60	269	322·1	−10·7	+ 55·3
31·293	42	198	60	287	323·2	−10·2	+ 70·0
1896.							
Jan. 1·269	0	89	0	366	323·8	−10·4	+ 83·4
Means ...	...	...	64	361	321·44	−10·34	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Group 4256.

A very fine stream closely following Group 4255. Its principal members are *a*, a large regular spot; *b*, a very large composite spot; *c*, a large double spot, the latter often being measured in two parts. *c* has disappeared, and *b* has divided into two parts by December 29. The group diminishes steadily throughout its whole course.

Date. Greenwich Civil Time.	Projected Area of Umbra.	Projected Area of Whole Spot.	Area for Group. Umbra.	Area for Group. Whole Spot.	Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
1895. d					°	°	°
Dec. 21·188	0	222	0	796	304·2	−11·4	− 82·2
22·268	147	622	217	968	299·2	−12·0	− 72·9
23·519	176	1026	150	882	302·0	−12·8	− 53·8
24·324	245	1203	173	848	301·3	−12·4	− 43·8
25·191	243	1321	144	793	301·8	−12·5	− 31·9
26·152	263	1187	141	637	302·3	−12·8	− 18·7
27·266	182	1080	94	555	302·8	−12·8	− 3·6
28·293	148	852	76	440	303·0	−13·2	+ 10·2
29·157	99	675	55	372	303·7	−13·3	+ 22·3
30·263	71	510	46	323	303·5	−13·1	+ 36·7
31·293	42	343	34	273	304·0	−12·9	+ 50·8
1896.							
Jan. 1·269	44	240	52	273	304·3	−13·2	+ 63·9
2·217	16	67	37	150	305·5	−13·6	+ 77·5
Means ...	...	...	94	562	302·89	−12·77	...

Group 4257.

A very small spot.

1895. Dec. 22·268	2	12	1	6	6·3	−19·3	− 5·8
Means ...	...	...	1	6	6·3	−19·3	...

Group 4258.

A short stream forming suddenly, *s* Group 4252. It has greatly increased by the second day, but diminishes rapidly afterwards. The leader, *a*, is a regular spot, and the two last spots, *b* and *c*, have definite nuclei. The other spots are unstable.

1895.							
Dec. 24·324	27	112	15	65	11·4	−18·6	+ 26·3
25·191	112	355	75	238	12·5	−18·9	+ 38·8
26·152	55	233	47	193	12·6	−18·7	+ 51·6
27·266	12	63	16	83	13·4	−18·7	+ 67·0
Means ...	...	...	38	145	12·48	−18·73	...

Group 4259.

A small spot on December 24. Three small faint spots on December 25.

1895. d					°	°	°
Dec. 24·324	2	18	2	17	288·8	+13·8	− 56·3
25·191	0	36	0	27	289·3	+13·1	− 44·4
Means ...	...	...	1	22	289·05	+13·45	...

Group 4260.

A small spot, *a*, with a very small companion on December 28.

1895.							
Dec. 26·152	1	15	2	23	251·1	+ 9·3	−69·9
27·266	3	14	3	12	252·2	+ 9·0	−54·2
28·293	0	4	0	2	252·2	+ 8·2	−40·6
Means ...	...	...	2	12	251·83	+ 8·83	...

Group 4261.

A small spot, *a*, with a very small companion on December 28. The group lies *s* of Group 4260.

1895.							
Dec. 26·152	2	21	3	34	249·6	+ 5·8	−71·4
27·266	0	19	0	17	251·0	+ 5·5	−55·4
28·293	0	20	0	14	251·1	+ 5·5	−41·7
Means ...	...	...	1	22	250·57	+ 5·60	...

Group 4262.

A large regular spot, *a*, followed by a short stream of spots, all small except the last one, *b*. *b* has disappeared by January 1, and *a* remains alone by January 6.

1895.							
Dec. 27·266	15	91	40	241	228·1	+12·3	− 78·3
28·293	32	212	41	277	226·4	+12·1	− 66·4
29·157	53	305	48	280	226·1	+12·2	− 55·3
30·263	67	383	45	260	227·1	+11·9	− 39·7
31·293	76	438	44	253	227·7	+12·0	− 25·5
1896.							
Jan. 1·269	99	429	53	229	227·8	+12·1	− 12·6
2·217	81	415	42	214	228·1	+11·8	+ 0·1
3·270	69	363	37	194	228·3	+11·9	+ 14·2
4·313	55	269	33	159	228·8	+11·4	+ 28·4
5·182	54	199	37	136	229·0	+11·6	+ 40·0
6·214	27	120	24	106	229·0	+11·7	+ 53·6
7·196	7	32	10	44	229·4	+11·4	+ 67·0
Means ...	...	...	38	199	227·98	+11·87	...

AREAS and HELIOGRAPHIC POSITIONS of GROUPS of SUN SPOTS—*continued.*

Date. Greenwich Civil Time.	Projected Area of		Area for Group.		Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
	Umbra.	Whole Spot.	Umbra.	Whole Spot.			
Group 4263. A pair of very small spots, *a* and *b*, on December 28, *sp* Group 4262. The group has developed into a short stream by December 30. The spots are small and mostly unstable.							
1895. d					°	°	°
Dec. 28·293	0	7	0	7	234·8	+ 9·8	−58·0
29·157	6	34	5	26	234·9	+ 9·5	−46·5
30·263	8	71	5	44	235·4	+ 9·6	−31·4
31·293	8	67	4	35	236·5	+ 9·3	−16·7
1896.							
Jan. 1·269	10	52	5	28	236·3	+ 9·1	− 4·1
2·217	9	54	4	28	238·7	+ 8·8	+10·7
Means ...	...	...	4	28	236·10	+ 9·35	...

Date. Greenwich Civil Time.	Projected Area of		Area for Group.		Mean Longitude of Group.	Mean Latitude of Group.	Longitude from Central Meridian.
	Umbra.	Whole Spot.	Umbra.	Whole Spot.			
Group 4264. A few very small unstable spots irregularly scattered.							
1895. d					°	°	°
Dec. 31·293	2	17	2	13	201·7	−13·0	−51·5
1896.							
Jan. 1·269	2	10	1	6	203·2	−13·0	−37·2
2·217	7	42	4	23	202·4	−13·2	−25·6
3·270	4	16	2	8	204·5	−13·2	− 9·6
4·313	0	6	0	3	202·3	−13·4	+ 1·9
5·182	0	6	0	3	202·9	−13·4	+13·9
Means ...	...	...	2	9	202·83	−13·20	...

ROYAL OBSERVATORY, GREENWICH.

TOTAL PROJECTED AREAS OF SUN SPOTS AND FACULÆ

FOR EACH DAY,

AND

MEAN AREAS AND MEAN HELIOGRAPHIC LATITUDE

OF

SUN SPOTS AND FACULÆ

FOR EACH ROTATION OF THE SUN,

AND FOR THE YEAR

1895.

TOTAL PROJECTED AREAS of SUN SPOTS and FACULÆ for EACH DAY in the Year 1895.

The Projected Area is the area as it is measured on the photograph, uncorrected for the effect of foreshortening, and expressed in millionths of the Sun's apparent disk.

The Greenwich Civil Time is expressed by the month, day of the month (civil reckoning) and decimal of a day, reckoned from Greenwich Mean Midnight.

Greenwich Civil Time.		Projected Area.		
		Umbræ.	Whole Spots.	Faculæ.
1895	d			
Jan.	1·2	120	876	3275
	2·2	200	1361	3328
	3·2	240	1470	2673
	4·2	191	1382	569
	5·2	279	1469	1459
	6·3	227	1385	1560
	7	...	...	...
	8·5	156	942	1573
	9·2	175	887	1461
	10·3	165	965	1347
	11·5	195	936	2347
	12·4	136	828	2108
	13·4	69	391	1549
	14·2	57	231	1218
	15·2	52	279	2556
	16·2	26	191	2039
	17·6	28	209	464
	18·5	54	424	1000
	19·2	147	865	2618
	20·4	194	1138	2753
	21·2	188	976	1293
	22·2	262	1433	1797
	23·5	315	1826	1719
	24·6	249	1638	827
	25·2	342	1692	2306
	26·3	370	1967	1960
	27·5	465	2351	2343
	28·4	431	2708	4223
	29·3	541	2826	4441
	30·4	423	2805	1906
	31·5	374	2287	916
Feb.	1·2	346	2032	1693
	2·2	352	1932	1996
	3·2	447	1950	2049
	4·3	433	2146	2338
	5·4	331	1690	1203
	6·5	279	1537	1148
	7·4	275	1362	1322
	8·4	223	1294	1257
	9·3	186	1125	1776
	10·2	204	1039	1065
	11·5	173	983	1241
	12·3	207	1249	3429
	13·3	155	893	2857
	14·2	124	599	1584
	15·2	136	652	1424
	16·5	151	875	2198
	17·2	184	905	4301
	18·2	174	1023	3135
	19·5	165	1011	502
	20·3	202	997	1080

Greenwich Civil Time.		Projected Area.		
		Umbræ.	Whole Spots.	Faculæ.
1895	d			
Feb.	21·2	200	923	1575
	22·2	208	877	1458
	23·2	107	703	2419
	24·5	186	988	1090
	25·2	224	1133	3585
	26·2	240	1265	3666
	27·4	282	1554	2323
	28·3	359	2058	1662
March	1·6	408	2372	925
	2·5	332	2033	1623
	3·5	274	1744	2600
	4·5	218	1413	2684
	5·5	174	1141	1555
	6·3	172	956	2193
	7·6	182	1050	2206
	8·5	217	1226	3025
	9·2	238	1339	3029
	10·5	268	1319	935
	11·4	287	1663	1917
	12·6	287	1541	1915
	13·4	255	1421	1698
	14·2	235	1351	1010
	15·2	213	1190	2951
	16·3	182	908	3971
	17·5	152	919	2040
	18·4	160	1052	829
	19·2	231	1280	933
	20·1	227	1514	601
	21·6	371	2153	1707
	22·5	415	2776	1237
	23·4	331	2502	1353
	24·2	274	2027	2161
	25·4	184	1396	1071
	26·5	119	773	3197
	27·2	85	491	2889
	28·5	166	690	716
	29·6	198	1140	1406
	30·2	211	1079	1916
	31·5	229	1252	1167
April	1·5	227	1246	2538
	2·2	232	1023	3387
	3·5	178	726	2242
	4·4	139	710	1563
	5·4	105	702	1903
	6·1	106	492	1753
	7·2	66	488	2453
	8·7	121	736	2800
	9·5	198	874	2730
	10·5	164	928	1836

Greenwich Civil Time.		Projected Area.		
		Umbræ.	Whole Spots.	Faculæ.
1895	d			
April	11·4	175	1016	3789
	12·4	212	1238	3560
	13·4	243	1410	1989
	14·5	214	1261	1804
	15·5	197	1212	1317
	16·5	245	1368	835
	17·5	268	1538	1476
	18·5	174	1286	820
	19·4	182	1125	1717
	20·4	186	1271	1327
	21·2	303	1714	3169
	22·4	407	2107	4114
	23·6	364	2047	1968
	24·4	444	2420	1715
	25·6	439	2545	1504
	26·6	496	2543	1862
	27·1	519	2561	2618
	28·2	501	2344	2470
	29·7	364	1869	2096
	30·4	254	1573	3142
May	1·5	172	729	1174
	2·4	132	664	1463
	3·4	87	477	1579
	4·4	73	409	1258
	5·6	99	715	2194
	6·4	112	611	2337
	7·4	139	756	2096
	8·4	130	675	3328
	9·4	84	482	3578
	10·4	76	445	926
	11·4	68	382	1139
	12·4	59	441	1514
	13·5	47	348	1877
	14·4	59	310	1945
	15·6	82	579	1777
	16·4	145	854	2597
	17·3	168	738	4247
	18·5	181	968	3531
	19·3	239	1238	3876
	20·2	284	1289	2790
	21·4	347	1797	1851
	22·4	415	2573	2044
	23·4	414	2392	2163
	24·5	409	2748	1944
	25·5	552	3264	2654
	26·1	569	3244	3469
	27·4	521	3004	3377
	28·4	320	2330	2978
	29·4	242	1527	3075
	30·4	103	570	1726
	31·5	93	440	1416

Greenwich Civil Time.		Projected Area.		
		Umbræ.	Whole Spots.	Faculæ.
1895	d			
June	1·2	69	395	1469
	2·5	95	526	2439
	3·4	114	607	2557
	4·3	125	721	4305
	5·6	188	1002	2289
	6·5	212	1217	1906
	7·4	198	1263	1712
	8·4	260	1665	1827
	9·5	333	1936	1423
	10·2	506	2510	1544
	11·5	400	2255	3584
	12·4	403	2147	1869
	13·4	424	2575	3063
	14·5	426	2402	3392
	15·4	447	2668	2504
	16·4	532	3166	2709
	17·4	461	2903	2938
	18·4	408	2242	1612
	19·1	621	2565	2860
	20·4	336	1978	3880
	21·4	297	1720	2331
	22·3	220	1335	1305
	23·4	214	1528	2237
	24·6	168	1113	3008
	25·4	150	864	2058
	26·4	90	1009	2384
	27·6	98	636	2342
	28·4	65	585	1381
	29·4	212	866	2107
	30·5	83	466	1223
July	1·4	99	431	1103
	2·4	61	340	1507
	3·4	84	394	1654
	4·6	62	392	1675
	5·4	72	380	1705
	6·4	54	296	924
	7·5	96	481	2184
	8·4	125	725	3245
	9·4	221	1585	2919
	10·4	336	1910	998
	11·5	298	1843	1370
	12·4	301	1820	3901
	13·4	201	1358	3339
	14·5	163	1109	2226
	15·7	129	653	2315
	16·4	124	499	3433
	17·5	68	406	3365
	18·4	46	292	1943
	19·4	26	212	1229
	20·5	47	267	2084
	21·2	67	221	1810

TOTAL PROJECTED AREAS of SUN SPOTS and FACULÆ—*concluded.*

Greenwich Civil Time.		Projected Area. Umbræ.	Whole Spots.	Faculæ.
1895 July	d 22·4	33	173	1412
	23·4	20	79	2438
	24·5	20	91	2161
	25·2	0	16	942
	26·5	16	74	1754
	27·2	57	268	2175
	28·2	57	251	1002
	29·6	116	538	1454
	30·2	51	316	763
	31·5	179	910	1928
Aug.	1·5	243	1453	1609
	2·5	363	2073	1278
	3·2	341	2612	1369
	4·4	518	3050	2644
	5·3	670	3171	2868
	6·6	742	4713	2132
	7·4	792	4279	3010
	8·4	762	4084	1588
	9·4	584	3348	1437
	10·5	379	2633	2146
	11·5	376	2142	2884
	12·4	320	1699	4384
	13·3	118	807	796
	14·4	94	532	2969
	15·5	102	714	1384
	16·2	142	921	1264
	17·4	293	1948	1867
	18·5	396	2142	1747
	19·4	434	2657	1123
	20·5	347	2084	1591
	21·4	309	1958	2024
	22·5	232	1119	842
	23·4	162	1023	2907
	24·4	178	1034	3494
	25·5	139	748	3458
	26·2	67	466	1383
	27·5	73	425	2968
	28·4	167	831	1706
	29·4	258	1449	3236
	30·4	300	1662	3584
	31·4	335	1692	1606

Greenwich Civil Time.		Projected Area. Umbræ.	Whole Spots.	Faculæ.
1895 Sept.	d 1·4	363	1910	2298
	2·4	375	1705	2089
	3·5	353	1648	1915
	4·5	301	1424	1687
	5·4	250	1262	435
	6·3	312	1396	1093
	7·4	203	1210	2329
	8·5	151	829	2924
	9·4	94	574	3088
	10·2	71	353	1693
	11·5	24	131	1697
	12·5	23	100	2446
	13·4	77	415	3112
	14·4	141	765	2632
	15·2	137	579	1876
	16·4	78	590	2354
	17·5	59	611	2148
	18·4	87	575	1936
	19·3	70	472	1757
	20·4	105	718	2286
	21·5	129	721	2142
	22·4	132	827	2121
	23·4	117	824	2440
	24·4	138	643	2378
	25·4	118	877	2429
	26·4	204	1062	1739
	27·4	337	1849	2849
	28·4	537	3068	1918
	29·5	701	4031	2484
	30·5	640	3835	2300
Oct.	1·4	742	4241	2178
	2·5	880	5797	1833
	3·5	598	3918	1525
	4·4	534	3278	2662
	5·2	550	2864	2978
	6·3	334	1969	3931
	7·4	299	1414	2269
	8·3	196	988	1846
	9·2	153	740	2376
	10·2	102	495	2727

Greenwich Civil Time.		Projected Area. Umbræ.	Whole Spots.	Faculæ.
1895 Oct.	d 11·5	24	150	2228
	12·5	32	144	2954
	13·2	37	147	1379
	14·5	24	243	1634
	15·5	33	236	1167
	16·7	34	212	1187
	17·4	48	205	990
	18·5	29	135	520
	19·2	30	97	1204
	20·2	104	359	1878
	21·2	226	1090	1216
	22·3	398	1985	2083
	23·2	416	2266	2485
	24·4	490	2973	2698
	25·4	500	2988	2673
	26·2	664	3327	3808
	27·2	534	3137	1758
	28·5	442	2600	2050
	29·2	412	2181	1926
	30·5	381	2314	1075
	31·2	488	2222	2570
Nov.	1·4	416	2403	4422
	2·2	518	2616	2624
	3·2	673	2674	2581
	4·2	601	3224	4066
	5·2	524	2784	2684
	6·4	220	1405	1610
	7·3	216	1090	1435
	8·2	143	683	1371
	9·4	43	207	1445
	10·2	2	4	1854
	11·4	3	28	1640
	12·6	4	46	735
	13·4	35	221	876
	14·4	85	512	866
	15·3	190	743	1432
	16·5	132	853	1035
	17·6	181	1083	652
	18·5	151	844	1632
	19·5	164	914	1796
	20·3	195	942	1610

Greenwich Civil Time.		Projected Area. Umbræ.	Whole Spots.	Faculæ.
1895 Nov.	d 21·3	207	929	1621
	22·3	213	975	1707
	23·2	173	821	1889
	24·2	140	649	1937
	25·2	147	609	1257
	26·5	125	558	743
	27·2	92	463	1863
	28·2	99	411	1739
	29·3	72	424	1327
	30·2	59	311	1648
Dec.	1·2	51	258	1600
	2·5	72	475	2713
	3·2	143	772	943
	4·3	124	576	895
	5·2	86	407	1089
	6·5	78	408	644
	7·5	127	705	1079
	8·3	142	777	2135
	9·2	236	1111	2157
	10·4	328	1551	3093
	11·3	345	1738	2535
	12·4	253	1653	246
	13·5	300	1836	601
	14·2	326	1635	709
	15·3	226	1128	873
	16·2	193	1136	1640
	17·2	185	1028	3147
	18·2	191	928	5192
	19·3	304	1333	3648
	20·3	259	1605	2407
	21·2	350	1943	2471
	22·3	469	2541	2724
	23·5	525	2790	1866
	24·3	569	2926	1816
	25·2	612	2986	1326
	26·2	527	2395	2295
	27·3	354	1964	2386
	28·3	276	1541	1725
	29·2	239	1367	1890
	30·3	215	1269	1853
	31·3	170	1063	1970

MEAN AREAS of SUN SPOTS and FACULÆ, as measured on PHOTOGRAPHS taken at the ROYAL OBSERVATORY, GREENWICH, at DEHRA DÛN, INDIA, and in MAURITIUS, for each ROTATION of the SUN, from 1895 January 2 to 1895 December 23.

The Mean Areas have been formed by taking the Means of the Areas for each day of observation throughout each Rotation of the Sun, the Projected Areas being the areas as measured on the photographs and expressed in millionths of the Sun's apparent disk, and the Areas corrected for foreshortening being expressed in millionths of the Sun's visible hemisphere.

The rotations adopted in the following table (which is in continuation of those for the years 1873–1894 printed in the Greenwich Observations for 1884 and succeeding years) correspond to the synodic rotation of the Sun, and the commencement of each is defined by the coincidence of the assumed prime meridian with the central meridian, the assumed prime meridian being that meridian which passed through the ascending node at mean noon on January 1, 1854, and the assumed period of the Sun's sidereal rotation being 25·38 days. The rotations adopted in the volumes of Greenwich Observations, 1877 to 1883, correspond on the other hand to the sidereal rotation of the Sun, the commencement of each being defined by the coincidence of the assumed prime meridian with the ascending node. The numeration of the rotations is in continuation of Carrington's series (*Observations of Solar Spots made at Redhill* by R. C. Carrington, F.R.S.), No. 1 being the rotation commencing 1853, November 9. The dates of commencement of the rotations are given in GREENWICH CIVIL TIME, reckoning from midnight.

No. of Rotation.	Date of Commencement of each Rotation.			No. of Days on which Photographs were taken.	Mean of Daily Areas.					
					Projected.			Corrected for Foreshortening.		
					Umbræ.	Whole Spots.	Faculæ.	Umbræ.	Whole Spots.	Faculæ.
			d							
552	1895	January	2·64	26	214	1208	1931	149	853	2137
553		January	29·97	28	240	1296	1936	175	991	2136
554		February	26·32	27	257	1552	1858	179	1114	2104
555		March	25·63	27	183	1029	2085	138	812	2460
556		April	21·91	27	211	1133	2224	158	853	2493
557		May	19·14	27	306	1764	2472	217	1280	2690
558		June	15·34	28	222	1294	2145	158	963	2380
559		July	12·54	27	217	1228	2010	143	833	2292
560		August	8·76	27	267	1508	2177	195	1135	2420
561		September	5·00	27	210	1206	2177	149	868	2399
562		October	2·27	28	290	1641	2071	200	1175	2230
563		October	29·56	27	231	1178	1793	163	851	1902
564		November	25·86	27	194	1026	1847	142	787	1948

MEAN AREAS of SUN SPOTS, and FACULÆ, as measured on PHOTOGRAPHS taken at the ROYAL OBSERVATORY, GREENWICH, at DEHRA DÛN, INDIA, and in MAURITIUS, for the YEAR 1895.

The Mean Projected Areas are expressed in millionths of the Sun's apparent disk.

The Mean Areas corrected for foreshortening are expressed in millionths of the Sun's visible hemisphere.

Year.	No. of Days on which Photographs were taken.	Mean of Daily Areas.					
		Projected.			Corrected for Foreshortening.		
		Umbræ.	Whole Spots.	Faculæ.	Umbræ.	Whole Spots.	Faculæ.
1895	364	237	1330	2059	169	974	2278

MEAN HELIOGRAPHIC LATITUDE of SUN SPOTS, as measured on PHOTOGRAPHS taken at the ROYAL OBSERVATORY, GREENWICH, at DEHRA DÛN, INDIA, and in MAURITIUS, for each ROTATION of the SUN, from 1895 January 2 to 1895 December 23.

The numbers given in the accompanying table have been formed as follows:—

The Heliographic Latitude of each Spot for each day has been multiplied by its Area (corrected for foreshortening), and the sum of the products for Spots North of the Sun's Equator has been divided by the sum of the corresponding Areas to form Mean Heliographic Latitude of Spotted Area North of Equator; similarly for Spots South of the Equator. In forming the Mean Heliographic Latitude of entire Spotted Area the algebraic sum of the products for Spots North and South of the Equator has been divided by the sum of the Areas; and for the Mean Distance from the Equator for all Spots, the numerical sum of the products, without regard to the sign of the latitude, has been similarly divided.

The Mean Areas have been formed by dividing the sum of the Daily Areas (corrected for foreshortening) by the number of days of observation for each Rotation of the Sun, and are expressed in millionths of the Sun's visible hemisphere.

No. of Rotation.	Date of Commencement of each Rotation.	No. of Days on which Photographs were taken.	Spots NORTH of the Equator.		Spots SOUTH of the Equator.		Mean Heliographic Latitude of entire Spotted Area.	Mean Distance from Equator of all Spots.
			Mean of Daily Areas.	Mean Heliographic Latitude.	Mean of Daily Areas.	Mean Heliographic Latitude.		
	d			°		°	°	°
552	1895 Jan. 2·64	26	392	12·51	461	14·19	− 1·91	13·42
553	Jan. 29·97	28	506	13·69	485	11·62	+ 1·30	12·68
554	Feb. 26·32	27	605	13·07	509	9·02	+ 2·97	11·22
555	Mar. 25·63	27	551	13·66	261	11·77	+ 5·48	13·05
556	Apr. 21·91	27	604	19·13	249	15·42	+ 9·05	18·05
557	May 19·14	27	686	16·41	594	16·68	+ 1·06	16·53
558	June 15·34	28	615	15·25	348	12·11	+ 5·37	14·12
559	July 12·54	27	302	12·80	531	9·00	− 1·11	10·38
560	Aug. 8·76	27	976	13·87	159	10·43	+ 10·46	13·38
561	Sept. 5·00	27	521	13·73	347	14·63	+ 2·39	14·09
562	Oct. 2·27	28	782	14·38	392	15·07	+ 4·54	14·61
563	Oct. 29·56	27	561	11·56	290	8·04	+ 4·88	10·36
564	Nov. 25·86	27	340	13·05	447	13·22	− 1·86	13·15

MEAN HELIOGRAPHIC LATITUDE of SUN SPOTS, as measured on PHOTOGRAPHS taken at the ROYAL OBSERVATORY, GREENWICH, at DEHRA DÛN, INDIA, and in MAURITIUS, for the YEAR 1895.

YEAR.	No. of Days on which Photographs were taken.	Spots NORTH of the Equator.		Spots SOUTH of the Equator.		Mean Heliographic Latitude of entire Spotted Area.	Mean Distance from Equator of all Spots.
		Mean of Daily Areas.	Mean Heliographic Latitude.	Mean of Daily Areas.	Mean Heliographic Latitude.		
			°		°	°	°
1895	364	565	14·26	409	12·54	+ 3·01	13·54

NOTE.—In the computations for forming the corresponding Tables given in the Volumes for 1884 and 1885 the latitudes of the Spots were only taken to the nearest whole degree, the next higher whole degree being adopted whenever the fractional part of the latitude amounted to or exceeded ·5. Thus, under 8°, for example, would be included all Spots from 7°·5 to 8°·4, both inclusive; and the corresponding mean latitude should have been taken as 7°·95 instead of 8°. The Mean Heliographic Latitudes, therefore, both for Spots North and Spots South of the Equator, and the Mean Distances from the Equator of all Spots, both for the rotations and for entire years, require a correction of − 0°·05. The Mean Latitude of the entire Spotted Area requires the following correction:—

$$-0^\circ\cdot05 \times \frac{\text{Mean Area N.} - \text{Mean Area S.}}{\text{Mean Area N.} + \text{Mean Area S.}}$$

These corrections have been applied in computing the Mean Heliographic Latitudes and Mean distance from the Equator given in the above Tables for 1895, and in corresponding Tables for the years 1886 to 1894.