Dupl.

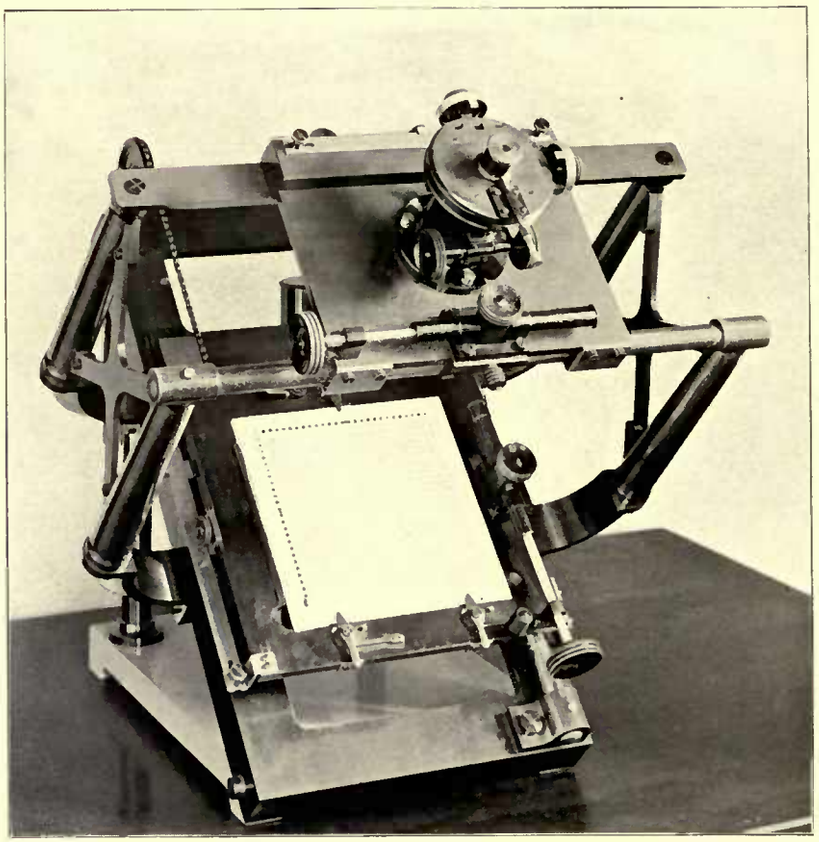
ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS OF THE PLANET

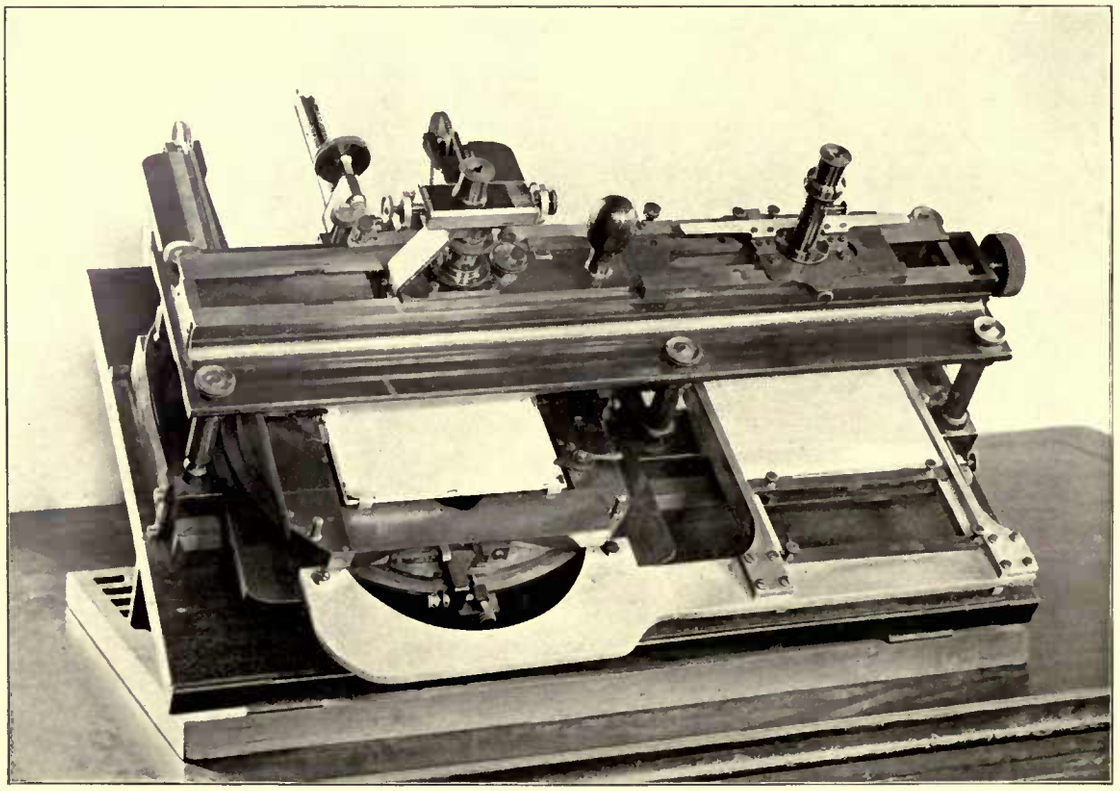
EROS.

1900–1901.

F.J.H.



EROS MICROMETER.



DUPLEX MICROMETER.
Used for determining division-errors.

OBSERVATIONS OF THE PLANET

EROS

1900—1901

FOR DETERMINATION OF THE

SOLAR PARALLAX

FROM PHOTOGRAPHS TAKEN AND MEASURED AT THE

ROYAL OBSERVATORY, GREENWICH,

UNDER THE DIRECTION OF

SIR WILLIAM HENRY MAHONEY CHRISTIE, K.C.B., M.A., D.Sc., F.R.S.,
ASTRONOMER ROYAL.

(*Forming an Appendix to the Volume of Greenwich Observations for the Year* 1905.)

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INDEX.

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ERRATA.

PAGE

5. Plate 5283, Position of Telescope, *for* W, *read* E.
   Plates 852, 853, Position of Telescope, *for* E, *read* W.
6. Plate 5360, delete the whole.
   Plates 869, 870, 871, 899, 900, 901, Position of Telescope, *for* E, *read* W.
7. Plate 928, Position of Telescope, *for* E, *read* W.
19. Plate 5192, y residuals of Comparison stars,

for	+″·08	*read*	−″·10
,,	+·09	,,	−·09
,,	+·23	,,	+·05
,,	+·02	,,	−·16
,,	+·31	,,	+·13
,,	−·02	,,	−·20
for Mean	+·12	,,	−·06

26. Plate 5222, Comparison star No. 80, y co-ordinate, *for* 2701·54, *read* 3001·54.
48. Plate 5342, Comparison star No. 36°450, y co-ordinate, *for* 4551·51, *read* 4451·51.
51. Plate 5354, col. 2, sixth star. No. in B.D., *for* 33°454, *read* 34°454.
65. Plate 802, Comparison star No. 114, y co-ordinate, *for* 1441·63, *read* 1141·63.
132. Star No. 20, Minutes of Declination, *for* 11′ *read* 21′.

Tables II. and IV. Footnotes. The dagger (†) is sometimes affixed to stars rejected for other reasons than those assigned.

GREENWICH OBSERVATIONS OF EROS, 1900–1901.

INTRODUCTION.

I. INTRODUCTORY STATEMENT.

At the meeting of the International Astrographic Conference at Paris in July 1900, a special committee under the presidency of the late M. Loewy discussed arrangements to be made for visual and photographic observations of the planet Eros during the opposition 1900–1901 by a number of co-operating observatories, with a view to a more accurate determination of the solar parallax, for which the near approach of the planet offered a favourable opportunity.

At Greenwich, arrangements were made for photographic observations of Eros with the Astrographic 13-inch refractor and the Thompson 26-inch refractor, the scale of which is just double that of the Astrographic. For determination of the Solar Parallax by the diurnal method, photographs were taken east and west of the meridian at about 60° zenith distance, as far as the conditions would allow, and also photographs as near the meridian as practicable, with a view to determining the position of the planet unaffected by parallax. By limiting the zenith distance for the east and west photographs to 60°, the practical troubles arising from atmospheric refraction, dispersion, and absorption at low altitudes were avoided, without appreciable loss in the parallax factor.

The alternatives of guiding the telescope on Eros and allowing the stars to trail slightly, or *vice versâ*, were carefully considered, and after some trials it was decided to guide on the stars, allowing Eros to trail. In February 1901, however, the faintness of the planet and its rapid motion made it necessary to reverse the process. Four exposures were usually given, the images being at the angles of a square of 20″ in the side, and all four images were measured.

For the reduction of the measures of Eros on the photographs, M. Loewy formed a catalogue of Reference Stars covering a region of about 70′ on either side of the path of Eros, selected so that about twelve stars should be available for an Astrographic plate covering $2^\circ \times 2^\circ$. The places of these stars were determined by meridian observations specially made by several observatories, those at Greenwich being taken with the New Altazimuth or Reversible Transit-Circle in the meridian. The provisional places, used for the reduction of the Greenwich photographs, were formed from the separate results for each observatory, published in the Eros Circulars issued by M. Loewy, the system of weighting described in Section IV. of this Introduction being adopted. Subsequently, when M. Loewy published his concluded places based on a slightly different system of weighting, corrections were applied, for the sake of uniformity, to reduce the Greenwich provisional results to his system, to which the final results are all referred.

The Reference Stars used for each plate were confined to a radius of 55′ from the centre of the plate, so as to be sensibly unaffected by optical distortion.

For the Thompson photographs with a field of 60′ square, six Comparison Stars within a radius of 25′ from the centre were selected, so as to be distributed as nearly symmetrically about Eros as practicable. These stars were chosen so as to be fairly comparable in brightness with Eros, which ranged from magnitude 9 to 10 during the period of observation, and was much fainter than the average of the Reference Stars. These Comparison Stars were also used for the Astrographic plates as additional points of reference for Eros, with which, as already mentioned, they were more nearly comparable. Their places were determined from the Astrographic photographs, the plate-constants being determined from the Reference Stars.

The plan of the Eros Commission contemplated, ultimately, the combined discussion of the photographs taken at all the co-operating observatories, but there is obviously great difficulty in treating such a mass of heterogeneous material, and it seems desirable, in the first instance, to discuss separately the observations of the individual observatories, and deduce a value of the solar parallax in each case.

With this view the results obtained from the Greenwich photographs are given in Section VIII. of this Introduction. There were in all 197 photographs taken with the Astrographic 13-inch refractor and 153 taken with the Thompson 26-inch refractor between 1900 October 1 and 1901 February 25, measures of which are given in this volume; but, for the determination of the solar parallax, the discussion has been confined to the period from 1900 October 14 to 1901 January 18 (151 photographs with the Astrographic and 103 with the Thompson),

the material before and after these dates not being suitable for determination of the solar parallax, though useful for the position of Eros.

II. THE TELESCOPES.

The instruments used for taking the photographs were the 13-inch Astrographic Refractor and the 26-inch Refractor of the Thompson Equatorial. The two telescopes were used concurrently throughout the opposition.

The *Astrographic Equatorial* is mounted in a dome of 18 feet diameter, 57 feet W. and 4 feet N. of the centre of the transit-circle. The dome has a sectorial shutter, coming to a point at the zenith, and opening $\frac{1}{6}$th of the circumference. The instrument is at a height of 30 feet above the ground. It was constructed by Sir Howard Grubb, F.R.S., on the lines laid down by the *Congrès Astrophotographique Internationale pour le Levé de la Carte du Ciel* in 1887. It consists of a 13-inch photographic refracting telescope and a parallel 10-inch visual guiding telescope in steel tubes firmly connected, mounted equatorially in the German form. The apertures of the object-glasses are $13^{in}{\cdot}0$ (or $0^{m}{\cdot}33$) and $10^{in}{\cdot}0$ (or $0^{m}{\cdot}25$), and the focal lengths of both are $135^{in}{\cdot}1$ (or $3^{m}{\cdot}43$), so that the scale of a plate placed in the focal plane is 1^{mm} to $1'$. [More precisely, the focal length of the photographic telescope is $3^{m}{\cdot}441$, so that 1^{mm} represents $0'{\cdot}9990$.] The photographic telescope is corrected as regards spherical and chromatic aberration for rays near Fraunhofer's line G. It is arranged to carry a plate 16^{cm} square with special provision for exact focussing and orientation. The mounting is so arranged as to allow of a motion of $1\frac{1}{2}$ hours beyond the meridian on each side without reversing the telescope. A large counterpoise is necessary, both because of the double weight and of the distance of the two telescopes from the polar axis. Some further details and a photograph of the instrument are given in the *Astrographic Catalogue, Greenwich Section*, vol. I.

The *Thompson Equatorial* is mounted in a dome of 30 feet diameter, on the central tower of the New Observatory building, 350 feet S. and 224 feet E. of the centre of the transit-circle. It was first brought into use at the end of 1898. The shutter opening of the dome extends from the zenith to the horizon, and is closed by a single curved shutter $3\frac{1}{2}$ feet wide at the zenith and 6 feet wide at the horizon. The 26-inch refractor, with its guiding telescope, the Merz refractor, and a 9-inch photo-heliograph are carried at one end of the declination axis, and are counterpoised by the 30-inch reflector and its guiding telescope which are mounted on the other end. The

mounting is of the German form, but allows of complete circumpolar motion without reversal. The 26-inch refractor is of 270^{in} (or $6^{m}\cdot86$) focal length, so that the scale of a plate placed in the focal plane is 2^{mm} to $1'$. It is corrected for aberration for rays near Fraunhofer's line G. The breech-end of the instrument is arranged for a plate carrier taking photographic plates 30^{cm} square, suitable adapters being inserted when smaller plates are used. For the photographs of Eros, plates 16^{cm} square were used, as in the Astrographic telescope. The Merz refractor, which serves as a guiding telescope, has an aperture of $12\frac{3}{4}^{in}$ and a focal length of 214^{in}.

In the Astrographic telescope the photographic plate rests on three rounded agate points, which can be adjusted by screws. In the Thompson telescope, the plate-holder itself rests on three steel bearing pins. The tilt of the plate is determined by means of a small collimating telescope with cross wires, mounted on a clear glass plate placed on the agates, or in the plate-holder, in the same manner as a photographic plate. A point at the centre of the object-glass is examined in reversed positions of the small collimator. The tilt never exceeded $2'$.

Ilford "Special Rapid" or Barnet "Rocket" plates were used, and developed with Pyro-soda or with Metol.

The réseau of cross-lines 5^{mm} apart was printed on the plates either before or after the exposure to Eros, but in any case before the development of the plate. For this purpose a photographic dark slide containing a silver-on-glass réseau and the photographic plate almost in contact with the ruled surface of the réseau, but separated from it about $0\cdot3^{mm}$ by thin pieces of platinum foil at the corners, was mounted outside the object-glass of the Astrographic telescope and exposed for a sufficient time to an electric lamp in the focus of the telescope. The same réseau (Gautier No. 90) was printed on all the Eros plates whether taken with the Thompson or Astrographic telescope, the object-glass of the Astrographic telescope being used to give the parallel beam of light for both series of plates.

The silver-on-glass réseau was kept permanently fixed in its dark slide. In order to secure that the plate should be correctly oriented relatively to the réseau, the ground edge of the plate was brought into contact with two bearing studs in the dark slide. The plate when exposed to Eros was also brought into contact with corresponding bearing studs in the telescope, but naturally these were reversed with the telescope in passing from the position E. to W. of the pier. Accordingly, it happened that when a photograph had been taken with the Astrographic telescope W. of the pier (easterly hour-angles) the réseau was printed direct, *i.e.* with the réseau readings increasing with increasing R.A. and Dec., but with the telescope E. of the pier (westerly hour-angles)

the réseau was printed reversed. This rule holds for all the Astrographic plates except No. 5279, on which the réseau was accidentally rotated through 90°. For the Thompson equatorial the position E. of the pier was used for easterly hour-angles and réseau direct, but the plate-carrier of the telescope could be reversed if desired. During the latter part of the opposition this reversal was sometimes made in order to avoid the reversal of the réseau relative to the sky. The positions of the réseau on the Thompson photographs do not, therefore, follow a strict rule after 1900 December 19.

The opposition of Eros occurred on 1900 October 30, and the nearest approach of Eros to the Earth on December 26. During the early part of the opposition the declination of the planet increased, reaching a maximum of 54° 21′ on November 9, after which it decreased continually.

Photographs were not taken when the planet was at a greater zenith distance than 60°, nor within an hour of sunrise or sunset. The following table shows the limiting hour-angles between which photographs could be taken (subject to the above restrictions) and the greatest difference of parallax in right ascension attainable at Greenwich.

Date.	Equatorial Horizontal Parallax.	Limiting Hour-Angles.		Maximum Difference of Parallax in R.A. attainable.
		E.	W.	
	″	h	h	″
1900 October 1	15	$6\frac{1}{2}$	$2\frac{1}{2}$	14
,, 15	18	7	$3\frac{3}{4}$	20
November 1	21	$6\frac{1}{2}$	$5\frac{1}{2}$	26
,, 15	24	5	7	29
December 1	27	$3\frac{1}{2}$	$7\frac{1}{2}$	31
,, 15	28	3	$6\frac{1}{2}$	29
1901 January 1	28	$2\frac{1}{2}$	6	27
,, 15	27	2	$5\frac{1}{2}$	25
February 1	26	2	$4\frac{3}{4}$	20
,, 15	23	2	$4\frac{1}{4}$	16
March 1	21	2	4	11

Accordingly, the most favourable period for the determination of parallax was about December 1.

As far as possible two (or sometimes three) photographs were taken with each instrument, near the limiting hour-angles. Plates were also taken near the meridian with a view to obtaining the place of Eros free from any uncertainty in the parallax.

The plate-centre was kept the same throughout each night, being set for the place of Eros at midnight.

From the beginning of the observations up till February 5 inclusive the telescopes were made to follow the stars, allowing Eros to trail; from February 6 the telescopes were made to follow Eros. The photographs after February 6 are few in number, and have not been used in the determination of the solar parallax given in Section VIII.

Table I. contains the list of photographs obtained, suitable for measurement and reduction. In general four exposures, two of 3^m and two of 2^m, were made on each plate, the four images of any star forming a square of 20″ side ($0^{mm}{\cdot}33$ for Astrographic and $0^{mm}{\cdot}66$ for the Thompson photographs). A fifth exposure of 1^m was made for orientation, the driving clock being put out of gear for 3^m between the fourth exposure and this; but the corresponding images have not been measured, as it was afterwards decided not to make use of them.

Except on a very few occasions when the passage of clouds caused delay, the series of four exposures was completed within 14 minutes. The beginning and end of each exposure were noted by the observer to the nearest second, and the observing clock frequently compared with the Sidereal Standard Clock.

III. MEASUREMENT OF THE PHOTOGRAPHS.

For the measurement of photographs of Eros, a new micrometer was obtained from Messrs. Troughton and Simms early in 1903, in which the principle adopted by Mr. Hinks in the Cambridge micrometer (*Monthly Notices*, lxi. p. 444) of a divided glass scale in the focal plane moved by micrometer screws was employed. The new features in the Greenwich micrometer are (i) the microscope, which is arranged so that its object-glass can be used to give magnification 2 or 1, so as to adapt it to photographs taken either with the Astrographic refractor, focal length 11 ft. 3 in. (3·4 metres), or with the Thompson refractor, focal length 22 ft. 6 in. (6·8 metres); (ii) the glass scale is ruled with pairs of lines so spaced as to admit of very accurate pointing on the réseau line placed between them.

The general appearance of the micrometer is shown in the upper figure in the Frontispiece.

The Microscope.

The microscope is designed so that a magnification of 1 or 2 by the object-glass can be used at will, the magnification 1 being used for the photographs taken with the Thompson equatorial, and 2 for those taken with the Astrographic equatorial. In order that the field may be well covered it is desirable to have an object-glass of

as long focus as practicable, the limit being determined by the condition that the eye-end should be at a height convenient for the measurer. Mr. Simms was able to supply an achromatic object-glass of 17^{mm} diameter and 78^{mm} focal length, of the same make as one supplied to Sir David Gill for the Cape Observatory. With the magnification 1 the object-glass would be at a distance of 156^{mm} (roughly 6$\frac{1}{4}$ inches) from the plate, and at an equal distance from the focal plane. For magnification 2 the object-glass must be 39^{mm} nearer the plate, and the focal plane is brought 39^{mm} further from the plate. The object-glass is brought from the first to the second position by means of an adapter of the required length.

The eye-end of the microscope may be set in either of two alternative positions. This is arranged by a slot of the required length (39^{mm}) which permits of motion in an outer tube. It is moved from one position to the other by hand, and held in position by a ring clamp.

The adjustments for focus and runs are made (i) by a rack and pinion which moves the whole microscope, and (ii) by a movement of the object-glass. The object-glass is carried by a sliding tube, from which project two studs passing through slots in the outer tube. The studs are moved by antagonistic clamping rings working on the outer tube, and thus no rotation is given to the object-glass during its adjustment.

The field of 20^{mm} diameter which is required when magnification 2 is used makes it necessary that the tube of the microscope should have a large diameter, and this is an advantage in securing stability in the mounting. As stated above, the diameter of the object-glass is 17^{mm}, but to secure critical definition over the whole of the field a stop of 7^{mm} diameter is placed inside the microscope 60^{mm} from the object-glass. When the magnification 1 is used the position of the stop is not changed, and is then 21^{mm} from the object-glass. The stop is of such a size that at the extremities of the field the edge of the object-glass is just not reached, so that with magnification 2 the cone of rays always proceeds from a circular portion of the object-glass of 9·7^{mm} diameter. With the magnification 1 the stop, being nearer, a circle of 8·1^{mm} of the object-glass, is used. The following figures give the optical details of the microscope :—

	mm
Diameter of object-glass	17
Focal length	78
Diameter of stop	7

With magnification 1 the object-glass is 156^{mm} from the plate, and at an equal distance from the focal plane. With magnification 2 it is 117^{mm} from the plate and 234^{mm} from the focal plane.

The field to be measured extends 5^{mm} from the centre on the plate, so that the image extends 5^{mm} from the centre on each side for magnification 1, and 10^{mm} for magnification 2.

The Glass Scale.

A glass diaphragm with divided scales in perpendicular directions is mounted on cross slides in the focal plane of the microscope, the slides being moved by micrometer screws. The scales, which extend 10^{mm} from the centre in the four directions, divide each 10^{mm} into thirty equal parts by pairs of lines, the distance from the centre of one pair of lines to the next being $\frac{1}{3}^{mm}$, and equal to one revolution of either of the micrometer screws. In measuring the position of a star image within a réseau square the readings of the micrometer screws are first set at zero, and the image bisected on the central cross by means of the slow motions. The micrometer screws are then moved so that the réseau lines are bisected by the nearest pairs of lines of the scale.

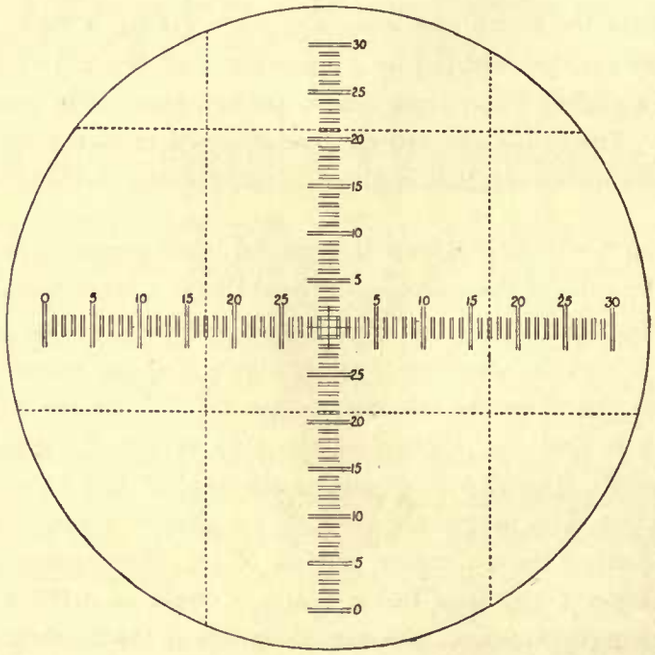


FIG. 1.—Arrangement of Scales on Glass Diaphragm.

If there were no correction for runs the two réseau lines in each direction would be simultaneously bisected. In practice this is not the case, and the difference between the two micrometer readings supplies the correction for runs. The separation of each pair of lines is $\frac{1}{9}^{mm}$, or $\frac{1}{3}$ of the distance of the centre of each pair from the centre of the next. This separation is a very suitable one in relation to the breadth of a réseau line on a photograph. It also simplified the division of the scales, as, with the

exception of the centre, 90 equidistant divisions were required with every third division omitted. The division of the scale was made to agree exactly with the actual value of one revolution of the screw. For convenience of computation, therefore, the scale may be regarded as giving the integral part of the reading of the screw. With the magnification 2, used for the plates taken with the Astrographic telescope (scale $1^{mm} = 1'$),

1 réseau interval = 300″ = 30 divisions of the scale ;

so that in this case

1 rev. of screw = 1 div. of scale = 10″.

With magnification unity used for the Thompson plates (scale $1^{mm} = 30''$),

1 réseau interval = 150″ = 15 divisions of the scale ;

so that again

1 rev. of screw = 1 div. of scale = 10″.

Micrometer Screws.

The total range through which the screws are used is one revolution. The value of one revolution was found sensibly equal to a mean division of the scale.

Division Errors of the Glass Scale.

To determine the division errors of the scale free from the optical distortion of the object-glass of the microscope, the diaphragm was removed from the microscope and mounted in the position of the photographic plate. A second similarly divided diaphragm was substituted for it in the focal plane of the microscope. It was thus possible to compare different lengths of the scale to be measured with a standard length at the centre of the field of the microscope. In this way the total length of the scale was subdivided into five lengths of twelve divisions each. These were further subdivided in a similar manner into four lengths of three divisions, and these again into single divisions.

The errors of the corresponding divisions on the right and left, or above and below the centre of the scale, are combined in the same way as the readings of the two réseau lines in forming the measured co-ordinate of a star's image. The weights thus given to the two errors in forming the mean are inversely proportional to the distance of the divisions from the centre of the scale. The following table gives the corrections for each division and the corrections to the mean for the two réseau lines :—

Corrections for Division Errors of Glass Scale, and the Corrections to the Mean applicable when Magnification 2 is used (Astrographic Photographs).

Division.	x Co-ordinate.		Correction to Mean.	y Co-ordinate.		Correction to Mean.
	Left of Centre.	Right of Centre.		Below Centre.	Above Centre.	
	″	″	″	″	″	″
0	·000	− ·031	− ·031	·000	+ ·059	+ ·059
1	+ ·026	− ·020	− ·018	+ ·033	+ ·029	+ ·029
2	+ ·008	− ·015	− ·013	+ ·001	+ ·022	+ ·021
3	− ·007	− ·021	− ·020	+ ·006	+ ·032	+ ·029
4	− ·013	− ·047	− ·042	·000	+ ·005	+ ·004
5	+ ·003	− ·032	− ·026	+ ·015	+ ·018	+ ·016
6	+ ·009	− ·006	− ·003	+ ·030	+ ·044	+ ·041
7	+ ·047	+ ·049	+ ·049	+ ·070	+ ·084	+ ·080
8	+ ·048	+ ·032	+ ·036	+ ·072	+ ·078	+ ·076
9	+ ·036	+ ·018	+ ·023	+ ·060	+ ·053	+ ·055
10	+ ·012	+ ·016	+ ·015	+ ·037	+ ·051	+ ·046
11	+ ·001	+ ·006	+ ·004	+ ·026	+ ·053	+ ·043
12	+ ·010	+ ·005	+ ·007	+ ·048	+ ·049	+ ·049
13	+ ·038	+ ·015	+ ·025	+ ·060	+ ·065	+ ·063
14	+ ·008	+ ·009	+ ·009	+ ·040	+ ·051	+ ·046
15	− ·011	− ·007	− ·009	+ ·012	+ ·040	+ ·026
16	− ·082	− ·079	− ·081	− ·052	− ·041	− ·047
17	− ·083	− ·103	− ·092	− ·061	− ·062	− ·061
18	− ·119	− ·106	− ·114	− ·081	− ·068	− ·076
19	− ·109	− ·096	− ·104	− ·072	− ·046	− ·062
20	− ·081	− ·113	− ·092	− ·052	− ·051	− ·052
21	− ·093	− ·121	− ·101	− ·058	− ·059	− ·058
22	− ·107	− ·126	− ·112	− ·081	− ·052	− ·073
23	− ·101	− ·101	− ·101	− ·060	− ·032	− ·053
24	− ·067	− ·089	− ·071	− ·022	− ·018	− ·021
25	− ·024	− ·050	− ·028	+ ·006	+ ·016	+ ·008
26	− ·031	− ·027	− ·030	·000	+ ·030	+ ·004
27	− ·029	− ·023	− ·028	+ ·005	+ ·029	+ ·007
28	− ·033	− ·055	− ·034	− ·014	− ·004	− ·013
29	− ·040	− ·069	− ·041	+ ·003	− ·019	+ ·002
30	− ·031	·000	− ·031	+ ·059	·000	+ ·059

With the magnification unity, only the central half of the scale is used. Thus if one réseau line is on division 5, to the right of the centre, the adjacent one falls on 20, to the left of the centre. The integer set down in the measures is the number of the division on which the réseau line to the right of (for the x co-ordinate) or above (for the y co-ordinate) the centre falls. The corrections for division errors are formed by combining those given above, as in the following table :—

Corrections for Division Errors of the Glass Scale and Corrections to Mean applicable when Unit Magnification is used (Thompson Photographs).

Divisions.	x Co-ordinate.			y Co-ordinate.		
	Left of Centre.	Right of Centre.	Correction to Mean.	Below Centre.	Above Centre.	Correction to Mean.
15, 0	− ″·011	− ″·031	− ″·031	+ ″·012	+ ″·059	+ ″·059
16, 1	− ·082	− ·020	− ·024	− ·052	+ ·029	+ ·024
17, 2	− ·083	− ·015	− ·024	− ·061	+ ·022	+ ·011
18, 3	− ·119	− ·021	− ·041	− ·081	+ ·032	+ ·009
19, 4	− ·109	− ·047	− ·064	− ·072	+ ·005	− ·016
20, 5	− ·081	− ·032	− ·048	− ·052	+ ·018	− ·005
21, 6	− ·093	− ·006	− ·041	− ·058	+ ·044	+ ·003
22, 7	− ·107	+ ·049	− ·024	− ·081	+ ·084	+ ·007
23, 8	− ·101	+ ·032	− ·039	− ·060	+ ·078	+ ·004
24, 9	− ·067	+ ·018	− ·033	− ·022	+ ·053	+ ·008
25, 10	− ·024	+ ·016	− ·011	+ ·006	+ ·051	+ ·021
26, 11	− ·031	+ ·006	− ·021	·000	+ ·053	+ ·014
27, 12	− ·029	+ ·005	− ·022	+ ·005	+ ·049	+ ·014
28, 13	− ·033	+ ·015	− ·027	− ·014	+ ·065	− ·003
29, 14	− ·040	+ ·009	− ·037	+ ·003	+ ·051	+ ·006
30, 15	− ·031	− ·007	− ·031	+ ·059	+ ·040	+ ·059

Distortion of the Field of the Microscope Object-glass.

The distortion of the field was determined for the magnification 2 by comparing intervals on the scale (whose errors had already been determined) with a standard interval. For this purpose the scale was replaced in the focal plane of the microscope and the subsidiary scale mounted in the position of a photograph to be measured. The scale from end to end was divided into ten equal intervals, which were successively compared with the same interval of the subsidiary scale. There was some difficulty in the measures at the edge of the field, owing to the lens being slightly over-corrected for

flatness of field. In the following table are given the differences of each interval from the standard interval after correction for the errors of the scale. The heading gives the reading of the scale as measured from the centre :—

	0d–6d	6d–12d	12d–18d	18d–24d	24d–30d
From centre to right . .	+ ″·077	+ ″·002	″·000	− ″·003	− ″·063
,, ,, left . .	+ ·004	+ ·038	+ ·051	− ·008	− ·093
,, ,, top . .	+ ·054	+ ·050	+ ·034	− ·002	− ·050
,, ,, bottom . .	+ ·017	+ ·031	+ ·010	− ·036	− ·108
Mean . .	+ ·038	+ ·030	+ ·024	− ·012	− ·079

Applying a correction −″·035 per six divisions, which is equivalent to taking the scale at the centre, the correction for distortion is found to be—

0d	6d	12d	18d	24d	30d
″·000	+″·002	−″·002	−″·014	−″·061	−″·175

The reading 30d corresponds to an angular distance of the object of $2\frac{1}{2}°$ from the centre of the object-glass. The above numbers indicate that the distortion is roughly proportional to the fifth power of the distance from the centre of the field. It is practically insensible up to 18d, and increases rapidly after 24d, or 240″ on the Astrographic plate.

For the photographs taken with the Thompson Equatorial the microscope is used with the magnification unity, and the field used can only extend to 15d from the centre, within which range the distortion is quite insensible.

The amount of the distortion at different distances from the centre is shown in the diagram by the curve above the horizontal line. The *correction* for distortion, which is negative on the positive side of the centre, is shown by the dotted curve below the line. On the negative side the correction changes sign and is positive, being represented by the full-line curve. Practically the whole effect of the distortion appears in alteration of the "runs" of the micrometer, and the effect on the mean of the measures of a star image is very small, for in measuring the position of an image it is bisected at the centre of the field C, and in effect the distances from the two réseau lines between which it falls, *i.e.* CA and CB, are read. The error of runs is eliminated by combining these measures with weights in inverse proportion to their distances from the centre. Measuring now in one direction, from right to left, the correction for distortion will be positive on one side of the centre and negative (indicated by the dotted curve) on the other. In the diagram the correction to the measure of the réseau line on the left is A M, to the réseau line on the right is zero, and the correction to the mean is C R.

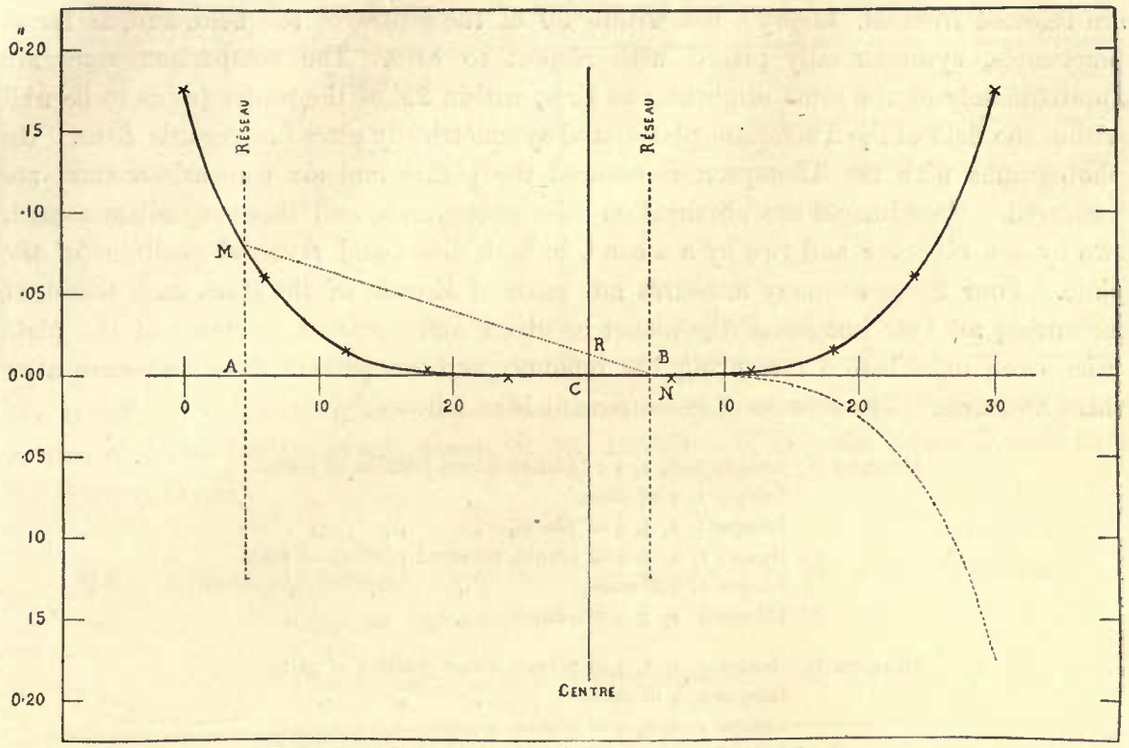


FIG. 2.—Distortion of Microscope Object-glass.

The position in the diagram corresponds to the maximum effect. The same result is shown in the following table :—

Correction for Distortion.

Reading of Scale.	Left.	Right.	Mean.
d	"	"	"
0	+ ·175	·000	·000
6	+ ·061	+ ·002	+ ·012
12	+ ·014	− ·002	+ ·003
18	+ ·002	− ·014	− ·003
24	− ·002	− ·061	− ·012
30	·000	− ·175	·000

This distortion of the microscope object-glass is quite insignificant, and no correction has been applied.

Measurement of the Photographs of Eros.

On each photograph taken with the Astrographic Equatorial measures are made of the planet, ten to twelve reference stars and six comparison stars. The reference stars

are selected from M. Loewy's list within 50′ of the centre of the field, and, as far as practicable, symmetrically placed with respect to Eros. The comparison stars are approximately of the same brightness as Eros, within 25′ of the centre (so as to be well within the field of the Thompson plates) and symmetrically placed as regards *Eros*. On photographs with the Thompson Equatorial the planet and six comparison stars are measured. Four images are obtained on each photograph, and these are all measured, two by one observer and two by a second, in both direct and reversed positions of the plate. Four times as many measures are made of Eros as of the stars, each measurer measuring all four images of the planet in direct and reversed positions of the plate twice over, once before measuring the reference and comparison stars and once after these measures. The scheme of measurement is as follows :—

Measurer A. Images 1, 2, 3, 4 of planet, direct position of plate.
Images 1, 2 of stars, ,, ,, ,,
Images 1, 2, 3, 4 of planet, ,, ,, ,,
Images 1, 2, 3, 4 of planet, reversed position of plate.
Images 1, 2 of stars, ,, ,, ,,
Images 1, 2, 3, 4 of planet, ,, ,, ,,

Measurer B. Images 1, 2, 3, 4 of planet, direct position of plate.
Images 3, 4 of stars, ,, ,, ,,
Images 1, 2, 3, 4 of planet, ,, ,, ,,
Images 1, 2, 3, 4 of planet, reversed position of plate.
Images 3, 4 of stars, ,, ,, ,,
Images 1, 2, 3, 4 of planet, ,, ,, ,,

The large number of measures of Eros (thirty-two in all) makes them comparable with the total number of measures of reference and comparison stars. The above system of measurement has proved amply sufficient to obtain the position of Eros with all the accuracy of which the photographs admit.

The Accuracy of the Measures.

From measures made on a réseau and others made on specks of the film of a photograph it appears that the probable error of a pointing on a perfectly defined speck is $\pm''\cdot020$. This result is obtained with the magnification used in the actual measurement of the photographs.

For the determination of the accuracy with which the planet Eros is bisected, comparisons have been made between the two pointings on Eros in the same position of the plate by the same measurer. These pointings were made after an interval of time during which other images were measured. The actual differences between Mr. Davidson's (C.D.) measures on plate 5306 are given as a specimen.

Plate 5306. *Measurer* C.D.

	Difference of 1st and 2nd Measures of Eros.			Difference of 1st and 2nd Measures of Eros.	
	x	y		x	y
Image 1 measured direct ...	− ″·06	+ ″·02	Image 1 measured reversed	+ ″·01	− ″·22
„ 2 „ „ ...	− ·02	+ ·14	„ 2 „ „ ...	− ·10	+ ·18
„ 3 „ „ ...	+ ·08	+ ·04	„ 3 „ „ ...	+ ·23	+ ·04
„ 4 „ „ ...	+ ·02	+ ·02	„ 4 „ „ ...	+ ·22	+ ·01
			Mean Discordance	± ·093	± ·084

Results of this nature, each depending on eight comparisons, are given below for a number of plates for the three measurers, Mr. Davidson (C.D.), Mr. Edney (D.E.), and Mr. Burkett (W.B.).

Mean Differences between Two Pointings on Eros by the same Measurer and in the same Position of the Plate.

Plates taken with Astrographic Equatorial.

Plate.	C.D.		D.E.		W.B.	
	x	y	x	y	x	y
5275	±″·111	±″·073	±″·075	±″·118	″...	″...
5276	·080	·070	·133	·081	...	...
5278	·126	·064	·124	·133	...	...
5280	·121	·156	·131	·124	...	...
5283	·151	·183	...	...	±·189	±·183
5285	·131	·073	·100	·106	...	...
5286	·108	·132	...	...	·040	·090
5287	·064	·068	·103	·050	...	...
5288	...	...	·115	·080	·134	·071
5289	·101	·149	·078	·101	...	...
5290	·059	·150	...	...	·078	·146
5294	...	...	·113	·131	·090	·081
5297	·085	·184	...	...	·135	·119
5299	...	...	·120	·083	·155	·129
5300	·080	·173	·158	·079	...	...
5304	...	...	·070	·120	·098	·106
5306	·093	·084	·101	·166	...	...
5307	...	...	·164	·158	...	...
	±·101	±·120	±·113	±·109	±·115	±·116
Mean =	±·110		±·115			

Mean Differences between Two Pointings on Eros by the same Measurer and in the same Position of the Plate.

Plates taken with Thompson Equatorial.

Plate.	C.D.		D.E.		W.B.	
	x	*y*	*x*	*y*	*x*	*y*
	"	"	"	"	"	"
845	±·086	±·068	±·069	±·093	...	...
846	...	...	·101	·071	±·094	±·079
847	...	...	·105	·053	·123	·075
848	·069	·075	·096	·073	...	...
849	·048	·081	·081	·091	...	...
850	·051	·084	·069	·090	...	...
851	...	...	·079	·058	·100	·104
852	...	...	·081	·110	·038	·078
853	·068	·065	·071	·084	...	...
854	·140	·128	·065	·118	...	...
855	...	...	·108	·095	·065	·090
857	...	...	·086	·078	·140	·086
858	·064	·096	·085	·055	...	...
859	...	...	·084	·051	·054	·070
860	·132	·097	...	...	·067	·095
861	...	...	·103	·125	·066	·068
863	·063	·097	·070	·062	...	...
864	...	...	·070	·054	·064	·073
865	...	...	·073	·079	·111	·111
	±·080	±·088	±·083	±·080	±·084	±·084
			Mean	±·082	±·083	

The above tables show that the accidental error of measurement is the same for the three measurers, and that it is considerably smaller for the Thompson than for the Astrographic photographs. The probable accidental error of a single pointing on Eros is

$$\pm''\cdot112 \times \frac{1}{\sqrt{2}} \times \cdot85 = \pm''\cdot067 \text{ for the Astrographic photographs}$$

and

$$\pm''\cdot082 \times \frac{1}{\sqrt{2}} \times \cdot85 = \pm''\cdot049 \text{ for the Thompson photographs.}$$

The comparison of the results shows that these accidental errors of measurement are only a trifling part of the final error. No attempt has been made to analyse the sources of error in detail, though it seems clear that a considerable error is inherent in the star images.

IV. REDUCTION OF THE MEASURES.

The measured positions of the images on the réseau were expressed in arc, assuming 1 réseau interval = 300″ for the Astrographic plates and 1 réseau interval = 150″ for the Thompson plates. Corrections for (1) the division errors of the eyepiece scale of the microscope (pp. xvi. and xvii.), (2) the *provisional* division errors of the réseau (see below, Section V.), and (3) the square term of the differential refraction, were applied, and the results thus corrected are printed as measured co-ordinates in Tables II. and III. With the réseau direct the lines 1, 2, 3 . . . . 27 correspond to 300″, 600″, 900″ . . . . 8100″, and with the réseau reversed to 8100″, 7800″, 7500″ . . . . 300″, the plate centre in either case being at $x = 4200''$ $y = 4200''$.

Differential Refraction.—It is well known that the principal part of the correction for differential aberration and refraction is a linear function of the co-ordinates, and accordingly merely leads to an alteration of the plate-constants. But to the order of accuracy here required the square term of the differential refraction is not negligible. This amounts to a displacement towards the zenith of the outer parts of the plate as compared with the central parts, arising from the fact that the mean of the tangents of two angles (zenith-distances) is greater than the tangent of the mean.

The formulæ for the effects of differential refraction are

$$\Delta x = -\beta\{(1+X^2)x + XYy\} + \beta\{X(2+X^2)x^2 + Y(1+2X^2)xy + X(1+Y^2)y^2\}$$
$$\Delta y = -\beta\{(XYx + (1+Y^2)y\} + \beta\{Y(1+X^2)x^2 + X(1+2Y^2)xy + Y(2+Y^2)y^2\}$$

where X, Y are standard co-ordinates of the zenith.

Considering only the second order terms, and expressing x and y in units of 1000″, we have

$$\Delta x = ''\cdot 00136\{ax^2 + 2hxy + by^2\}$$

where

$$a = X(2+X^2)$$
$$2h = Y(1+2X^2)$$
$$b = X(1+Y^2)$$

and

$$''\cdot 00136 = \text{constant of refraction} \times (\text{circular measure of } 1000'')^2.$$

A graphical method of determining these corrections was employed, diagrams being constructed for each plate, from which the corrections to the individual stars could be at once read off. Since the errors Δx were required to the nearest hundredth of a second, curves were drawn on a plan of the plate for which Δx = ″·005, ″·015, ″·025, etc. These curves divide the plate into regions for which corrections ″·00, ″·01,

″·02, etc., are applicable. They are co-axal and similar conics, and in almost all cases of practical importance are ellipses.

The inclination θ of the axes of the ellipses to the axes of the réseau is given by

$$\tan 2\theta = \frac{2h}{a-b},$$

the equation referred to the principal axes is

$$\Delta x = ″\cdot00136\{a'x'^2 + b'y'^2\},$$

where

$$2a' = \overline{a+b} + \overline{a-b}\cos 2\theta + 2h \sin 2\theta$$

$$2b' = \overline{a+b} - \overline{a-b}\cos 2\theta - 2h \sin 2\theta.$$

Eight points on each ellipse are readily found, viz. the extremities of the principal axes and the intercepts on the middle lines of the réseau. The actual determination of these points is greatly facilitated by the use of a table giving the solution of

$$\Delta x = ″\cdot00136\, ax^2$$

for the argument a and for the standard values (″·005, ″·015, etc.) of Δx; the same table is available for determining all the eight points on each ellipse.

A similar figure was used to determine Δy; the following is an example of the method :—

Plate 5283. 1900 *December* 7.

Hour-Angle West $5^h\ 12^m\cdot3$, Declination North 48° 17′.

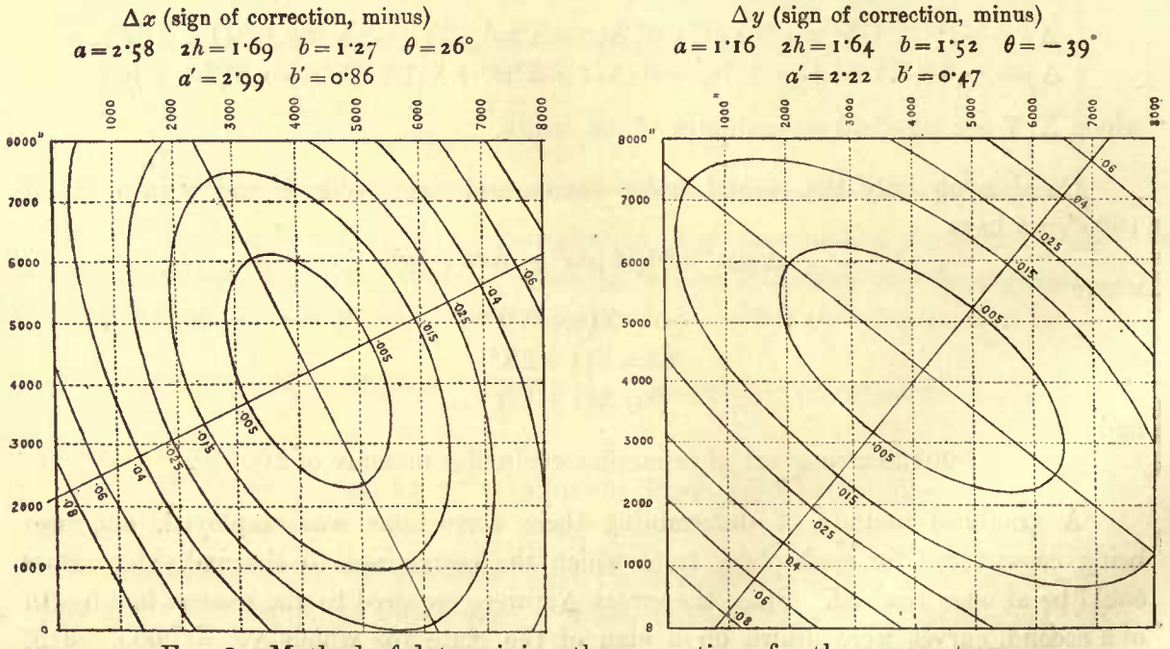


FIG. 3—Method of determining the corrections for the square term of the differential refraction.

Plate-Constants. Astrographic Plates.

For the purpose of determining plate-constants, from ten to twelve reference stars and six comparison stars were measured on each of the Astrographic Plates. The réseau covers an area of the plate 130′ square, but it was decided not to make use of stars outside a circle of 55′ radius, measured from the centre of the field, for determining plate-constants.

The *reference stars* (*étoiles de repère*) were taken from the list given in Circulars Nos. 4 and 5 of the Astrographic Conference. In general no selection was possible, as there were not more than twelve suitable reference stars (from the list) on the plate.

At the time when the work of reduction at Greenwich began, neither M. Loewy's adopted positions nor Mr. Tucker's normal catalogue of reference stars had been published. Accordingly, the work was started with a series of places adopted independently of other observatories; however, at a later stage in the reductions, corrections were introduced to reduce to M. Loewy's system (Circular No. 11, p. 402). The positions of Eros (Table X.) and the photographically corrected places of the reference and comparison stars (Tables VII. and VIII.) depend on M. Loewy's adopted places, exactly as though his places had been used from the beginning.

The initially adopted places of the reference stars were found by taking means of the meridian places determined at the various co-operating observatories, and published in the Circulars of the Astrographic Conference, the following system of weights being used :—

1 observation	. . . .	weight 1
2 and 3 observations	. . . .	,, 2
4, 5 and 6 ,,	. . . .	,, 3
above 6 ,,	. . . .	,, 4

These places being only used provisionally, the means were taken to $0^s{\cdot}01$ in R.A. and $0''{\cdot}1$ in Decl. They are given in Table VII.

The plate-constants were computed in the way that has been used at Greenwich for the Astrographic Catalogue.

The name "Standard Co-ordinates" is given to the co-ordinates which the star has on an ideal plate fulfilling the conditions :—

(1) The centre of the plate agrees with the assumed centre.

(2) The plate is oriented with the axis of y along the meridian (y increasing with the Declination) for the mean equinox, 1900·0.

(3) Refraction and aberration are non-existent.

If ξ, η are Standard Co-ordinates, and x, y are Measured Co-ordinates, setting as usual—

$$\xi = (1+a)x + by + c$$
$$\eta = dx + (1+e)y + f,$$

c, f give the position of the actual plate-centre referred to the assumed plate-centre.

a, e give the difference of the actual scale from the ideal scale (1 mean réseau interval = 300″), assumed when converting the measured co-ordinates into arc, and depend partly on the focal length of the telescope, partly on the mean interval of the réseau, and partly on the differential refraction and aberration.

b, d give the error of orientation of the plate.

The Standard Co-ordinates were calculated from the adopted meridian places of the reference stars by the formulæ—

$$\xi = \tan(\alpha - \mathrm{A}) \,.\, \sec(\theta - \mathrm{D}) \,.\, \cos\theta$$
$$\eta = \delta - \mathrm{D} + \tan^2\frac{\alpha - \mathrm{A}}{2} \,.\, \sin 2\delta + \frac{\eta^3}{3}$$

where α, δ are the right ascension and declination of the star; A, D the right ascension and declination of the centre of the plate; and $\theta = (\delta + \tan^2\frac{\alpha - \mathrm{A}}{2} \,.\, \sin 2\delta)$.

The conversion of Standard Co-ordinates into Right Ascension and Declination was effected by means of the formulæ and tables given by M. Loewy in Circular 10 of the Astrographic Conference.

The Standard Co-ordinates of the reference stars being compared with the measured co-ordinates, each star provides two equations for the determination of the six constants a, b, c, d, e, f. Following a practice pretty generally adopted, these equations were *not* solved by least squares. The accuracy of determinations of the positions of stars near the edges of the plate is much inferior to the accuracy of those nearer the centre, and the unmodified method of least squares would give too great weight to the outer stars in forming equations for the scale-constants. It has already been mentioned that it was found desirable to reject stars more than 55′ from the centre; for the same reason, a solution of the equations in which each star has a weight directly proportional to its distance from the centre could not be satisfactory. In the method actually adopted the scale-constants were determined by grouping the stars on one side of the central line and comparing with the group of stars on the other side of the line, giving equal weight to each star.

The scale-constants a and e may each be analysed into two parts. The part depending on the focal length of the telescope and the interval between the réseau-lines is practically constant. The part depending on the differential refraction and aberration can be calculated theoretically. The formulæ for these are given in the Greenwich Astrographic Catalogue, vol. I. pp. xliv and xlv. Under the columns headed a' and e' in Table IV. are the values obtained for the former part for each plate; i.e. a' and e' are the scale-constants derived from the solution of the equations for each plate, but with the theoretical effects of refraction and aberration removed. The mean values for the whole opposition are $a' = -\cdot00102$ $e' = -\cdot00095$, and the mean discordance of each single determination from the mean is $\pm\cdot00005$. The question arises, to what extent are these discordances real, and to what extent are they due to errors in the places of the reference stars or errors of measurement? It is considered that the latter is the main cause of these differences (see Dyson, "Note on Plate-Constants," *Monthly Notices, R.A.S.*, vol. lxiii. p. 134), and accordingly the mean values $-\cdot00102$ and $-\cdot00095$ were adopted. The theoretical terms due to aberration and refraction were then added to these to give the adopted scale-constants a and e which are entered in Table IV.

In like manner, the values of b and d adopted are not exactly the values derived directly from the equations. The latter, after correction to clear from refraction and aberration, are denoted by b' and d'. The sum $b'+d'$ should be equal to zero; actually the mean value of the sum from all the plates is found to be $+\cdot000066$. This may depend on the axes of x and y on the réseau not being at right angles to one another or on other small errors. The value of $b'-d'$ depends on the orientation, and varies from plate to plate; combining the value of $b'-d'$ found for the individual plate with the mean adopted value of $b'+d'$, and applying the theoretical corrections for refraction and aberration, the finally adopted orientation-constants b and d are arrived at.

The corrections to the origin c' and f' are derived from the whole of the equations after substituting the values of a, b, d, e adopted; c and f are the corresponding corrections, using improved places of the reference stars (see below).

In the seventh and eighth columns of Table II. are given the residuals (calculated—observed) of the reference stars; these residuals are the quantities $\xi - ax - by - c'$, $\eta - dx - ey - f'$, and represent the difference between the adopted (provisional) place of the star and the place as computed from the plate-constants, (viz. final scale-constants but provisional plate-centre).

In order to obtain improved places of the stars these residuals have been ledgered

in Table VI. In forming the mean residual, the means for each night were taken separately and then combined with the following system of weights :—

Result from	1 photograph	a weight	2
,,	2 photographs	,,	3
,,	3 ,,	,,	4
,,	4 or 5 ,,	,,	5
,,	6 or 7 ,,	,,	6

The error of a star's position derived from any photograph depends on (1) ϵ_0 the systematic error of the plate-centre due to erroneous star-places, which is constant throughout any one night, (2) ϵ_1 the accidental error of measurement of the star's image. The above system of weights is founded on the assumption $\epsilon_0^2 = 0{\cdot}3\ \epsilon_1^2$.*

At this point the correction to reduce to M. Loewy's adopted star-places was introduced. Forming the differences, Loewy – Greenwich Provisional, for each reference star on any plate, and taking the mean, corrections to the plate-centre to reduce each plate to Loewy's system were found. For each star these corrections were ledgered side by side with the residuals and the mean taken with the same weights as were used for the corresponding residuals. Only the final correction is given in Table VI.

M. Loewy's star-places have been taken from the data published by him in Circular No. 11, p. 402. He has since published in Circular No. 12 of the Astrographic Conference a catalogue, which differs slightly, especially in the latter part.

The finally deduced places are collected in Table VII., which also gives M. Loewy's place and the place provisionally adopted at Greenwich. It was now necessary to correct the plate-constants c' and f' by using the improved places. The resulting values c and f, and the corrections to c' and f', are given in Table IV.

On each plate, in addition to the Reference Stars, another series of stars called *Comparison Stars* was measured. These were six stars of about the same magnitude as Eros, arranged symmetrically about it and within 25′ of the centre of the plate.

* A comparison of the adopted meridian places of reference stars with places derived from Paris photographs showed a mean discordance of ±″·17. Allowing 12 reference stars to the plate, we may estimate ϵ_0 to be ±″·05. But the mean discordance of a single measured place from the mean measured place (for a star measured on a large number of plates on several nights) is ±″·10, so that—

$$\sqrt{\epsilon_0^2 + \epsilon_1^2} = \pm''{\cdot}10$$

whence

$$\epsilon_1 = \pm''{\cdot}09$$
$$\epsilon_0 = \cdot 56\ \epsilon_1$$
$$\epsilon_0^2 = 0{\cdot}3\ \epsilon_1^2$$

It was also necessary, in order that a good determination of the place of the star might be made possible, that the star should be measurable on plates taken on two or more different nights. These stars served the double purpose of points of reference for the Thompson photographs (for which, owing to the smaller field, the reference stars could not be used), and of an additional series of points of reference for the Astrographic plates.

The measures of these stars are given on the right-hand side of each page in Table II. The measured positions converted into R.A. and Dec. by means of the finally adopted plate-constants are ledgered in Table VIII., simple means are there taken, and the resulting places summarised in Table IX. In the last two columns of Table II. are tabulated the residuals of the measures of Comparison Stars on the respective plates.

For the determination of the places of the comparison stars, measures of their images were made on all plates on which they appear, and not only on those for which they were used as comparison stars. Where the star is not used as a comparison star for the plate to which the measures refer, a dagger (†) is affixed to the residuals.

The mean of the residuals of the six comparison stars on any one plate, with the sign changed, is the correction required to refer Eros (or any star) to the comparison stars instead of to the reference stars.

Thompson Plates.—The reduction of the measures followed the same lines as for the Astrographic, but was more straightforward. The comparison stars served as points of reference, their adopted places being found from the Astrographic measures, as already explained. No rectification of star-places or reduction to Loewy was required, that having been already accomplished in the determination of these places from the Astrographic Plates. The equations for the plate constants were, however, in this case, solved by least squares.

V. DIVISION ERRORS OF THE RÉSEAU.

The very high accuracy aimed at in the measurement of the positions of Eros for the determination of solar parallax renders the determination of the division errors of the réseau a matter of great importance. All the measurements and corrections have been carried to $''\cdot01$, which gives some idea of the order of accuracy desired; in particular, a *systematic* difference of $''\cdot01$ between the measured positions of Eros deduced from evening and morning photographs would introduce a systematic error of $''\cdot003$ (or more) into the finally deduced value of the parallax—a quantity nearly equal to the accidental error of the final result.

In the case of the Astrographic photographs, the fact that the réseau was reversed (see p. x) when the telescope passed from east to west of the pier will introduce such a systematic difference unless the mean division error for that part of the réseau where Eros generally falls has been determined correctly to ″·005.

Besides the principal division errors due to the unequal spacing of the lines of the réseau, there are small errors due to imperfect straightness of the réseau lines which cannot be wholly neglected for our purpose. To determine the division error at a sufficient number of points along every réseau line to ″·01 would be far too laborious a task; and, moreover, there is the further difficulty that the prints are not exact copies of the silver-on-glass réseau, but differ from it, partly accidentally and partly systematically.

This difficulty has been met by applying, in the first place, approximate division corrections to all measurements (both of Eros and of the stars), and afterwards applying supplementary corrections to Eros to refer it more accurately to the mean of the reference or comparison stars.

The investigation is accordingly divided into two parts:—

(I.) PROVISIONAL DIVISION ERRORS.

The micrometer used throughout for the determination of division errors was described in *Monthly Notices*, vol. liii. p. 326, but has been somewhat modified since then. A photograph of the instrument, as it now is, is shown in the lower figure in the frontispiece. Two microscopes, whose distance apart can be adjusted, are connected by a bar which can move longitudinally in a slide and can be firmly clamped in any desired position. The réseau and scale to be compared are mounted so as to be viewed one by each microscope. The frame which carries the réseau can move in a slide perpendicularly to the line joining the microscopes. A fixed close pair of parallel wires in the right-hand microscope is set on the required division of the scale by moving the bar which carries the two microscopes by means of a slow-motion screw. A movable wire in the left-hand microscope is then set on the required réseau-line by turning a micrometer-head. In this way the difference between the interval between two réseau-lines and the interval between two scale divisions can be determined, the constancy of the distance between the axes of the two microscopes being used, as it were, to project the scale divisions on the réseau. In order that the same reading of the micrometer may always correspond to the same distance between the two points viewed, it is necessary that either the axes of the microscopes should be parallel or that each slide should move accurately in its plane

Probably an appreciable error arises from the non-fulfilment of these conditions when the outer parts of the réseau are viewed; the error can be detected and eliminated by turning the réseau through 180° and remeasuring.

The réseau-lines 5mm apart are numbered from 1 to 27 in both co-ordinates, so that the centre of the réseau is at the intersection of the lines numbered 14. Omitting the extreme lines 1 and 27, the division errors of lines 8, 14, and 20 referred to 2 and 26 were first determined. The measurements were made at the central parts of the lines, and consisted in comparing the intervals 2–8, 8–14, 14–20, 20–26 with the same interval on a glass scale. Four complete sets of measures were made, each set being the mean of measures made with the réseau direct and reversed. These gave for the division errors referred to 2 and 26 as standard :—

TABLE 1.

x Co-ordinate.

	2	8	14	20	26
	″·00	− ″·20	− ″·20	− ″·18	″·00
	·00	− ·21	− ·19	− ·14	·00
	·00	− ·21	− ·25	− ·20	·00
	·00	− ·21	− ·22	− ·18	·00
Mean	·00	− ·21	− ·21	− ·18	·00

y Co-ordinate.

	2	8	14	20	26
	″·00	+ ″·05	+ ″·11	+ ″·11	″·00
	·00	+ ·08	+ ·10	+ ·13	·00
	·00	+ ·08	+ ·11	+ ·11	·00
	·00	+ ·06	+ ·10	+ ·11	·00
Mean	·00	+ ·07	+ ·11	+ ·12	·00

The division errors given are expressed in arc for the scale of the Astrographic plates.

Each of the single intervals from 1 to 27 was now compared with each of six consecutive intervals of the glass scale by a symmetrical method. If the six lengths

of the scale be called a, b, c, d, e, f, the intervals 1–2, 2–3, 3–4, 4–5, 5–6, 6–7, 7–8 were compared with them as follows. In the first setting 1–2 was compared with f; in the second, 1–2 with e, and 2–3 with f; in the third, 1–2 with d, 2–3 with e, and 3–4 with f; and so on, the relative positions of the scale and réseau being changed one division at each setting.

In this way cumulative error was, as far as possible, avoided, and a comparison effected between each of the intervals 1–2, 2–3, 3–4, 4–5, 5–6, 6–7, 7–8, and the mean $\frac{1}{6}(a+b+c+d+e+f)$ of six intervals of the scale. Using the values of the terminal division errors at 2 and 8, those of the intermediate points and one exterior point are found. A similar method was used to subdivide 8–14, 14–20, and 20–27.

The division errors found in this way are given in the following table*, and were applied to all measures, whether of Eros or of the reference and comparison stars. The measures printed in Tables II. and III. are corrected for *these* division errors, but not for the supplementary division errors about to be described.

TABLE 2.

Provisionally Adopted Errors of Réseau.

Line	X —	Y	Line	X	Y
	″	″		″	″
1	−·00	−·19	15	−·18	−·03
2	·00	·11	16	·18	·04
3	·06	·11	17	·18	·05
4	·01	·09	18	·17	·01
5	·08	·07	19	·16	·00
6	·13	·03	20	·17	·01
7	·17	·06	21	·16	·00
8	·19	·06	22	·13	·01
9	·24	·02	23	·12	·05
10	·21	·02	24	·10	·05
11	·18	·00	25	−·09	·08
12	·21	·02	26	·00	·11
13	·17	·04	27	+·14	−·12
14	−·19	−·03			

(II.) SUPPLEMENTARY DIVISION ERRORS.

It has already been explained (p. x) that in the case of the Astrographic telescope the réseau is reversed with the telescope in passing from east to west of the pier.

* The errors at 2, 8, 14, 20 and 26 are not derived directly from Table 1, but are modified by the inclusion of measures made at the intersections with 2 and 26 in the other co-ordinate as well as those made at the intersections with 14 (see Table 9).

In consequence of this reversal the division errors of the central line 14 and the adjacent line 13 or 15 between which Eros is usually placed affect the R.A. of Eros with opposite signs on photographs taken with the telescope east and west of the pier respectively, and thus directly enter into the value of the parallax deduced from morning and evening photographs with the telescope east and west respectively. It was therefore necessary to determine the division errors of the x lines 13, 14, and 15 with a degree of accuracy far beyond that of the other lines.

It must be remembered that division errors are *relative*; and it is necessary to specify to what these division errors are referred. What was required in this supplementary investigation was the error of that part of the réseau where Eros falls, referred to the mean of the lines in that portion of the réseau on which those stars fall from which the co-ordinates of the plate-centre were deduced. In Table X. three series of places of Eros are given, viz. (1) Astrographic photographs using *reference stars*; (2) Astrographic photographs using *comparison stars*; (3) Thompson photographs using *comparison stars*. In series (2) the comparison stars may be considered to be in the mean fairly uniformly distributed ever the square between lines 9 and 19 in each co-ordinate, while in the other two series the stars were mainly distributed over the square between lines 4 and 24. Different corrections must be applied to Eros in the two cases.

There were three steps in the determination of these supplementary division err (r

(1) A more accurate determination of the errors of lines 13, 14, 15 on the silver réseau.

(2) Measurement of the systematic differences between prints of the réseau and the réseau itself.

(3) Examination of the straightness of the réseau lines.

This discussion is limited to division errors in the x co-ordinate,—*i.e.* to those applicable to Right Ascensions. No determination of division errors with special reference to the central lines was needed for the Declinations. The parallax in Declination being of the same sign on both sides of the meridian, comparisons are made between plates taken at a large hour-angle E or W and those near the meridian, not, as in the case of the right ascensions, between plates E and plates W. Accordingly, if the same proportion of low plates are taken with the telescope E and W (réseau direct and reversed) as of meridian plates, the value of the division error of the central lines of the réseau does not affect systematically the deduced parallax.

(1) *Supplementary Division Errors of the Central Lines on the Silver Réseau.*

To find the division error of line 14 referred to the mean of the lines from 4 to 24, the intervals between line 14 and each symmetrical pair of lines from 4 to 24 were compared by means of a glass scale.

Thus the comparison between the intervals 4–14 and 14–24 gave the division error of 14 referred to the mean of 4 and 24. Referring 14 in succession to the pairs of lines 4, 24; 5, 23; 6, 22 . . . . 13, 15, and applying the provisional division errors, ten independent determinations of the residual division error of line 14 referred to a pair of lines were obtained. Similarly, line 13 was referred to each pair of lines 3, 23; 4, 24 . . . . 12, 14; and line 15 to each pair 5, 25; 6, 24 . . . . 14, 16. Since, in this method, each line is necessarily referred to pairs of lines symmetrically situated about itself, lines 13 and 15 could not be referred exactly to the same lines (4 to 24) as line 14, but it is clear that the accidental residual division error arising from the substitution of line 3 for line 24 and line 25 for line 4, in the two cases respectively, is negligible in the means of 20 lines.

The investigation was carried out at $y = 13{\cdot}5$ and $y = 14{\cdot}5$ independently. The provisional division errors were determined at $y = 14{\cdot}0$. The accompanying table gives the result :—

TABLE 3.

Supplementary Division Errors of Lines 13, 14, 15.

	$x=13$.			$x=14$.			$x=15$.			$x=15$ (Extra determination).		
	Referred to Lines	Errors		Referred to Lines	Errors		Referred to Lines	Errors		Referred to Lines	Errors	
		$y=13{\cdot}5$	$y=14{\cdot}5$		$y=13{\cdot}5$	$y=14{\cdot}5$		$y=13{\cdot}5$	$y=14{\cdot}5$		$y=13{\cdot}5$	$y=14{\cdot}5$
		"	"		"	"		"	"		"	"
	3, 23	+·003	−·042	4, 24	+·087	+·029	5, 25	+·029	+·032	5, 25	−·004	+·013
	4, 22	+·026	·000	5, 23	+·063	+·004	6, 24	+·016	+·031	6, 24	−·021	+·012
	5, 21	−·004	+·018	6, 22	+·025	+·046	7, 23	−·008	+·002	7, 23	−·012	−·009
	6, 20	−·015	−·014	7, 21	+·004	+·001	8, 22	−·031	+·015	8, 22	+·002	+·018
	7, 19	+·021	+·028	8, 20	−·011	−·034	9, 21	−·048	+·008	9, 21	−·040	−·018
	8, 18	−·027	−·045	9, 19	+·004	−·001	10, 20	−·047	+·014	10, 20	−·041	+·029
	9, 17	−·009	−·035	10, 18	+·006	+·016	11, 19	−·029	+·005	11, 19	−·024	+·008
	10, 16	−·020	+·010	11, 17	−·046	−·029	12, 18	−·042	−·005	12, 18	−·024	−·045
	11, 15	−·024	−·018	12, 16	−·011	−·005	13, 17	−·031	+·044	13, 17	−·053	+·015
	12, 14	−·033	−·027	13, 15	+·016	−·001	14, 16	−·025	+·003	14, 16	−·007	+·011
Means	3 to 23	−·008	−·013	4 to 24	+·014	+·003	5 to 25	−·022	+·015	5 to 25	−·022	+·003
Means	8 to 18	−·023	−·023	9 to 19	−·006	−·004	10 to 20	−·035	+·012	10 to 20	−·030	+·004

For the sake of showing the accuracy attainable, a second determination of the errors of line 15 made after an interval of two months is included in the tables for comparison. The agreement is very satisfactory.

The two sets of means given at the foot of the table are the additional division errors applicable to Eros when referred to reference and comparison stars respectively on Astrographic photographs.

It will be noticed that line 15 has a sensible bend (″·04) in passing from $y = 13\frac{1}{2}$ to $14\frac{1}{2}$, whereas lines 13 and 14 are sensibly straight.

Each quantity in Table 3 is the mean of measures made independently with the réseau direct and reversed.

Table 4 shows the differences between the determinations made with the réseau direct and reversed respectively. The table is given to show the magnitude of the instrumental error, which (it is hoped) is eliminated in taking the mean of the measures.

TABLE 4.

Instrumental Errors in the determination of Supplementary Division Errors.

Réseau reversed—Réseau direct.

$x=13$.			$x=14$.			$x=15$.			$x=15$ (Extra determination).		
Referred to Lines	$y=13\cdot5$	$y=14\cdot5$	Referred to Lines	$y=13\cdot5$	$y=14\cdot5$	Referred to Lines	$y=13\cdot5$	$y=14\cdot5$	Referred to Lines	$y=13\cdot5$	$y=14\cdot5$
	″	″		″	″		″	″		″	″
3, 23	+·138	+·088	4, 24	+·094	+·100	5, 25	+·096	+·090	5, 25	+·082	+·150
4, 22	+·064	+·044	5, 23	+·110	+·088	6, 24	−·038	+·088	6, 24	+·100	+·173
5, 21	+·068	+·032	6, 22	+·058	+·024	7, 23	−·006	+·066	7, 23	+·082	+·077
6, 20	+·026	+·036	7, 21	+·030	+·012	8, 22	−·026	+·046	8, 22	+·096	+·065
7, 19	−·008	−·018	8, 20	+·002	+·046	9, 21	+·020	+·020	9, 21	+·048	+·059
8, 18	−·014	−·034	9, 19	+·036	−·006	10, 20	−·074	+·032	10, 20	−·022	+·058
9, 17	−·002	−·062	10, 18	−·024	·000	11, 19	−·034	+·030	11, 19	−·028	+·015
10, 16	−·022	−·050	11, 17	−·004	+·014	12, 18	−·044	+·042	12, 18	+·017	+·036
11, 15	+·016	−·048	12, 16	+·052	+·020	13, 17	−·020	+·014	13, 17	·000	−·020
12, 14	+·038	−·022	13, 15	+·022	+·012	14, 16	+·024	+·044	14, 16	+·020	+·021

Lines 12 *and* 16.—The scale of the Thompson photographs being double that of the Astrographic, the range of the image of Eros on the plate was naturally greater. Supplementary division errors for lines 12 and 16 were therefore determined.

The intervals 12–13, 13–14, 14–15, 15–16 were compared. The previous investigation had determined accurately the differences between the intervals 13–14 and 14–15 and the mean réseau interval; thus the intervals 12–13 and 15–16 were indirectly compared with the mean réseau interval, and the errors of 13 and 15 being known, those of 12 and 16 were found.

Supplementary Division Errors.

(Referred to the mean of lines 4 to 24.)

	$x=$ 12	13	14	15	16
At $y=13{\cdot}5$ . . .	$+{\cdot}015$	$-{\cdot}008$	$+{\cdot}014$	$-{\cdot}022$	$-{\cdot}010$
$14{\cdot}5$ . . .	$+{\cdot}042$	$-{\cdot}013$	$+{\cdot}003$	$+{\cdot}015$	$+{\cdot}003$

All these errors are halved for the Thompson photographs.

(2) *Comparison between the Réseau and the Photographs.*

A preliminary investigation having shown that there were sensible and systematic differences between the prints of the réseau and the réseau itself, fifteen plates were selected so as to be well representative of the different batches of Eros plates. These were one by one compared with the silver réseau, the corresponding lines on plate and réseau being compared at $y=13{\cdot}5$ and at $y=14{\cdot}5$. All the x lines from 3 to 25 were measured on each plate, and the results are given in Tables 5 and 6. The errors tabulated are referred to the mean of lines 9 to 19 as zero. They are differences between the prints and the silver réseau, and consequently are additional to the errors of the réseau itself. A linear term (corresponding to a difference of scale between the plate and réseau) has been removed from the results for each plate. This is necessary if the plate-constants a and e found with the originally adopted errors are not to be modified; moreover, it allows the remaining differences between the plates which are not differences of scale to be more clearly exhibited.

This correction for scale is given in the last column of the tables, for ten réseau intervals, as applied to line 4, and with reversed sign to line 24, and proportionately to the other lines, and has been applied in forming the results given. It was determined by comparing the mean of lines 3 to 13 with the mean of lines 15 to 25, giving equal weight to each line to correspond with the system of weighting adopted in forming the plate-constants.

The mean results are shown graphically in fig. 4.

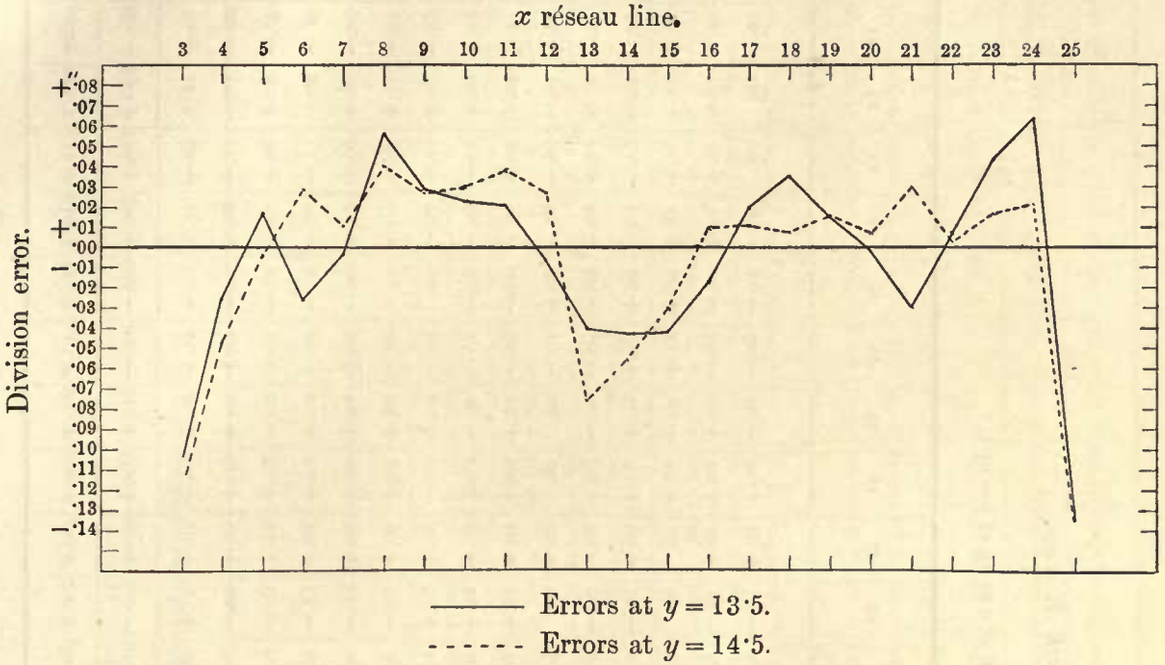


FIG. 4.—Comparison of Photographs with Réseau.

Near the centre the prints agree very closely among themselves. The mean discordance of the measured position of a line *on a single print* from the mean print ranges from ±″·016 for line 14 to ±″·04 for lines 9 and 19, and to ±″·13 for the extreme lines 3 and 25, increasing regularly with the distance from the centre. But this apparent greater irregularity of the outer lines is not entirely arbitrary. For example, if we take the differences between the errors of lines 24 and 25 in the above tables for the fifteen plates,

At 13·5, these are +″·21, +·21, +·22, +·26, +·26, +·13, +·13, +·24, +·08, +·14, +·21, +·28, +·16, +·21, +·22.

At 14·5, „ „ +·16, +·16, +·16, +·26, +·18, +·12, +·22, +·14, +·05, +·08, +·17, +·22, +·07, +·17, +·20.

Whereas the absolute errors vary greatly from print to print, the differences are very accordant.

These systematic differences between the prints and the réseau give a very important correction to the place of Eros. If not applied, there would be an apparent spurious parallactic displacement of Eros amounting to about 0″·1 between east and

TABLE 5.

Comparison of Prints with Réseau.

Division Errors of Print referred to Mean of 9 to 19 at $y = 13{\cdot}5$.

Réseau Line. / Plate.	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Scale Correction.
5160	−″13	−″08	−″05	−″10	−″07	″00	−″03	″00	+″04	−″01	−″01	−″02	−″02	−″03	+″02	+″04	−″02	−″07	−″12	−″06	″00	″00	−″21	+″08
5172	−·11	−·06	−·03	−·07	−·02	−·01	+·03	+·05	−·07	−·05	·00	− 02	−·03	−·01	+·01	+·04	+·03	−·03	−·10	+·05	+·02	+·01	−·20	+·16
5183	+·14	+·14	+·12	+·08	+·14	+·22	+·20	−·08	+·02	−·06	−·10	−·06	−·04	·00	·00	+·04	+·06	+·12	+·06	+·10	+·14	+·26	+·04	+·31
5190	·00	·00	−·02	−·03	+·05	·00	−·02	−·02	−·03	−·05	−·04	−·04	·00	−·03	+·03	+·07	+·09	+·03	+·05	−·03	−·03	−·01	−·27	+·02
5204	−·10	−·02	−·04	−·05	−·01	+·02	+·05	+·07	+·01	+·02	·00	−·01	−·08	−·06	−·02	+·03	−·01	−·05	−·03	+·04	+·14	+·21	−·05	+·11
5218	−·19	−·09	−·05	−·15	−·12	+·10	+·04	+·07	+·02	+·02	−·07	−·05	−·05	·00	+·02	·00	·00	−·01	−·06	−·04	−·05	−·07	−·20	+·16
5230	−·09	−·05	−·05	−·04	−·02	−·01	−·01	+·04	+·04	+·02	−·03	−·05	−·07	+·04	+·02	+·03	+·01	−·05	−·09	−·05	+·08	+·02	−·11	+·11
5239	−·09	−·01	+·04	−·10	−·03	+·03	−·01	·00	·00	−·01	−·02	−·02	−·07	+·02	+·04	+·03	−·01	−·01	−·07	−·07	−·01	+·09	−·15	+·01
5260	−·03	+·01	+·11	+·03	−·03	+·01	−·08	·00	+·01	+·02	−·05	−·04	+·04	+·03	+·05	−·02	+·06	−·12	·00	−·04	+·03	+·03	−·05	+·03
5283	+·11	+·12	+·09	·00	+·04	+·06	+·04	−·03	+·04	−·05	−·05	−·04	−·07	−·01	+·06	+·08	+·04	−·02	−·01	+·09	+·08	+·13	−·01	−·04
5307	−·39	−·08	+·05	+·05	+·12	+·11	+·06	+·04	+·03	−·03	−·04	−·05	−·02	−·05	+·02	+·06	+·04	+·04	−·06	+·02	+·04	+·01	−·20	+·07
5324	−·72	−·39	−·18	−·14	−·11	+·11	+·08	+·14	+·08	+·03	−·02	−·07	−·06	−·13	−·02	+·02	−·10	−·06	−·09	−·09	−·11	−·08	−·36	+·27
5336	−·08	−·06	·00	+·01	−·02	+·03	·00	+·05	+·09	+·06	−·05	−·04	−·05	−·03	+·02	+·03	−·02	+·01	−·02	+·01	+·07	+·08	−·08	+·04
5352	−·33	−·18	+·01	−·01	+·01	+·09	+·07	+·04	+·02	+·03	−·06	−·08	−·11	−·06	+·05	+·05	+·02	+·02	−·01	−·04	+·02	−·01	−·22	+·12
5368	+·42	+·36	+·26	+·13	+·03	+·06	+·02	−·03	+·01	−·03	−·06	−·04	·00	+·07	+·01	+·03	+·04	+·18	+·11	+·21	+·22	+·27	+·05	−·20
Mean	−·106	−·026	+·017	−·026	−·003	+·056	+·029	+·023	+·021	−·006	−·040	−·043	−·042	−·017	+·020	+·035	+·015	−·001	−·029	+·007	+·043	+·063	−·135	
Prob. Error	±·028	±·022	±·016	±·013	±·011	±·011	±·009	±·007	±·006	±·007	±·005	±·004	±·005	±·007	±·006	±·007	±·009	±·011	±·011	±·013	±·016	±·022	±·028	

TABLE 6.

Comparison of Prints with Réseau.

Division Errors of Prints referred to the Mean of 9 to 19 at $y = 14{\cdot}5$.

Réseau Line. / Plate.	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Scale Correction.
5160	−″·12	−″·04	−″·07	−″·04	−″·14	−″·02	−″·03	+″·02	+″·05	+″·09	−″·05	−″·06	−″·02	+″·01	+″·02	+″·02	−″·06	−″·04	+″·01	+″·01	−″·03	−″·05	−″·21	+″·10
5172	− ·13	− ·09	− ·08	·00	− ·07	− ·01	+ ·03	− ·01	+ ·04	+ ·05	− ·10	− ·07	− ·07	+ ·05	·00	+ ·02	+ ·02	+ ·03	·00	− ·08	− ·09	− ·07	− ·23	+ ·19
5183	+ ·08	+ ·08	+ ·12	+ ·06	+ ·12	+ ·16	+ ·22	− ·06	− ·06	− ·08	− ·06	− ·06	− ·04	·00	+ ·06	+ ·02	+ ·06	+ ·08	+ ·06	+ ·04	+ ·08	+ ·20	+ ·04	+ ·32
5190	− ·02	+ ·04	− ·01	+ ·05	+ ·03	+ ·01	− ·03	·00	·00	+ ·02	− ·09	− ·04	+ ·01	+ ·03	+ ·04	+ ·02	+ ·08	+ ·08	+ ·06	+ ·05	+ ·03	− ·07	− ·33	+ ·06
5204	− ·17	− ·07	− ·07	·00	− ·03	+ ·05	+ ·05	+ ·05	+ ·11	+ ·10	− ·06	− ·03	− ·04	− ·03	− ·05	− ·05	− ·01	− ·02	+ ·05	+ ·06	+ ·09	+ ·12	− ·06	+ ·12
5218	− ·12	− ·12	− ·03	− ·09	− ·01	− ·01	+ ·01	+ ·20	·00	+ ·01	− ·03	− ·08	− ·01	− ·03	+ ·01	+ ·02	− ·02	− ·02	·00	− ·07	− ·03	+ ·04	− ·08	+ ·12
5230	− ·12	− ·11	− ·06	− ·10	− ·05	− ·03	− ·02	+ ·04	+ ·04	+ ·08	− ·11	− ·02	− ·01	+ ·06	+ ·02	− ·03	− ·05	− ·09	− ·03	− ·07	− ·03	·00	− ·22	+ ·07
5239	− ·07	− ·07	+ ·01	− ·02	+ ·12	+ ·02	+ ·01	·00	+ ·09	− ·01	− ·06	− ·05	− ·03	− ·04	·00	+ ·01	+ ·06	+ ·05	− ·02	+ ·02	+ ·06	+ ·03	− ·11	+ ·01
5260	− ·05	+ ·05	+ ·07	+ ·05	− ·05	+ ·06	− ·04	− ·02	+ ·02	+ ·03	+ ·01	− ·06	·00	·00	− ·03	+ ·03	+ ·07	− ·01	+ ·07	+ ·06	+ ·07	− ·04	− ·09	+ ·01
5283	+ ·06	+ ·13	+ ·10	+ ·02	+ ·03	+ ·04	·00	+ ·04	+ ·07	+ ·01	− ·12	− ·04	− ·05	+ ·02	+ ·01	+ ·05	·00	+ ·09	+ ·13	− ·10	+ ·12	+ ·09	+ ·01	− ·06
5307	− ·39	− ·15	− ·06	+ ·08	+ ·01	+ ·08	+ ·01	+ ·05	+ ·06	+ ·02	− ·12	− ·09	− ·04	+ ·03	+ ·01	+ ·01	+ ·04	− ·04	− ·01	− ·05	− ·06	− ·08	− ·25	+ ·07
5324	− ·64	− ·43	− ·26	+ ·06	+ ·06	+ ·16	+ ·12	+ ·08	+ ·12	+ ·04	− ·07	− ·04	− ·03	− ·02	− ·05	− ·08	− ·07	− ·05	− ·03	− ·02	− ·06	− ·07	− ·29	+ ·28
5336	− ·17	− ·11	− ·05	+ ·04	+ ·02	+ ·05	+ ·03	+ ·03	+ ·04	+ ·05	− ·04	− ·03	− ·04	− ·01	+ ·03	+ ·01	− ·04	− ·02	− ·01	+ ·02	− ·02	+ ·02	− ·05	+ ·08
5352	− ·31	− ·19	− ·01	+ ·13	+ ·08	+ ·06	+ ·04	+ ·01	+ ·04	+ ·02	− ·07	− ·09	− ·07	+ ·02	+ ·03	+ ·01	+ ·06	− ·02	+ ·03	+ ·03	− ·05	− ·03	− ·20	+ ·13
5368	+ ·39	+ ·38	+ ·34	+ ·19	+ ·04	− ·02	+ ·01	+ ·02	− ·05	− ·02	− ·15	− ·06	− ·01	+ ·06	+ ·06	+ ·06	+ ·10	+ ·08	+ ·14	+ ·14	+ ·17	+ ·23	+ ·03	− ·16
Mean	− ·119	− ·047	− ·004	+ ·029	+ ·011	+ ·040	+ ·027	+ ·030	+ ·038	+ ·027	− ·075	− ·055	− ·030	+ ·010	+ ·011	+ ·008	+ ·016	+ ·007	+ ·030	+ ·003	+ ·017	+ ·021	− ·136	
Prob. Error	± ·028	± ·022	± ·016	± ·013	± ·011	± ·011	± ·009	± ·007	± ·006	± ·007	± ·005	± ·004	± ·005	± ·007	± ·006	± ·007	± ·009	± ·011	± ·011	± ·013	± ·016	± ·022	± ·028	

west positions, and an error of at least ″·025 in the final value of the solar parallax from Astrographic photographs.

The cause of these differences is somewhat uncertain. They cannot be due to a shrinkage of the film during or after development, for such a shrinkage would be, in the mean of a number of plates, fairly symmetrical about the centre. Perhaps the scale-corrections which were eliminated from the above results, and the great accidental errors of the outer lines, are partly due to such a shrinkage. But, for instance, the systematic displacement of line 25 relative to line 24 could not be accounted for by a contraction of the film; and it will be shown later that the division errors here found are confirmed by an examination of the star-residuals; this would not be the case if they were caused by a shrinkage of the film after the exposure of the plate to the sky and réseau.

It may be noted that in printing the réseau the parallel rays necessarily pass through the glass of the réseau from the back before passing through the silver film. Also the breadth of the réseau line printed on the plate is generally from 1″·5 to 2″, so that the displacement to be accounted for is only a small fraction of the breadth of the line. It seems, therefore, not improbable that the effect is due to unsymmetrical diffraction, which naturally varies from line to line.

(3) *Examination of the Straightness of the Réseau Lines.*

So far, all the measurements described have been confined to the strip of the réseau near $y = 14$, and the result enables Eros to be accurately referred to stars distributed over this strip. But this strip may have in the mean an error relative to the area covered by the reference and comparison stars. If the ruling machine is not absolutely accurate a curvature of all the réseau lines may exist. A preliminary investigation had shown that if such a curvature exists at all it must be very small, but it might not be negligible in the present problem.

The straightness was tested by comparing the lines directly with a spider web mounted parallel to them in the double frame of the micrometer, so as to be viewed respectively by the two microscopes, as for the comparisons between the réseau and photographic plate. The motion of the frame perpendicularly to the line joining the microscopes allowed the different portions of the réseau line and spider line to be brought into view, and the distance between them measured. Sir David Gill has described a somewhat similar comparison with a spider line (*Memoirs R.A.S.*, vol. li.), though in that case the réseau could not be compared directly with the spider line, as was practicable with the Greenwich measuring apparatus.

In order to eliminate irregularities due to "knots" in the spider line, measures were repeated with the spider line turned over front to back. A more serious instrumental error (which was attributed to the slide which carries the spider line and réseau not moving perfectly in its plane) could only be eliminated by turning the réseau through 180° and measuring again. When this is done the curvature and other irregularities measured against the spider line are reversed in direction, while instrumental errors remain unaltered. The instrumental error associated with, say, $y = 9$ réseau direct will be associated with $y = 19$ réseau reversed, so that it is only possible to eliminate instrumental error from the means of pairs of points such as $y = 9$ and 19, or from the mean curvature, and not from the individual points.

Experiments were made both on the prints and on the réseau. For the réseau the investigation was almost entirely confined to line $x = 14$, since it happened to be impracticable (without modifying the micrometer) to measure any other line in both the direct and reversed position. Four series of measures were made at different times, and in the following table deviations from the straight line are tabulated, measures made being grouped according to the positions of the réseau and the spider line.

TABLE 7.

Réseau compared with Spider Line, $x = 14$.

y / Series.	4	4½	5	5½	6	12	13	14	15	16	22	22½	23	23½	24	Sagitta.
Réseau Direct, Wire Direct.																
1	− ″·07	+ ″·03	+ ″·01	+ ″·02	+ ″·01	− ′·03	− ″·01	″·00	+ ″·02	+ ″·02	− ″·01	− ″·02	+ ″·03	+ ″·02	− ″·01	″·000
2	+ ·03	+ ·03	·00	+ ·04	+ ·06	+ ·02	·00	− ·02	+ ·01	− ·01	+ ·02	·00	+ ·01	+ ·06	+ ·07	−·030
3	− ·05	+ ·04	+ ·04	+ ·08	− ·01	+ ·02	− ·01	+ ·01	− ·02	·00	+ ·01	·00	+ ·04	+ ·03	+ ·03	−·022
4	+ ·03	+ ·08	+ ·05	+ ·05	+ ·02	+ ·03	− ·08	− ·02	+ ·03	+ ·05	− ·01	+ ·05	+ ·07	+ ·02	+ ·10	−·046
Réseau Direct, Wire Reversed.																
2	+ ·05	+ ·01	+ ·03	·00	+ ·09	+ ·02	·00	− ·04	− ·02	+ ·03	+ ·03	·00	+ ·02	+ ·01	+ ·12	−·034
3	+ ·08	+ ·11	+ ·03	+ ·09	+ ·07	+ ·03	·00	− ·02	− ·03	+ ·02	+ ·04	+ ·10	+ ·06	+ ·06	+ ·11	−·074
4	+ ·02	+ ·02	+ ·02	+ ·05	+ ·03	·00	+ ·02	+ ·03	− ·01	− ·04	+ ·02	·00	+ ·02	+ ·06	+ ·06	−·030
Réseau Reversed, Wire Direct.																
1	+ ·03	+ ·05	+ ·07	+ ·08	+ ·11	+ ·01	− ·05	− ·03	·00	+ ·07	+ ·05	+ ·04	+ ·09	+ ·07	+ ·09	−·068
3	− ·04	− ·01	− ·05	+ ·02	+ ·01	+ ·01	− ·02	− ·01	+ ·04	− ·01	− ·02	− ·04	·00	− ·01	+ ·01	+·014
4	− ·03	·00	− ·01	− ·03	+ ·05	− ·03	+ ·01	·00	+ ·03	− ·01	·00	− ·05	+ ·03	+ ·02	·00	+·002
Réseau Reversed, Wire Reversed.																
3	− ·07	+ ·03	− ·01	+ ·02	·00	·00	− ·02	+ ·01	− ·04	+ ·06	− ·05	+ ·01	− ·03	+ ·02	+ ·01	+·006
4	− ·02	+ ·01	+ ·01	+ ·02	− ·05	+ ·05	+ ·03	− ·03	− ·06	·00	− ·07	+ ·02	+ ·02	− ·01	+ ·02	+·006
Mean	−·012	+·037	+·017	+·040	+·025	+·010	−·015	−·007	−·004	+·017	−·004	+·011	+·032	+·029	+·042	−·021

Taking from this table the "curvature" measured by the discordance between the middle of the line (represented by the mean of $y = 12, 13, 14, 15, 16$) and the line joining the two ends (represented by the means of $y = 4, 4\frac{1}{2}, 5, 5\frac{1}{2}, 6$ and $y = 22, 22\frac{1}{2}, 23, 23\frac{1}{2}, 24$ respectively) we obtain the following summary :—

TABLE 8.

Curvature of Réseau Line $x = 14$.

Sagitta for $y = 5$ to $y = 23$.

Series.	1	2	3	4
Réseau D, Wire D	″·000	−″·030	−″·022	−″·046
„ D, „ R	...	−·034	−·074	−·030
„ R, „ D	−·068	...	+·014	+·002
„ R, „ R	...	...	+·006	+·006
Means .	−·034	−·032	−·019	−·017

As the réseau was not reversed in Series No. 2, instrumental error was not eliminated from the corresponding mean. Remembering this, the agreement between Series 2, 3, and 4 is very satisfactory; the discordance of Series 1 is hard to account for.

The parallelism of the réseau lines had already been tested by determining the division errors of the "x" lines 2, 8, 14, 20, and 26 (by the method described on p. xxx), at $y = 2$ and $y = 26$, as well as at $y = 14$, with similar tests for the parallelism of the "y" lines.

The following table shows that the lines are sensibly parallel :—

TABLE 9.

At Intersection with Line.	2	8	14	20	26
			x Co-ordinates.		
2	″·00	−″·16	−″·15	−″·13	″·00
14	·00	−·21	−·21	−·17	·00
26	·00	−·17	−·18	−·18	·00
			y Co-ordinates.		
2	·00	+·05	+·07	+·09	·00
14	·00	+·07	+·11	+·12	·00
26	·00	+·03	+·04	+·06	·00

In examining the *photographed lines* the treatment was somewhat different. The aim of the investigation was to determine the mean error of the central strip with reference to the areas covered respectively by the reference and comparison stars. In such an investigation it is important that the measurements should be made at a very large number of points distributed over the areas covered by the stars, but it is not necessary that many measures should be made at each point, for the errors at the individual points are not required, but only the mean. For the same reason it is only necessary to arrange that instrumental errors are eliminated from the mean.

Eight plates were selected (from the fifteen previously referred to) and measured according to the following scheme. Lines 1 to 13 could only be measured with réseau direct, and lines 15 to 27 with the réseau reversed. The scheme provided for the measurement of 110 points uniformly distributed over the comparison star area, and 298 points (equivalent to about 200 points uniformly distributed) over the reference star area, each measured on at least two prints.

Straightness of Lines on Prints, Scheme of Measures.

Plate.	Date 1900.	Réseau Lines x.	Prints.	Spider Lines.
5172	October 20	4, 6, 8, 10, 12, 14	Direct	Reversed
5190	26	14, 16, 18, 20, 22, 24	Reversed	Direct
5204	28	4, 6, 8, 10, 12, 14	Direct	Direct
5218	November 10	14, 15, 17, 19, 21, 23	Reversed	Reversed
5239	15	14, 16, 18, 20, 22, 24	Reversed	Reversed
5260	22	5, 7, 9, 11, 13, 14	Direct	Reversed
5307	December 15	14, 15, 17, 19, 21, 23	Reversed	Direct
5352	January 8	5, 7, 9, 11, 13, 14	Direct	Direct

Measures were made at $y = 9\frac{1}{2}$, $10\frac{1}{2}$, $11\frac{1}{2}$, $12\frac{1}{2}$, $13\frac{1}{2}$, $14\frac{1}{2}$, $15\frac{1}{2}$, $16\frac{1}{2}$, $17\frac{1}{2}$, and $18\frac{1}{2}$, and also at either $4\frac{1}{2}$, $5\frac{1}{2}$, $22\frac{1}{2}$, $23\frac{1}{2}$, or $6\frac{1}{2}$, $7\frac{1}{2}$, $20\frac{1}{2}$, $21\frac{1}{2}$.

The results are given in Table 10: on each line the mean of the errors from $y = 9\frac{1}{2}$ to $y = 18\frac{1}{2}$ has been arbitrarily put equal to zero, that portion of the line being taken as a standard.

Each of the errors tabulated is the mean of measures on two prints (except in the case of line 14, which was measured on all the 8 prints), so that but little reliance can be placed on the results for individual points. The curvature is quite sensible. For line 14 it amounts to $-''\cdot 048$ (measured by the sagitta from 5 to 23), which may be compared with the results for the silver réseau in Table 8. The curvature cannot

TABLE 10.

Test of Straightness of Réseau Lines on Prints.

Division Errors of Prints by comparison with a Spider Line.

y \ x	4	5	6	7	8	9	10	11	12	13	14 (1)	14 (2)	15	16	17	18	19	20	21	22	23	24	Mean.
23½	+″·06	″ ...	+″·17	″ ...	+″·14	″ ...	+″·11	″ ...	+″·10	″ ...	+″·12	−″·09	″ ...	−″·09	″ ...	−″·01	″ ...	+″·03	″ ...	−″·03	″ ...	−″·12	+″·035
22½	+·04	...	+·13	...	+·07	...	+·05	...	+ 07	...	+·10	−·04	...	+·01	...	·00	...	−·07	...	−·02	...	−·12	+·018
21½	...	−·03	...	+·05	...	+·02	...	−·02	...	−·01	·00	−·02	−·01	...	−·01	...	−·04	...	+·05	...	+·04	...	+·002
20½	...	−·02	...	−·02	...	·00	...	+·04	...	+·06	+·04	−·01	−·05	...	−·01	...	+·02	...	+·05	...	−·02	...	+·006
19½	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...
18½	−·07	·00	·00	+·05	+·02	+·01	+·05	−·01	·00	+·02	+·04	−·01	−·02	−·04	·00	−·06	−·02	·00	+·04	+·04	+·03	−·03	+·001
17½	+·05	+·03	−·03	+·01	+·03	−·01	+·02	+·02	−·02	+·01	+·03	−·02	−·03	−·03	+·03	+·02	−·06	−·02	+·03	+·01	−·01	−·01	+·002
16½	−·07	+·10	−·04	+·03	−·02	−·01	−·01	−·03	−·02	−·01	·00	−·02	−·02	·00	−·05	+·01	−·04	·00	+·05	+·02	+·02	+·02	−·004
15½	−·03	−·02	·00	+·01	+·01	+·01	+·02	+·03	−·01	·00	−·04	−·01	+·01	+·05	+·01	+·01	−·01	+·03	·00	+·05	·00	−·01	+·007
14½	−·04	+·03	+·03	−·02	+·01	−·02	−·07	−·03	+·02	−·02	−·02	−·02	·00	+·01	−·06	+·01	−·01	·00	−·04	·00	+·01	·00	−·006
13½	·00	+·02	−·05	−·07	−·05	−·05	·00	+·01	−·03	−·03	−·01	+·02	·00	+·04	+·04	+·02	·00	+·03	−·03	−·02	·00	+·04	−·006
12½	+·05	−·09	+·06	+·02	·00	·00	+·01	+·02	−·03	−·01	−·04	+·02	+·04	+·03	+·01	−·01	+·02	+·01	−·06	−·03	−·02	+·01	+·002
11½	+·03	+·01	−·02	·00	−·02	+·03	+·02	−·01	+·03	+·03	·00	·00	+·01	−·02	+·02	·00	+·06	·00	−·01	·00	−·02	+·04	+·009
10½	−·01	−·05	+·06	−·03	+·02	+·03	−·03	·00	+·03	−·05	+·03	+·02	+·03	−·03	+·02	−·01	+·02	+·02	−·02	−·04	·00	−·06	−·004
9½	+·11	·00	·00	·00	·00	+·01	−·02	·00	+·02	+·07	+·02	+·02	·00	−·01	−·03	·00	+·03	−·07	−·02	−·05	·00	·00	+·002
8½	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...
7½	...	−·01	...	−·04	...	·00	...	−·01	...	+·03	−·01	·00	·00	...	−·04	...	·00	...	−·04	...	+ 06	...	−·006
6½	...	+·01	...	+·01	...	−·05	...	+·08	...	+·04	+·04	·00	+·01	...	−·01	...	+·05	...	·00	...	−·08	...	+·010
5½	+·12	...	+·03	..	+·06	...	+·06	...	+·11	...	+·13	+·07	...	−·03	...	−·07	...	−·11	...	−·10	...	−·11	+·003
4½	+·16	...	+·16	...	+·06	...	+·07	...	+·15	...	+·06	−·01	...	+·04	...	−·05	...	−·07	...	−·13	...	−·12	+·027

The two sets of errors for line 14 are derived from plates measured direct and reversed respectively.

be given for the other lines separately, since instrumental error was only eliminated from their mean; but the mean curvature of all the even lines from $x=4$ to $x=24$ (measured by the same sagitta) is $-''\cdot020$.

To determine the correction which must be applied in consequence of this curvature when Eros is referred to *reference stars*, assume that the corrections previously determined have been applied so as to refer Eros correctly to the strip from $x=4$ to $x=24$, $y=13\frac{1}{2}$, and $y=14\frac{1}{2}$; a correction is now required to refer this strip to the whole square 4 to 24.

Turning to the last column of the Table 10 we find the mean error of the strip is $-''\cdot006$ (the mean of $-''\cdot006$ and $-''\cdot006$), and the mean error of the whole square is $+''\cdot005$ (the mean of all the numbers in the last column). Hence the error of the strip referred to the square is $-''\cdot011$.

TABLE 11.

Test of Straightness of Réseau Lines on Prints.

y \ x	9	10	11	12	13	14		15	16	17	18	19	Mean.
$18\frac{1}{2}$	+''·01	+''·05	−''·01	''·00	+''·02	+''·02	''·00	−''·01	−''·04	''·00	−''·06	−''·02	−''·005
$17\frac{1}{2}$	−·01	+·02	+·02	−·02	+·01	+·01	−·01	−·03	−·03	+·03	+·02	−·06	−·004
$16\frac{1}{2}$	−·01	−·01	−·03	−·02	−·01	−·01	−·01	−·05	·00	−·05	+·01	−·04	−·021
$15\frac{1}{2}$	+·01	+·02	+·03	−·01	−·01	−·03	−·03	·00	+·05	+·01	+·01	−·01	+·008
$14\frac{1}{2}$	−·02	−·07	−·03	+·02	−·01	−·01	−·02	+·01	+·01	−·06	+·01	−·01	−·015
$13\frac{1}{2}$	−·05	·00	+·01	−·03	−·01	·00	+·01	·00	+·04	+·04	+·02	·00	+·003
$12\frac{1}{2}$	·00	+·01	+·02	−·03	+·01	−·02	+·01	+·06	+·03	+·01	−·01	+·02	+·012
$11\frac{1}{2}$	+·03	+·02	−·01	+·03	+·04	·00	−·01	·00	−·02	+·02	·00	+·06	+·016
$10\frac{1}{2}$	+·03	−·03	·00	+·03	−·03	+·03	+·02	+·03	−·03	+·02	−·01	+·02	+·007
$9\frac{1}{2}$	+·01	−·02	·00	+·02	·00	+·03	+·02	−·01	−·01	−·03	·00	+·03	+·001

The two sets of errors for line 14 are derived from plates measured direct and reversed respectively.

For the area covered by the *comparison stars* the results are given in Table 11. Some additional measures of lines 13, 14, 15 on prints not included in the Scheme

have been included in the means given in this table. The irregularities appear to be purely accidental, and the smallness of the horizontal means shows that there is no appreciable error of the ruling machine within this area. The mean deviation from straightness (including error of measurement and accidental error of the print examined) is $\pm''\cdot024$.

The mean error of the central strip referred to the square 9 to 19 is $-''\cdot006$ $\pm''\cdot005$.

VI. DISCUSSION OF THE RESIDUALS OF STARS.

It may legitimately be asked whether, in spite of all precautions, the errors determined in the foregoing investigations and the accuracy claimed for the values found may not be to some extent illusory. Is it quite certain that all instrumental errors have been eliminated? Is it quite certain that there may not be other sources of division error which have not been considered? Fortunately, a discussion of the residuals of the reference and comparison stars supplies an independent check on the results obtained by direct measurement.

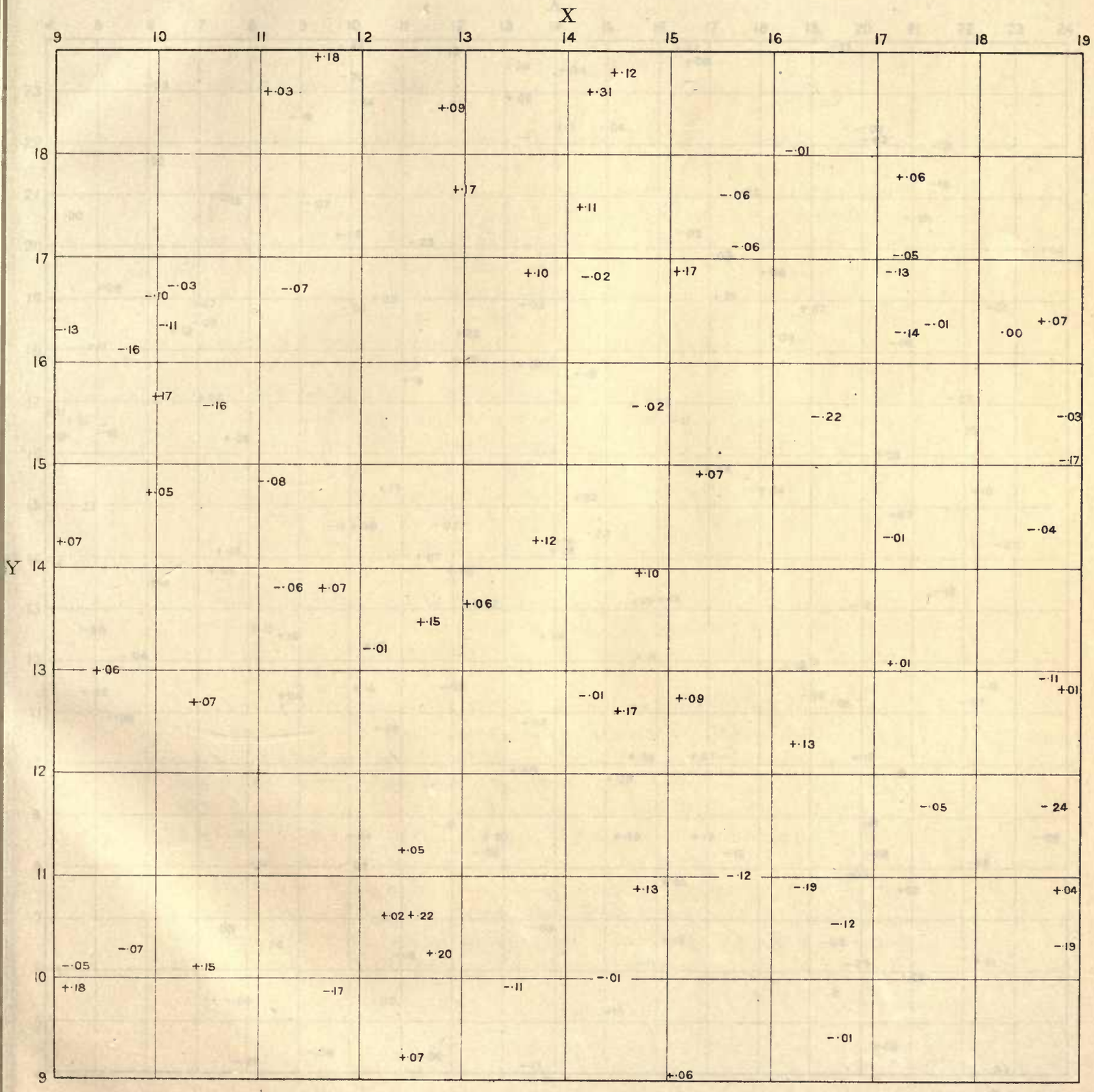
Before the measurements of the réseau and its prints were made, it was realised that considerable corrections were required in order to reconcile the places of the stars determined with the Astrographic telescope west and east respectively. The stars, in fact, showed a spurious parallax. The plate-centre was the same for all plates taken on any one night (evening and morning): if on the evening photographs the image of a star falls at $x=12$ $y=10$, on the morning photographs (with the réseau reversed) it will fall at $x=16$ $y=18$. It can be shown that the difference in the places of the star determined from the two sets of photographs should be equal to the sum of the residual division *corrections* required at these two points of the réseau.

An examination of the places of the stars was made for all nights on which at least two plates were taken with the Astrographic telescope in each position. There were 14 nights thus available; the number of comparison stars discussed was 73 and of the reference stars 146.

Figs. 5 and 6 show the data in this discussion for the comparison stars and reference stars respectively. The differences (Mean Residual, réseau direct)—(Mean Residual, réseau reversed) are entered at the point of the réseau where the image of the star fell when the réseau was direct. The residuals (calculated—observed) of the reference stars are referred to the mean of the reference stars on the plate; accordingly, the division errors deduced from them are referred to the square 4 to 24.

Fig. 5.

Chart of Residuals of Comparison Stars.



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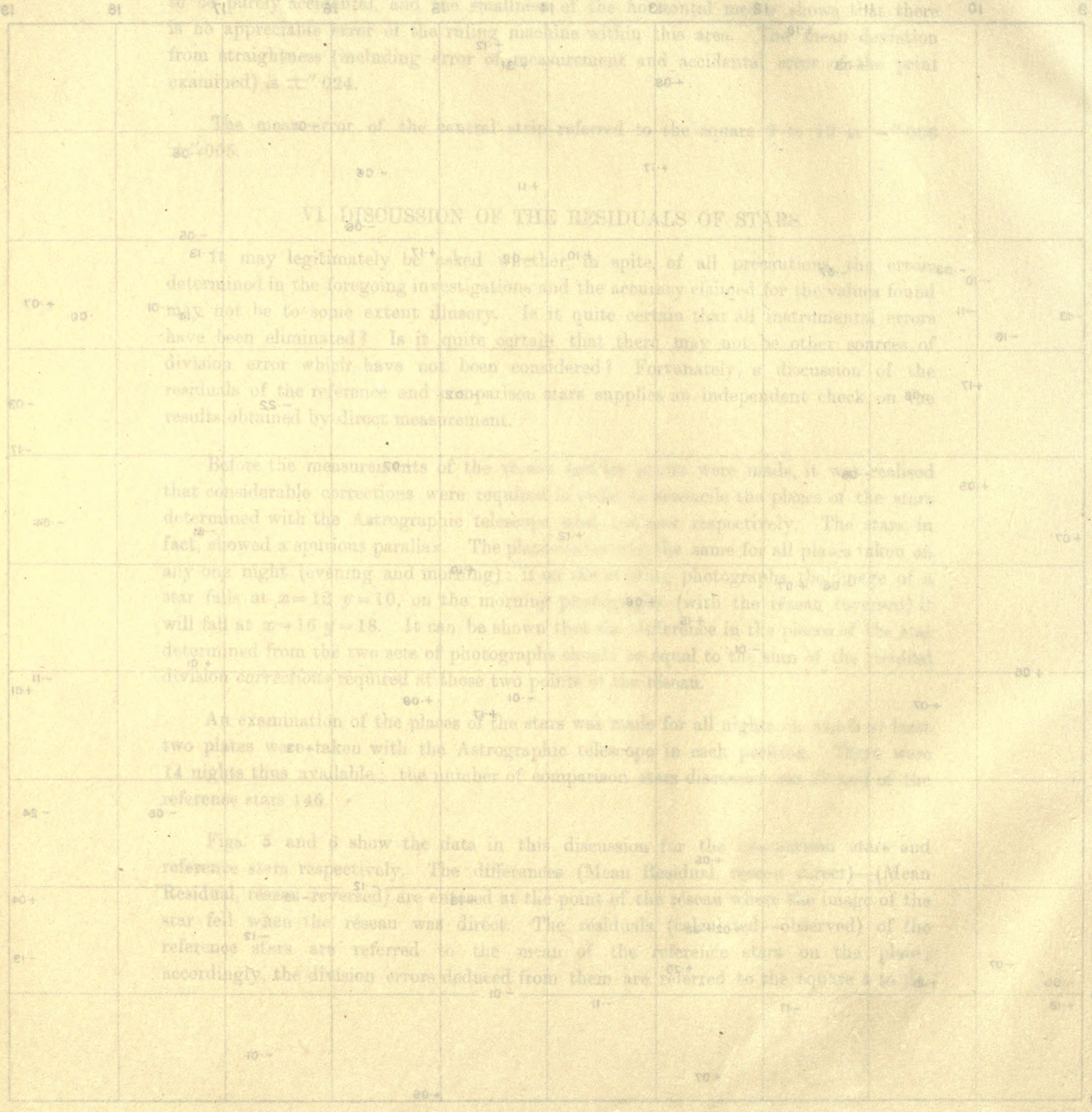
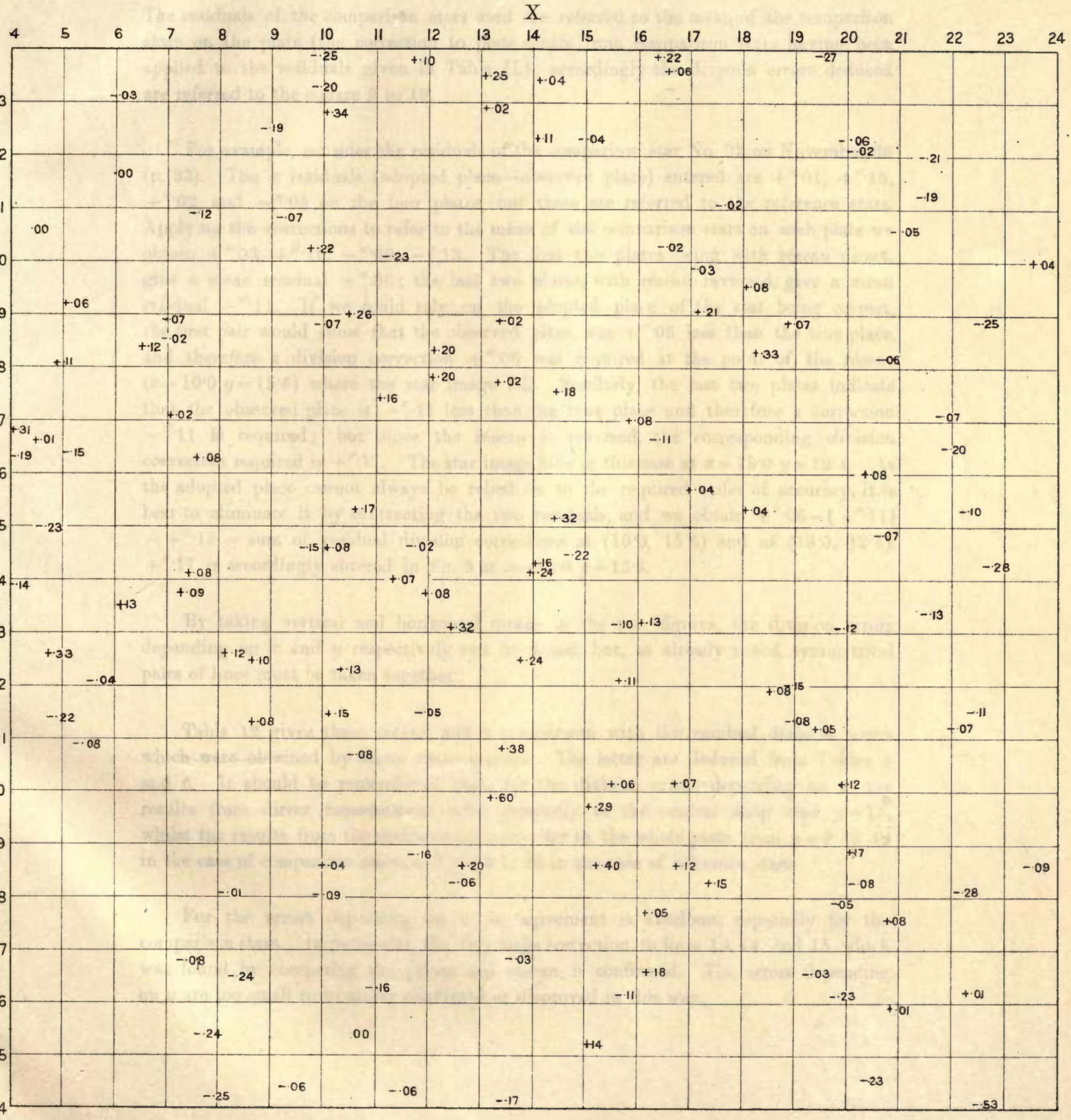


Fig. 6.

Chart of residuals of Reference Stars.



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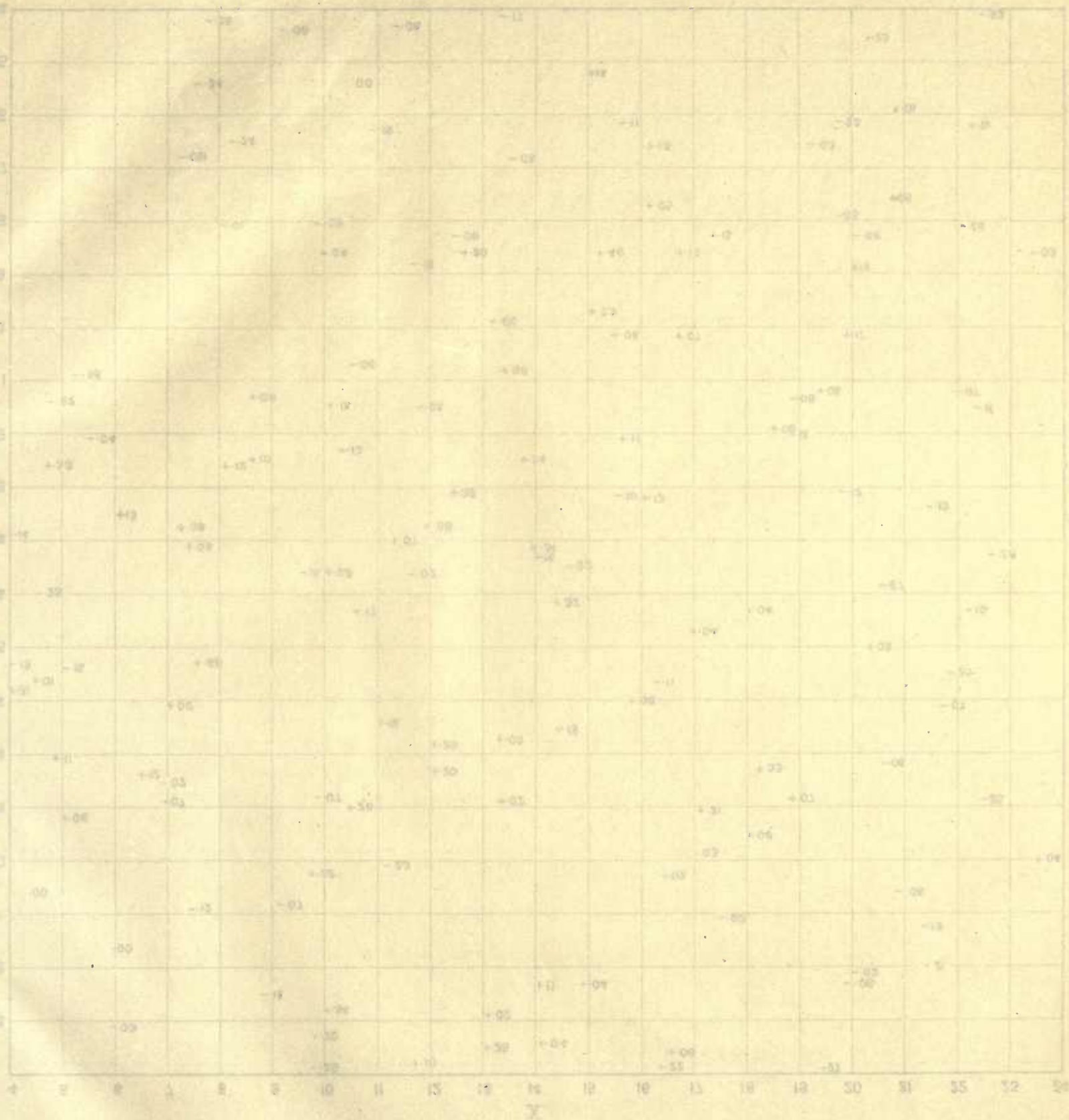


Chart of Residuals of Reference Stars.

Fig. 8.

The residuals of the comparison stars used are referred to the mean of the comparison stars on the plate (the correction to plate-centre from comparison stars having been applied to the residuals given in Table II.); accordingly the division errors deduced are referred to the square 9 to 19.

For example, consider the residuals of the comparison star No. 23 on November 23 (p. 33). The x residuals (adopted place—observed place) entered are $+''\cdot01$, $+''\cdot15$, $+''\cdot02$, and $-''\cdot05$ on the four plates, but these are referred to the reference stars. Applying the corrections to refer to the mean of the comparison stars on each plate we obtain $+''\cdot03$, $+''\cdot10$, $-''\cdot09$, $-''\cdot13$. The first two plates being with réseau direct, give a mean residual $+''\cdot06$; the last two plates, with réseau reversed, give a mean residual $-''\cdot11$. If we could rely on the adopted place of the star being correct, the first pair would show that the observed place was $+''\cdot06$ less than the true place, and therefore a division *correction* $+''\cdot06$ was required at the point of the réseau ($x=10\cdot0$ $y=15\cdot6$) where the star image fell. Similarly, the last two plates indicate that the observed place is $-''\cdot11$ less than the true place and therefore a correction $-''\cdot11$ is required; but since the réseau is reversed, the corresponding *division correction* required is $+''\cdot11$. The star image falls in this case at $x=18\cdot0$ $y=12\cdot4$. As the adopted place cannot always be relied on to the required order of accuracy, it is best to eliminate it by subtracting the two residuals, and we obtain $+''\cdot06-(-''\cdot11)$ $=+''\cdot17$ = sum of residual division corrections at (10·0, 15·6) and at (18·0, 12·4). $+''\cdot17$ is accordingly entered in fig. 5 at $x=10\cdot0$ $y=15\cdot6$.

By taking vertical and horizontal means in the two figures, the division errors depending on x and y respectively can be found, but, as already noted, symmetrical pairs of lines must be taken together.

Table 12 gives these means, and a comparison with the residual division errors which were obtained by direct measurement. The latter are deduced from Tables 5 and 6. It should be remembered that, for the division errors depending on x, the results from direct measurement refer primarily to the central strip near $y=14$, whilst the results from the residuals of stars refer to the whole plate from $y=9$ to 19 in the case of comparison stars, and $y=4$ to 24 in the case of reference stars.

For the errors depending on x the agreement is excellent, especially for the comparison stars. In particular, the very large correction to lines 13, 14, and 15, which was found by comparing the prints and réseau, is confirmed. The errors depending on y are too small to be either confirmed or disproved in this way.

TABLE 12.

SUMS OF PAIRS OF RESIDUAL DIVISION ERRORS.

(1) *Errors which depend on x.*

Comparison Stars. (From $y=9$ to 19.)

$x=$	9, 19	10, 18	11, 17	12, 16	13, 15	14, 14
Sums of Division Errors deduced from residuals of stars . .	+″·05	+″·01	+″·06	+″·01	−″·10	−″·09
Sums of Division Errors deduced by direct measurement (Tables 6 and 7), ...	+ ·04	+ ·05	+ ·05	+ ·01	− ·09	− ·10

Reference Stars. (From $y=4$ to 24.)

$x=$	5*, 23	7, 21	9, 19	11, 17	13, 15
Sums of Division Errors deduced from residuals of stars . .	+″·08	+″·04	+″·04	−″·04	−″·11
Sums of Division Errors deduced by direct measurement (Tables 6 and 7), ...	+ ·01	+ ·01	+ ·04	+ ·03	− ·08

(2) *Errors which depend on y.*

Comparison Stars. ($x=9$ to 19.)

$y=$	$9\frac{1}{2}$, $18\frac{1}{2}$	$10\frac{1}{2}$, $17\frac{1}{2}$	$11\frac{1}{2}$, $16\frac{1}{2}$	$12\frac{1}{2}$, $15\frac{1}{2}$	$13\frac{1}{2}$, $14\frac{1}{2}$
Sums of Errors deduced from residuals of stars	−″·03	−″·01	+″·04	″·00	−″·04
Sums of Errors deduced by comparison with spider line .	·00	·00	·00	+ ·02	− ·01

Reference Stars. ($x=4$ to 24.)

$y=$	5*, 23	7, 21	9, 19	11, 17	13, 15
Sums of Errors deduced from residuals of stars	+″·06	+″·05	−″·06	−″·02	−″·04
Sums of Errors deduced by comparison with spider line . .	+ ·03	·00	− ·01	− ·01	− ·01

* In this table, by the division error at 5 is strictly meant the mean division error in the space between lines 4 and 6, which is $\frac{1}{4}$ (error at 4 + error at 6 + 2 × error at 5). Similarly for the other lines.

An important application is to examine the correction for curvature, which must be applied to the strip between $y = 13$ and $y = 15$ to refer it to the rest of the square.

The residuals (differences réseau direct—reversed) of the comparison stars which fall in the strip are entered in the accompanying diagram (fig. 7), *after correction for division errors which depend on x.* The mean is $+''{\cdot}04 \pm ''{\cdot}012$.

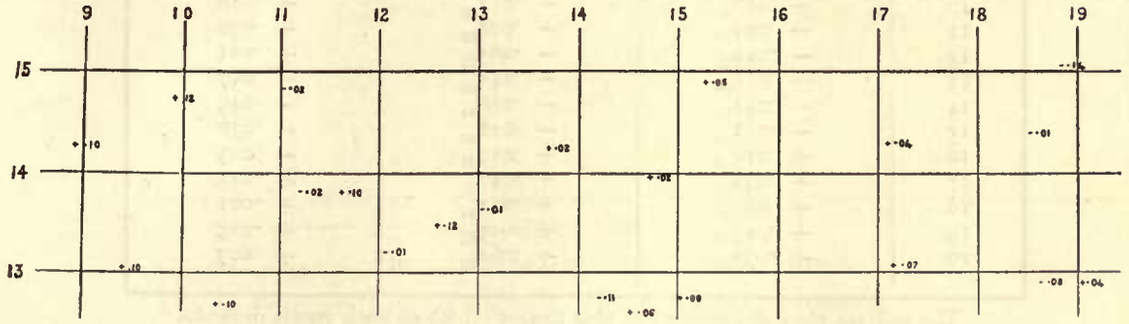


FIG. 7.—Residuals of Comparison Stars (corrected).

This should be twice the division correction of the strip, so that the deduced division *error* is $-''{\cdot}02 \pm ''{\cdot}006$, which may be compared with the result $-''{\cdot}006 \pm ''{\cdot}005$ from the spider line investigation.

The corresponding division error (referred to 4 to 24) from the residuals of reference stars is $''{\cdot}00 \pm ''{\cdot}014$, which may be compared with $-''{\cdot}011$ found by the spider line investigation, but the probable error in this case is too great for the result to be of value.

The advantage of discussing *differences* of residuals is that errors of the star places are eliminated. A discussion was, however, also made of the actual residuals of comparison stars, réseau direct and réseau reversed separately. This discussion makes use of more material than the discussion of differences, and gives the division errors directly instead of the sums of pairs of errors, but the division errors found in this way tend to be less (numerically) than the truth. For if, for instance, a star's place is determined from one plate only its residual will necessarily be zero, and more generally the effect of using a star place determined from insufficient material is to diminish (numerically) the residuals. Care was taken to exclude from the discussion as far as possible stars whose places were insufficiently determined.

TABLE 13.

Division Errors which depend on x.

x	From Residuals of Stars.		By direct measurement (Tables 5 and 6).
	Réseau direct.	Réseau reversed.	
	"	"	"
8	$+ \cdot 032_{11}$	$- \cdot 010_{14}$	$+ \cdot 048$
9	$+ \cdot 010_{31}$	$+ \cdot 038_{41}$	$+ \cdot 028$
10	$- \cdot 007_{45}$	$- \cdot 013_{20}$	$+ \cdot 026$
11	$- \cdot 005_{27}$	$- \cdot 008_{39}$	$+ \cdot 030$
12	$- \cdot 024_{27}$	$- \cdot 003_{33}$	$+ \cdot 011$
13	$- \cdot 059_{39}$	$- \cdot 048_{46}$	$- \cdot 057$
14	$- \cdot 042_{30}$	$- \cdot 016_{34}$	$- \cdot 049$
15	$- \cdot 023_{36}$	$- \cdot 028_{44}$	$- \cdot 036$
16	$+ \cdot 015_{43}$	$+ \cdot 015_{36}$	$- \cdot 003$
17	$+ \cdot 034_{31}$	$+ \cdot 047_{47}$	$+ \cdot 015$
18	$+ \cdot 052_{27}$	$+ \cdot 011_{44}$	$+ \cdot 021$
19	$+ \cdot 033_{35}$	$+ \cdot 009_{32}$	$+ \cdot 015$
20	$+ \cdot 035_{12}$	$+ \cdot 061_{10}$	$+ \cdot 003$

The suffixes show the number of star images on which each result depends.

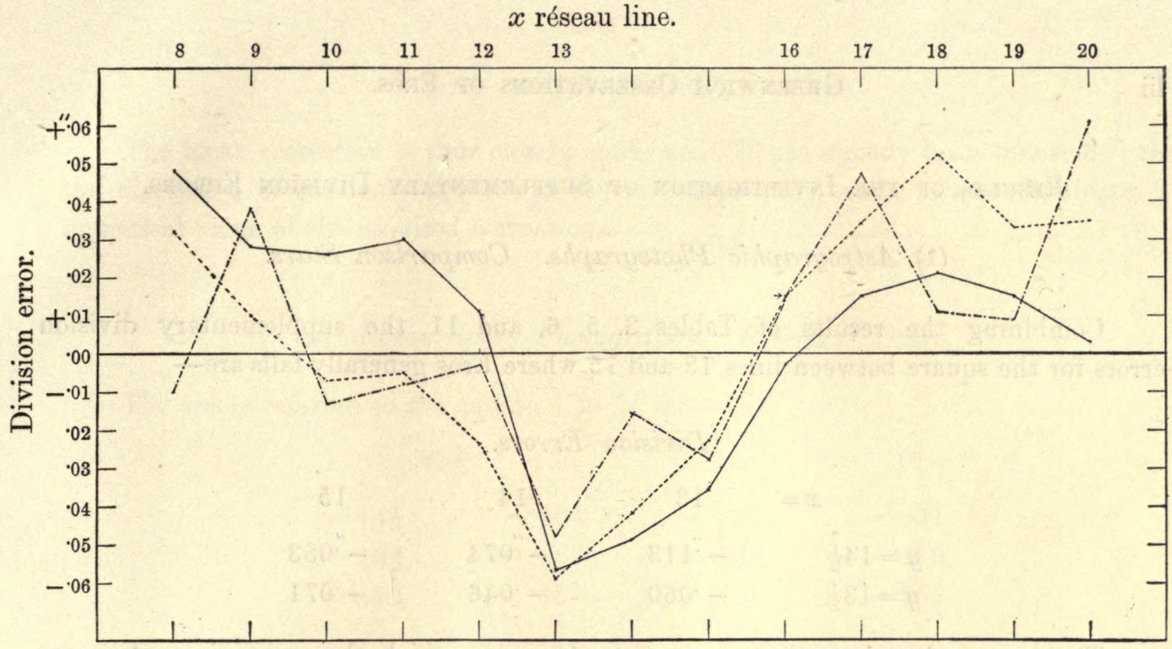
The x division errors determined in this way are given in Table 13, and are shown by the curves fig. 8. The agreement with the curve showing results of direct measurement leaves no room for doubt that the latter corrections are actually required. If a small scale-constant (which corresponds to a tilt of the curve) were removed from the results of the star-residuals the agreement would be still more close.

TABLE 14.

Division Errors which depend on y.

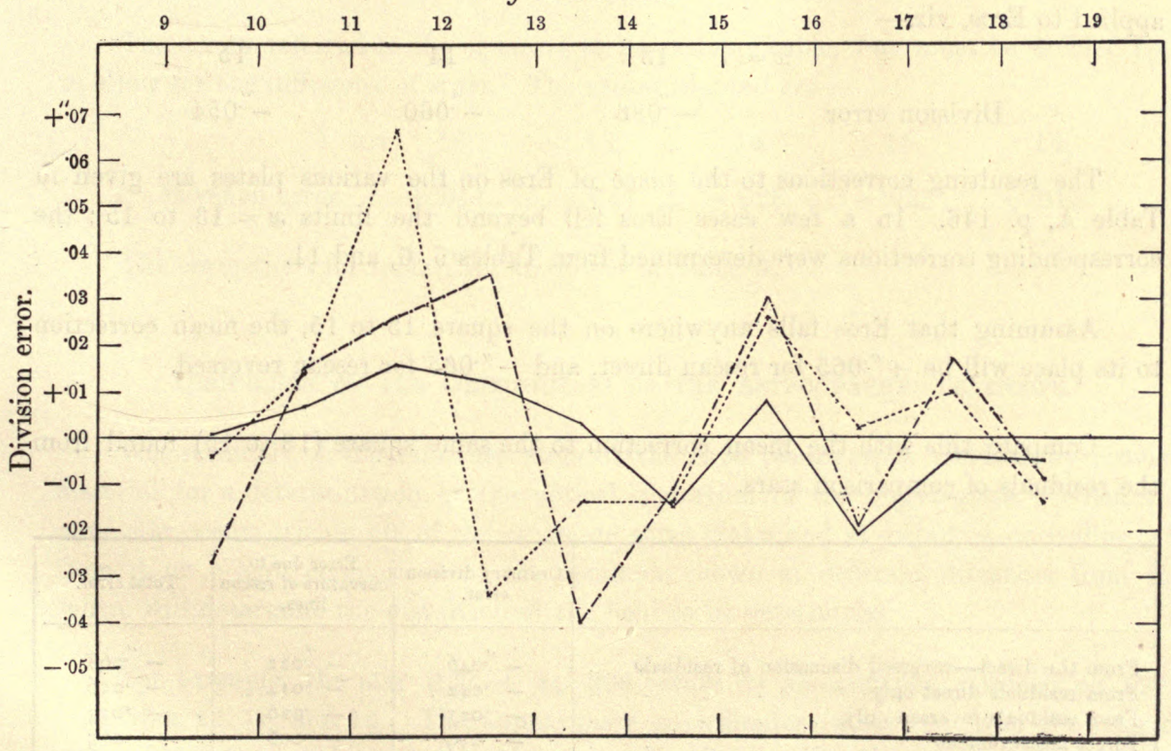
y	From Residuals of Stars.		By direct measurement (Table 11).
	Réseau direct.	Réseau reversed.	
	"	"	"
$18\frac{1}{2}$	$- \cdot 014_{41}$	$- \cdot 009_{41}$	$- \cdot 005$
$17\frac{1}{2}$	$+ \cdot 010_{33}$	$+ \cdot 017_{42}$	$- \cdot 004$
$16\frac{1}{2}$	$+ \cdot 002_{56}$	$- \cdot 019_{48}$	$- \cdot 021$
$15\frac{1}{2}$	$+ \cdot 026_{29}$	$+ \cdot 030_{39}$	$+ \cdot 008$
$14\frac{1}{2}$	$- \cdot 014_{38}$	$- \cdot 011_{49}$	$- \cdot 015$
$13\frac{1}{2}$	$- \cdot 014_{42}$	$- \cdot 040_{48}$	$+ \cdot 003$
$12\frac{1}{2}$	$- \cdot 034_{34}$	$+ \cdot 035_{39}$	$+ \cdot 012$
$11\frac{1}{2}$	$+ \cdot 066_{24}$	$+ \cdot 026_{51}$	$+ \cdot 016$
$10\frac{1}{2}$	$+ \cdot 014_{59}$	$+ \cdot 015_{48}$	$+ \cdot 007$
$9\frac{1}{2}$	$- \cdot 004_{38}$	$- \cdot 019_{35}$	$+ \cdot 001$

The division errors depending on y (curvature errors) are shown in Table 14 and fig. 9. Here the quantities to be measured are small compared with the accidental error, but the general similarity of the three curves is clearly noticeable.



——— By direct measurement.
- - - - - - - - From residuals of stars ; réseau direct.
— - — - — From residuals of stars ; réseau reversed.

FIG. 8.—Division Errors which depend on x.



——— By direct measurement.
- - - - - - - - From residuals of stars ; réseau direct.
— - — - — From residuals of stars ; réseau reversed.

FIG. 9.—Division Errors which depend on y.

RESULTS OF THE INVESTIGATION OF SUPPLEMENTARY DIVISION ERRORS.

(1) *Astrographic Photographs. Comparison Stars.*

Combining the results of Tables 3, 5, 6, and 11, the supplementary division errors for the square between lines 13 and 15 where Eros generally falls are—

Division Errors.

$x =$	13	14	15
$y = 14\frac{1}{2}$	$-''\cdot113$	$-''\cdot074$	$-''\cdot033$
$y = 13\frac{1}{2}$	$-\cdot060$	$-\cdot046$	$-\cdot071$

These are referred to the square 9 to 19, over which the comparison stars are distributed.

Although doubtless the errors at $y = 14\frac{1}{2}$ differ from those at $13\frac{1}{2}$, it was not considered well to place too much reliance on the difference along y shown in the above tables. Accordingly, mean corrections not depending on y were adopted and applied to Eros, viz.—

$x =$	13	14	15
Division error	$-''\cdot086$	$-''\cdot060$	$-''\cdot054$

The resulting corrections to the place of Eros on the various plates are given in Table A, p. 146. In a few cases Eros fell beyond the limits $x = 13$ to 15; the corresponding corrections were determined from Tables 5, 6, and 11.

Assuming that Eros falls anywhere on the square 13 to 15, the mean correction to its place will be $+''\cdot065$ for réseau direct, and $-''\cdot065$ for réseau reversed.

Compare this with the mean correction to the same square (13 to 15) found from the residuals of comparison stars.

	Ordinary division error.	Error due to curvature of réseau lines.	Total error.
From the direct—reversed discussion of residuals .	$-''\cdot046$	$-''\cdot022$	$-''\cdot068$
From residuals direct only	$-\cdot042$	$-\cdot014$	$-\cdot056$
From residuals reversed only	$-\cdot027$	$-\cdot026$	$-\cdot053$
Direct measurement	$-\cdot059$	$-\cdot006$	$-\cdot065$

The mean correction is thus closely confirmed; it has already been mentioned that the discussion of residuals direct and reversed separately tends to underestimate the numerical value of the required correction.

(2) *Astrographic Photographs. Reference Stars.*

The errors referred to the square 4 to 24 are—

	$x=$	13	14	15
$y=14\frac{1}{2}$		$-''\cdot104$	$-''\cdot068$	$-''\cdot031$
$y=13\frac{1}{2}$		$-\cdot063$	$-\cdot044$	$-\cdot079$
Mean		$-\cdot084$	$-\cdot056$	$-\cdot055$

The means are so nearly identical with those for the square 9 to 19 that the same set of corrections has been used. The corrections given in Table A have accordingly been applied to both series of places of Eros.

(3) *Thompson Photographs. Comparison Stars.*

The errors referred to the square 4 to 24 are applicable, but must be divided by 2 to allow for the difference of scale. The errors adopted are—

	$x=$	12	13	14	15	16
Division error		$+''\cdot011$	$-''\cdot041$	$-''\cdot028$	$-''\cdot028$	$-''\cdot011$

The corrections for each plate are given in Table A.

DISTORTION OF THE OBJECT-GLASS OF THE ASTROGRAPHIC TELESCOPE.

The residuals of the reference stars of the Eros photographs incidentally provide material for a determination of the optical distortion of the object-glass. When the same star occurs within 40′ of the centre on some plates and at distances exceeding 45′ from it on others, comparison of the residuals shown at different distances from the centre will determine the distortion of the field to be determined.

For example, the star B.D. + 44° 326 occurs on photographs obtained on 1900 December 13, 15, and 16. The approximate co-ordinates (measured from the centre) and residuals, and distance r from the centre, are given in the following table :—

TABLE 15.

No. of Plate.	Position of Instrument.	Date.	Approximate Co-ordinates and Distance from Centre.			Residuals (Tab.—Obs.).	
			x	y	r	Δx	Δy
		1900.					
5288	E	December 13	−1000″	−3100″	55′	+″·05	−″·06
89	E	,,	,,	,,	,,	−·06	−·22
90	E	,,	,,	,,	,,	−·11	−·15
94	E	,,	,,	,,	,,	+·13	−·34
97	E	,,	,,	,,	,,	+·10	+·07
99	W	December 15	−2400	−200	40	+·16	−·40
5300	W	,,	,,	,,	,,	−·15	−·36
04	E	,,	,,	,,	,,	−·06	−·36
06	E	,,	,,	,,	,,	+·02	−·27
07	E	,,	,,	,,	,,	−·34	−·28
08	W	December 16	−3000	+1300	55	−·13	−·42

Date.	Weight.	Mean Residuals.	
		x	y
1900.			
December 13	5	+″·02	−″·14
,, 15	5	−·07	−·33
,, 16	1	−·13	−·42

Images within 40′ of the centre have been considered as sensibly free from optical distortion. Thus by subtraction the following are obtained :—

x	y	r	Δx	Δy	No. of Photos.
−1000″	−3100″	55′	−″·09	−″·19	5, 5
−3000	+1300	55	+·06	+·09	1, 5

The quantities Δx and Δy were tabulated for all the reference stars and plotted as shown in the diagram, and the values of Δr (the radial component) measured off.

The values of Δr found between different limits of distance from the centre are shown in Table 16, the number of photographs on which the results depend being given in the second column, the second number in the column referring to the comparison photographs on which the images are within 40′ of the centre.

TABLE 16.

r=45′ to 50′.		r=50′ to 55′.		r=55′ to 60′.		r=60′ to 65′.	
Δr	No. of Photos.	Δr	No. of Photos.	Δr	No. of Photos.	Δr	No. of Photos.
+″·15	3, 5	+″·13	5, 1	−″·04	1, 2	−″·47	1, 5
+·15	2, 6	+·18	3, 3	+·20	5, 5	−·42	1, 1
+·11	5, 5	−·05	2, 1	−·02	1, 5	+·26	1, 3
−·10	3, 5	−·11	5, 1	−·13	1, 10	−·29	4, 2
−·25	1, 5	−·13	2, 3	−·20	3, 6	−·30	5, 2
−·29	3, 3	−·19	1, 2	−·22	6, 4	−·01	1, 2
−·03	7, 7	+·02	5, 5	+·06	3, 11	−·43	2, 7
+·04	3, 2	+·02	5, 4	+·19	4, 10	−·06	1, 4
−·07	1, 10	−·39	5, 6	+·37	3, 4	+·28	3, 1
+·07	5, 5	+·33	1, 3	+·07	1, 3	−·72	1, 3
+·08	7, 7	−·11	5, 3	·00	3, 6	−·15	1, 7
−·09	5, 7	−·28	3, 1	+·07	1, 3	+·11	3, 4
+·10	5, 5	−·10	5, 3	+·12	6, 5	−·15	1, 1
+·19	3, 6	−·04	6, 6	−·18	4, 13	−·19	1, 1
+·06	1, 3	−·21	2, 3	·00	4, 8		
+·60	1, 1	+·19	3, 1	+·03	6, 3	r=65′ to 70′.	
−·10	5, 12	+·12	4, 1	−·44	7, 4		
−·09	1, 4	−·05	6, 15	+·13	2, 15	Δr	No. of Photos.
+·02	5, 9	−·09	6, 3	+·12	4, 1		
−·17	5, 3	−·04	2, 10	+·02	3, 4		
+·11	2, 1	−·21	1, 1	+·10	1, 2		
−·28	2, 6	+·04	2, 4	+·02	1, 1	−″·35	4, 13
+·07	7, 10	−·02	1, 6	−·87	1, 6	−·20	1, 1
−·05	7, 8	+·49	1, 7	−·39	4, 3	−·24	2, 4
−·01	7, 7	−·10	3, 1	−·26	4, 3	−·41	3, 3
−·11	1, 7	+·22	4, 4	−·11	4, 1	−1·02	2, 4
+·08	3, 5	−·14	2, 3	−·40	1, 3	−·31	3, 3
−·16	5, 3	−·18	3, 4	−·12	3, 4	+·24	1, 1
−·07	2, 1	−·12	5, 1	+·02	1, 1	−·32	5, 1
+·10	2, 1	...	...	−·30	3, 4		
+·07	3, 1	...	...	−·66	1, 3	r=70′ to 75′.	
+·15	2, 1	...	...	−·56	1, 3		
+·04	3, 1					Δr	No. of Photos.
−·12	4, 4						
+·14	4, 4						
−·02	1, 4						
+·19	1, 1						
+·04	3, 4					+″·11	2, 5
						−·74	7, 4
						+·02	4, 1
						−·12	2, 5

The means in the above tables were taken in two ways: (I.) the simple mean, the result for each star being considered of equal weight; (II.) the weighted mean, the weight being equal to the number of photographs on which the distorted images occur. The results are shown in the following table:—

Limits of Distance.	Mean Distance from Centre.	No. of Stars.	Weight.	Mean Distortion.		Mean Discordance after Correction for Distortion.	Mean Discordance (Uncorrected).
				(I.)	(II.)		
′ ′	′			″	″	″	″
45–50	47·5	38	130	+·014	+·005	±·12	±·12
50–55	52·5	29	98	−·029	−·044	·14	·15
55–60	57·5	32	93	−·106	−·083	·21	·20
60–65	61·6	14	26	−·181	−·166	·21	·27
65–75	70·0	12	36	−·262	−·354	·25	·34

The differences between the residuals have been regarded as entirely due to optical distortion. It should, however, be mentioned that only the provisional division errors were used, so that the discordance between the prints and the réseau has not been taken into account. It is possible that part (if not all) of what is here attributed to the distortion of the object-glass may be due to this discordance between the prints and réseau; but as the investigation of the latter was confined to the lines 3 to 25, whilst the supposed distortion is mainly sensible beyond these limits, the cause must be left uncertain.

The table given above shows—

(1) Within 55′ from the centre the star-images are not seriously distorted, but beyond 55′ they are sensibly displaced towards the centre of the plate.

(2) The amount of this displacement is subject to such variations that very little is gained by applying this mean correction. This is clear from the last two columns of the above table, the mean discordance (irrespective of sign) being sensibly the same as the mean discordance obtained after applying the mean correction.

(3) The falling off in accuracy is very marked beyond 55′ from the centre.

As has already been mentioned, reference stars at a greater distance than 55′ from the centre have not been used in forming the final results (except in one or two instances when the number of suitable stars within 55′ of the centre was very small).

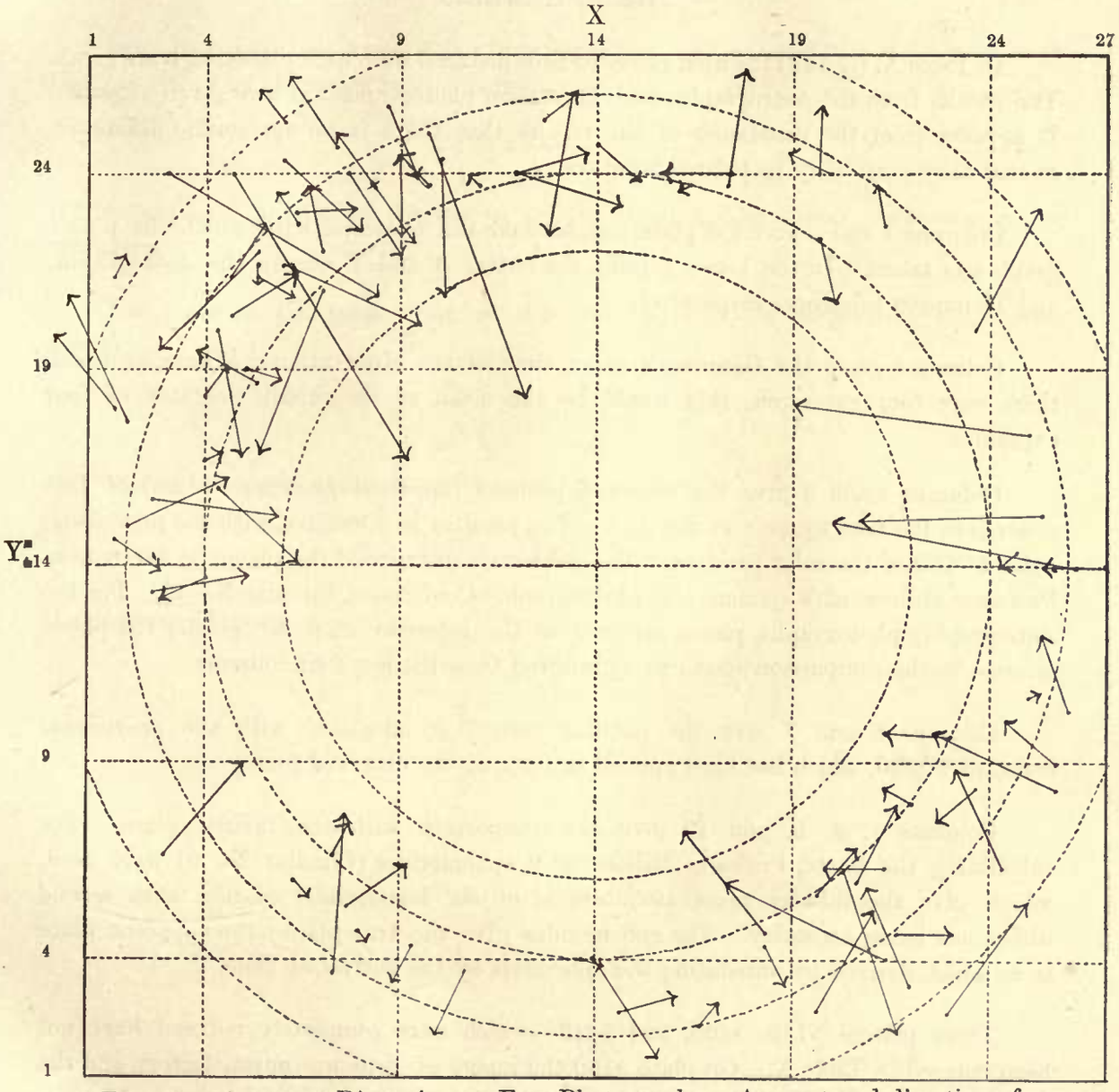


FIG. 10.—Apparent Distortion on Eros Photographs. Amount and direction of distortion indicated by the arrows. Scale $1^{cm} = 0''{\cdot}2$.

VII. COMPARISON OF OBSERVED PLACES OF EROS WITH THE EPHEMERIS.

In Table X. (p. 148) the final places of Eros deduced from each photograph are given. The results from the Astrographic and Thompson photographs are here given together. It appears from the discussion of the results that there is no systematic difference, so that they may fairly be treated together.

Columns 1 and 2 give the plate number and the telescope with which the photograph was taken. In the latter column the letters A and T denote the Astrographic and Thompson telescopes respectively.

Column 3 gives the Greenwich mean time of the observation. Where, as usual, there were four exposures, this would be the mean of the middle instants of four exposures.

Columns 4 and 5 give the observed position (apparent geocentric place) of Eros referred to the true equinox of the date. The parallax is calculated with the provisional value $8''{\cdot}800$ of the solar parallax. The geocentric distance of the planet is taken from Professor Millosevich's ephemerides (Astrographic Conference, Circular No. 9). For the Astrographic photographs, places referred to the reference stars are given; the places referred to the comparison stars can be inferred from the last four columns.

Columns 6 and 7 give the parallax correction calculated with the provisional constant $8''{\cdot}800$, which has been applied in forming the observed place.

Columns 7, 8, 9, and 10 give the comparison with the tabular place. For calculating the latter, Professor Millosevich's ephemerides (Circular No. 9) were used, which give the tabular place at intervals of six hours, interpolation with second differences being necessary. The ephemerides give the true place; the apparent place is, as usual, derived by antedating the ephemeris by the aberration time.

Three plates—5150, 5408, and 5413—which were completely reduced have not been entered in Table X. On plate 5150 the image of Eros was unsatisfactory and the deduced place badly discordant. Plates 5408 and 5413 were rejected because the trails of the stars were irregular.

It is important to justify the legitimacy of working with the means of four exposures. Two sources of error must be guarded against: the place of Eros at the mean

time of the exposures may not be the same as the mean of the places of Eros at the times of the exposures, and the parallax of Eros at the mean time may not be the same as the mean of the parallaxes.

Let $t_1\ t_2\ t_3\ t_4$ be the times of the four exposures, and let the place of Eros (R.A. or Dec.) at time t be expressed by the formula

$$\alpha+\beta t+\tfrac{1}{2}\gamma t^2+\ \ldots\ .$$

If t be expressed in units of 6 hours, γ will be equal to the *second difference* in the ephemeris.

The place at the mean time of the four exposures is (neglecting third-order terms),

$$\alpha+\beta\left(\frac{t_1+t_2+t_3+t_4}{4}\right)+\tfrac{1}{2}\gamma\left(\frac{t_1+t_2+t_3+t_4}{4}\right)^2,$$

the mean of the places at the times of the four exposures is

$$\alpha+\beta\left(\frac{t_1+t_2+t_3+t_4}{4}\right)+\tfrac{1}{2}\gamma\left(\frac{t_1^2+t_2^2+t_3^2+t_4^2}{4}\right),$$

the difference between these is

$$\tfrac{1}{2}\gamma\left\{\frac{t_1^2+t_2^2+t_3^2+t_4^2}{4}-\left(\frac{t_1+t_2+t_3+t_4}{4}\right)^2\right\}$$

$$=\frac{1}{32}\gamma\left\{(t_3-t_2)^2+(t_1-t_3)^2+(t_2-t_1)^2+(t_4-t_1)^2+(t_4-t_2)^2+(t_4-t_3)^2\right\}$$

$$<\frac{3}{16}\gamma(t_4-t_1)^2.$$

Now for R.A., γ is less than $0^s{\cdot}4$ always (and for Dec., γ is still less).

$\therefore$ the difference is certainly less than $^s{\cdot}0005$ provided

$$(t_4-t_1)^2<\frac{1}{150};$$

$$i.e.\quad \text{if } t_4-t_1<\frac{1}{12}$$

the unit is 6 hours, so that the exposures ought to be completed within about half an hour. This was always fully satisfied; in fact, the series of exposures rarely occupied more than 15 minutes.

For the parallax in R.A. the limit of time over which the exposures may be extended is much smaller. Let h be the hour-angle at the mean of the exposures, and $t_1\ t_2\ t_3\ t_4$ the times of the exposures measured from that mean.

The parallax in R.A. at the mean time of the exposures, being proportional to the hour angle, $= \pi \sin h$, say, the mean of the parallaxes at the four exposures

$$= \pi \sin h + \pi \cos h \left(\frac{t_1+t_2+t_3+t_4}{4}\right)$$

$$-\tfrac{1}{2}\pi \sin h \left(\frac{t_1^2+t_2^2+t_3^2+t_4^2}{4}\right) + \ \ldots .$$

the second term vanishes, since $t_1+t_2+t_3+t_4=0$ by definition; thus the difference between the two modes of estimating the parallax

$$= \tfrac{1}{8}\pi \sin h\ (t_1^2+t_2^2+t_3^2+t_4^2), \text{ approximately.}$$

But $\pi \sin h$ is often as great as $1^s{\cdot}7$,

$\therefore\ t_1^2+t_2^2+t_3^2+t_4^2$ must be $< \frac{1}{425}$ if the error is not to be greater than $0^s{\cdot}0005$.

In general t_2^2 and t_3^2 will be small, t_1^2 and t_4^2 (for the extreme exposures) about equal. Thus—

$$t_1^2 \text{ should be less than } \frac{1}{900} \text{ say}$$

$$t_1 < \frac{1}{30};$$

the unit in this case being 1 radian, we must have

$$t_1 < 8 \text{ minutes.}$$

Thus, provided the whole duration of the exposure is not more than 16 minutes, no error of the last figure is introduced. This condition was satisfied, except in one or two isolated cases when the exposures were interrupted by cloud.

In an average series of exposures, viz. 3^m, 3^m, 2^m, 2^m, with one minute interval between each exposure,

$$t_1^2+t_2^2+t_3^2+t_4^2 = {\cdot}0012;$$

$\therefore$ the error introduced by taking the mean is

$$\cdot 00015 \times \text{actual parallax.}$$

Thus a systematic error of about $0''\cdot0015$ is introduced into the deduced value of the solar parallax, the deduced value being too small by this amount.

It has not been considered worth while to apply this correction, as the probable accidental error of the best of the finally deduced values of the parallax is between two and three times as great.

Correction of the Ephemeris.

The determination of the error of the ephemeris, besides being of intrinsic importance, must be undertaken as a preliminary to the discussion of the observed places for the determination of the solar parallax. For the latter purpose groups of two or three days' observations are discussed together, and it is important to be able to determine the change of error of the ephemeris in the interval between the various observations of the group.

In the following tables the mean error of the ephemeris is given for the mean times of groups of plates. The arrangement into groups is generally determined by breaks in the series of observations owing to bad weather, etc. (Where the error of the ephemeris is not a linear function of the time, the error at the mean time is not strictly the same as the mean of the errors at the separate times, but the groups were never sufficiently extended for this difference to be appreciable.) The mean parallax of the group is stated in the last two columns, so that the effect of a change in the adopted value of the solar parallax can be computed if necessary.

The mean parallax of a group, however, is in general small; this is especially true where the conditions were favourable for determining the parallax, the most favourable occasions being when plates were taken on which Eros had large positive and negative parallaxes in about equal numbers.

TABLE 17.

Errors of the Ephemerides of Eros from Means of Groups of Photographs.

Astrographic Photographs.

Plate Numbers.	No. of Plates.	Mean G.M.T. 1900–1901.	Correction to Ephemeris.		Mean Parallax of Group.	
			R.A.	Dec.	R.A.	Dec.
		d h	s	"	s	"
5126–5141	9	October 3 4	− 0·034	+ 1·71	− 0·79	+ 6·0
5142–5152	6	7 18	− 0·079	+ 1·91	− 0·69	+ 4·2
5160–5162	3	14 19	− 0·109	+ 1·58	− 0·43	+ 3·4
5169–5179	8	21 4	− 0·168	+ 1·43	+ 0·07	+ 4·7
5183–5203	14	26 23	− 0·228	+ 1·27	− 0·24	+ 5·2
5204–5208	5	30 3	− 0·259	+ 1·08	+ 0·31	+ 8·4
5209–5211	3	November 7 6	− 0·291	+ 0·62	+ 0·55	+ 10·8
5212–5229	15	10 7	− 0·309	+ 0·51	− 0·44	+ 4·1
5230–5243	13	14 8	− 0·304	+ 0·20	− 0·10	+ 6·0
5248–5250	3	18 10	− 0·329	− 0·12	− 0·07	− 0·9
5253–5264	11	November 22 19	− 0·329	− 0·13	+ 0·23	+ 5·8
5267–5269	3	25 8	− 0·323	− 0·39	− 0·51	+ 0·4
5270–5275	6	27 15	− 0·298	− 0·46	− 0·70	+ 0·5
5276–5283	6	December 6 23	− 0·276	− 0·91	− 1·02	+ 8·7
5285–5287	3	9 16	− 0·270	− 0·66	+ 0·03	+ 5·3
5288–5297	5	13 9	− 0·266	− 0·90	+ 0·46	+ 7·0
5299–5313	9	16 3	− 0·255	− 0·77	− 0·03	+ 7·7
5314–5329	10	20 3	− 0·242	− 0·72	+ 0·76	+ 10·1
5331–5338	7	28 10	− 0·210	− 1·01	+ 0·82	+ 9·2
5341–5348	8	January 5 0	− 0·193	− 0·98	+ 0·46	+ 10·4
5349–5356	8	January 8 21	+ 0·025	+ 1·40	+ 0·65	+ 12·3
5359–5372	8	14 18	+ 0·005	+ 1·09	+ 0·89	+ 14·4
5394–5398	3	February 2 18	+ 0·015	− 0·11	+ 0·81	+ 14·5
5409–5427	10	12 15	+ 0·015	− 0·82	+ 0·35	+ 13·3
5428–5434	5	15 10	+ 0·026	− 0·98	+ 0·34	+ 13·2
5436–5441	3	20 8	+ 0·059	− 1·27	+ 0·38	+ 13·2

TABLE 18.

Errors of the Ephemerides of Eros from Means of Groups of Photographs.

Thompson Photographs.

Plate Numbers.	No. of Plates.	Mean G.M.T. 1900–1901.	Correction to Ephemeris.		Mean Parallax of Group.	
			R.A.	Dec.	R.A.	Dec.
		d h			s	
744–755	11	October 3 9	− ·033	+ 1·81	− 0·80	+ 6·9
756–761	5	8 0	− ·079	+ 1·84	− 0·76	+ 6·0
762–764	3	9 23	− ·109	+ 1·80	− 1·03	+ 10·6
766–771	3	14 4	− ·120	+ 1·67	− 0·26	+ 0·8
778–783	3	21 0	− ·166	+ 1·42	− 0·96	+ 5·3
787–799	13	26 22	− ·232	+ 1·23	− 0·11	+ 4·7
800–803	4	29 3	− ·250	+ 1·14	− 0·77	+ 7·8
804–807	3	November 7 18	− ·296	+ 0·69	0·00	+ 2·7
811–812	2	10 17	− ·307	+ 0·46	+ 1·66	+ 12·3
817–823	7	14 3	− ·311	+ 0·23	− 0·24	+ 6·5
844–847	4	27 7	− ·309	− 0·43	− 0·45	+ 3·9
848–854	7	December 7 2	− ·283	− 0·86	+ 1·36	+ 10·7
855–856	2	10 6	− ·273	− 0·68	− 0·86	+ 3·7
858–861	4	13 8	− ·261	− 0·83	+ 0·09	+ 5·8
863–871	9	16 0	− ·260	− 0·79	0·00	+ 7·7
872–882	11	20 7	− ·245	− 0·68	+ 0·42	+ 10·0
883–887	5	27 18	− ·221	− 0·96	+ 0·43	+ 7·3
889–890	2	January 2 13	− ·221	− 0·88	+ 1·47	+ 15·4
891–898	7	5 2	− ·180	− 1·12	+ 0·67	+ 12·1
899–901	3	9 6	+ ·006	+ 1·30	− 0·21	+ 8·1
904–914	10	14 23	+ ·018	+ 1·03	+ 0·50	+ 12·7
915–920	5	18 3	+ ·006	+ 0·78	+ 0·40	+ 11·5
921–926	4	23 10	+ ·013	+ 0·55	+ 0·84	+ 13·1
927–930	3	29 0	+ ·006	+ 0·05	+ 0·47	+ 12·8
931–935	4	February 2 10	+ ·022	− 0·14	+ 0·80	+ 14·3
936–940	5	5 23	+ ·007	− 0·41	+ 0·37	+ 13·2
941–949	9	11 22	+ ·015	− 0·76	+ 0·39	+ 13·3
952–955	3	16 10	+ ·004	− 1·12	+ 0·76	+ 14·1
958–959	2	20 8	+ ·032	− 1·34	+ 0·26	+ 12·9

TABLE 19.

Errors of the Ephemerides of Eros from Mean of Groups of Photographs.

Astrographic and Thompson Photographs Combined.

Astrographic Plate Numbers.	No. of Plates.	Thompson Plate Numbers.	No. of Plates.	Mean G.M.T. 1900–1901.	Correction to Ephemeris.	
					R.A.	Dec.
				d h	s	″
5126–5141	9	744–755	11	October 3 7	− ·033	+ 1·78
5142–5152	6	756–761	5	7 22	− ·079	+ 1·86
...	...	762–764	3	9 23	− ·109	+ 1·80
5160–5162	3	766–771	3	14 10	− ·116	+ 1·64
5169–5179	8	778–783	3	21 2	− ·168	+ 1·43
5183–5203	14	787–799	13	26 22	− ·230	+ 1·25
5204–5208	5	800–803	4	29 13	− ·254	+ 1·11
5209–5211	3	804–807	3	November 7 14	− ·294	+ 0·66
5212–5229	15	811–812	2	10 9	− ·308	+ 0·50
5230–5243	13	817–823	7	14 5	− ·307	+ 0·20
5248–5250	3	...	...	18 10	− ·329	− 0·12
5253–5264	11	...	...	22 19	− ·329	− 0·13
5267–5269	3	...	...	25 8	− ·323	− 0·39
5270–5275	6	844–847	4	27 11	− ·303	− 0·44
5276–5283	6	848–854	7	December 7 1	− ·280	− 0·88
5285–5287	3	855–856	2	9 23	− ·271	− 0·67
5288–5297	5	858–861	4	13 8	− ·263	− 0·86
5299–5313	9	863–871	9	16 1	− ·258	− 0·78
5314–5329	10	872–882	11	20 6	− ·244	− 0·69
5331–5338	7	883–887	5	28 1	− ·216	− 0·98
..	...	889–890	2	January 2 13	− ·221	− 0·88
5341–5348	8	881–898	7	5 1	− ·185	− 1·06
5349–5356	8	899–901	3	9 0	+ ·018	+ 1·36
5359–5372	8	904–914	10	14 21	+ ·014	+ 1·05
...	...	915–920	5	18 3	+ ·006	+ 0·78
...	...	921–926	4	23 10	+ ·013	+ 0·55
...	...	927–930	3	29 0	+ ·006	+ 0·05
5394–5398	3	931–935	4	Febfuary 2 13	+ ·019	− 0·13
...	...	936–940	5	5 23	+ ·007	− 0·41
5409–5427	10	941–949	9	12 5	+ ·015	− 0·78
5428–5434	5	952–955	3	15 22	+ ·015	− 1·05
5436–5441	3	958–959	2	20 8	+ ·044	− 1·31

In combining the results from Astrographic and Thompson plates, weight 3 has been given to an Astrographic plate and weight 5 to a Thompson plate. These weights were derived from a preliminary discussion of the discordances among themselves of the positions of Eros deduced from the two sets of photographs, allowance being made where necessary for the change of error of the ephemeris. This discussion (revised by taking account of the supplementary division errors, which were not available when the preliminary discussion was made and the weights 5 : 3 adopted) is given in Table 20.

TABLE 20.

Mean Accidental Error of a Place of Eros.

Mean Discordances between a position of Eros deduced from one plate and the mean of the group.

Date.	Astrographic.					Thompson.		
	No. of Plates.	Reference Stars.		Comparison Stars.		No. of Plates.	R.A.	Decl.
		R.A.	Decl.	R.A.	Decl.			
October 26–27	14	±″·103	±″·095	±″·107	±″·081	13	±″·059	±″·039
December 15–17	9	·104	·084	·096	·083	9	·066	·102
December 19–21	10	·114	·100	·107	·120	11	·120	·084
February 11–13	10	(·172)	·100	(·200)	·080	9	·076	·080
Mean Discordance	...	± ·107	± ·095	± ·103	± ·091	...	± ·080	± ·076

From these discordances, weight of Thompson Photograph : weight of Astrographic Photograph (comparison stars)

= 1·66 : 1 from Right Ascensions.
= 1·43 : 1 from Declinations.

The above include discordances due to erroneous places of Reference Stars, since the groups extend over two or three days. If the groups were limited to a single day the discordances would be much smaller.

The places of Eros given in Table 19 were plotted and a smooth curve drawn through them. From this is derived the following table, giving the error of the ephemeris and the daily rate of change of error.

TABLE 21.

Error of Ephemeris.

Right Ascension.

Ephemeris A.			Ephemeria B.			Ephemeris C.		
Date. (noon).	Correction to Ephemeris.	Rate of Change per day.	Date. (noon).	Correction to Ephemeris.	Rate of Change per day.	Date. (noon).	Correction to Ephemeris.	Rate of Change per day.
1900.	s	s	1900–01.	s	s	1901.	s	s
Oct. 2	− ·022	− ·010	Nov. 22	− ·322	+ ·003	Jan. 8	+ ·018	− ·001
5	− ·051	− ·009	25	− ·314	+ ·003	11	+ ·014	− ·001
8	− ·077	− ·007	28	− ·305	+ ·003	14	+ ·012	·000
11	− ·099	− ·006	Dec. 1	− ·296	+ ·003	17	+ ·012	·000
14	− ·117	− ·007	4	− ·288	+ ·003	20	+ ·012	·000
17	− ·137	− ·008	7	− ·279	+ ·002	23	+ ·012	·000
20	− ·160	− ·009	10	− ·272	+ ·003	26	+ ·012	·000
23	− ·188	− ·011	13	− ·264	+ ·003	29	+ ·013	·000
26	− ·220	− ·009	16	− ·256	+ ·003	Feb. 1	+ ·013	·000
29	− ·248	− ·007	19	− ·247	+ ·003	4	+ ·013	·000
Nov. 1	− ·269	− ·005	22	− ·238	+ ·004	7	+ ·013	·000
4	− ·285	− ·004	25	− ·227	+ ·004	10	+ ·014	·000
7	− ·296	− ·002	28	− ·216	+ ·004	13	+ ·015	+ ·001
10	− ·303	− ·002	31	− ·205	+ ·004	16	+ ·019	+ ·003
13	− ·308	− ·001	Jan. 3	− ·193	+ ·004	19	+ ·027	+ ·003
16	− ·310		6	− ·182		22	+ ·036	

Declination.

Ephemeris A.			Ephemeris B.			Ephemeris C.		
Date. (noon).	Correction to Ephemeris.	Rate of Change per day.	Date. (noon).	Correction to Ephemeris.	Rate of Change per day.	Date. (noon).	Correction to Ephemeris.	Rate of Change per day.
1900.	"	"	1900–01.	"	"	1901.	"	"
Oct. 2	+ 1·77	+ ·02	Nov. 22	− 0·12	− ·06	Jan. 8	+ 1·41	− ·05
5	+ 1·82	+ ·01	25	− 0·30	− ·06	11	+ 1·26	− ·05
8	+ 1·85	− ·02	28	− 0·48	− ·05	14	+ 1·08	− ·06
11	+ 1·79	− ·04	Dec. 1	− 0·64	− ·04	17	+ 0·90	− ·06
14	+ 1·66	− ·04	4	− 0·76	− ·03	20	+ 0·71	− ·06
17	+ 1·55	− ·03	7	− 0·85	− ·01	23	+ 0·52	− ·07
20	+ 1·46	− ·03	10	− 0·87	+ ·01	26	+ 0·31	− ·06
23	+ 1·37	− ·03	13	− 0·85	+ ·02	29	+ 0·12	− ·06
26	+ 1·28	− ·04	16	− 0·79	+ ·02	Feb. 1	− 0·07	− ·06
29	+ 1·15	− ·05	19	− 0·72	− ·01	4	− 0·24	− ·07
Nov. 1	+ 1·00	− ·05	22	− 0·75	− ·03	7	− 0·45	− ·07
4	+ 0·85	− ·05	25	− 0·85	− ·03	10	− 0·65	− ·07
7	+ 0·69	− ·06	28	− 0·95	− ·02	13	− 0·85	− ·06
10	+ 0·52	− ·07	31	− 1·01	− ·01	16	− 1·04	− ·06
13	+ 0·30	− ·08	Jan. 3	− 1·04	·00	19	− 1·22	− ·05
16	+ 0·07		6	− 1·04		22	− 1·38	

These errors were examined with a view to detecting a monthly periodicity depending on the lunar parallactic inequality, and thus deducing a correction to the adopted mass of the Moon. A small wave having a period of about a month is noticeable in the Right Ascensions compared with ephemeris A, but it is not supported by the comparisons during the later part of the opposition.

VIII. DETERMINATION OF THE SOLAR PARALLAX.

The residuals of Eros (observed place—tabular place), which are given in the last four columns of Table X., may be regarded as made up of three parts, due respectively to the error of the ephemeris, the error in the adopted parallax, and the accidental error of the plate. The error in the parallax is to be determined by comparing observations made at different hour-angles; it is necessary in making this comparison to allow for the change in the error of the ephemeris during the interval between the observations. For this the rate of change of error of the ephemeris given in Table 21 was applied in order to reduce to a common epoch the various observations compared.

The accuracy with which the rate of change of error of the ephemeris is required depends on the extent of the groups of plates which are discussed together for the solar parallax. For the finally deduced values of the parallax these groups never extended over a longer period than from one day to the next. The rate of change was thus only applied to reduce plates taken at most forty hours apart to a common epoch. But, as appears from Table 19, the rate of change of error of the ephemeris was generally derived by comparing the mean places about five days apart, so that an error in determining the change of error of the ephemeris in five days will affect in a much smaller degree the reduction to a common epoch of plates, extending over a little more than a day.* Further, any residual error from this cause can only affect accidentally the solar parallax deduced from the mean of a large number of groups of plates.

The extent of a group of plates which can be profitably compared together is limited by a different consideration, viz. the large accidental errors introduced by erroneous places of the stars to which Eros was referred. The same reference and comparison stars were used throughout each night, so that, in deducing the parallax

* The possibility of solving each group of observations independently by least squares, retaining the change of error of ephemeris as one of the unknowns, was considered, but the above method seems preferable both in theory and practical simplicity. There is a very close analogy between the problem of determining the change of error of the ephemeris for reducing short groups of observations and that of determining the clock rate for reducing short groups of meridian observations.

from comparisons between photographs taken on an evening and on the following morning, errors in the star-places are eliminated; but in all other comparisons some of the stars used are different for the two groups of plates, and the longer the interval, the weaker the connection between the star-places.

RIGHT ASCENSIONS.

In the following tables the results of comparisons in Right Ascensions for the determination of the solar parallax are given for (1) Astrographic photographs, reference stars; (2) Astrographic photographs, comparison stars; (3) Thompson photographs, comparison stars; (4) Astrographic and Thompson photographs treated together, comparison stars.

The weight is derived from the formula—

$$\frac{1}{10}\frac{mn}{m+n}(\delta\pi)^2,$$

where m and n are the numbers of plates compared,

and $\delta\pi$ = the difference of parallax of Eros in seconds of arc between the two groups compared.

Thus weight 30 corresponds to a comparison between two plates under fairly favourable conditions, viz. with a difference of parallax of Eros of nearly 25″ between the two plates.

Care has been taken either to avoid using the same plates in different comparisons, or, where the same group has been compared with a preceding and succeeding group of plates, to give half weight to it in each comparison. For example, on October 26 and 27 there were four groups of plates to be compared.

a. October 26, evening.
b. October 26, morning.
c. October 27, evening.
d. October 27, morning.

At first sight the most natural process is to obtain values of the solar parallax by comparing *a* and *b*, *b* and *c*, *c* and *d*; but if this is done, *b* and *c* are used twice over, and consequently double weight is given to them. Again, the comparison between *a* and *d* is also equally favourable for determining parallax; but evidently the mean parallax determined from *b* and *c* and from *a* and *d* simply reproduces the mean from *a* and *b* and *c* and *d*. Accordingly, in such a case only the comparisons *a* and *b*, *c* and *d* have been utilised.

TABLE 22.

Determination of the Solar Parallax from Right Ascensions of Eros.

Astrographic Photographs—Reference Stars.

Date.		No. of Plates compared.	Approximate Difference of Parallax.	Weight.	Correction to Solar Parallax 8″·800.	Correction to Parallax × Weight.
1900.			″		″	″
October	14–15	2, 1	11	8	− ·040	− 0·32
	20	2, 1	13	11	+ ·038	+ 0·42
	21	2, 2	24	58	− ·021	− 1·22
	26	3, 2	25	75	− ·003	− 0·23
	27	3, 2	25	75	+ ·022	+ 1·65
	28–29	1, 2*	26	34	+ ·015	+ 0·51
	29–31	2*, 2	27	49	+ ·051	+ 2·50
November	6–7	1, 2	28	52	− ·036	− 1·87
	9	2, 3	26	81	− ·009	− 0·73
	10	3, 2	15	27	+ ·016	+ 0·43
	11	3, 1	11	9	+ ·007	+ 0·06
	13	3, 3	28	117	− ·028	− 3·28
	14–15	2, 3*	25	53	− ·025	− 1·32
	15	3*, 2	10	9	+ ·062	+ 0·56
	22	2, 5	27	105	− ·018	− 1·89
	23	2, 2	13	17	+ ·042	+ 0·71
	25–27	2, 3*	10	9	+ ·164	+ 1·48
	27	3*, 2	12	12	+ ·061	+ 0·73
December	6–7	3, 1	17	22	+ ·049	+ 1·08
	7–9	1, 1*	29	28	− ·030	− 0·84
	9	1*, 1	27	24	+ ·017	+ 0·41
	13	3, 2	20	48	− ·032	− 1·54
	15	2, 3*	27	62	− ·041	− 2·54
	15–16	3*, 1	27	44	− ·010	− 0·44
	19	2, 2	25	62	− ·080	− 4·96
	28–29	2, 2	13	17	+ ·032	+ 0·54
1901.						
January	5	2, 3	11	14	·000	0·00
	8	1, 3	21	33	− ·040	− 1·32
	9	1, 1	24	29	+ ·027	+ 0·78
	14–15	3, 2*	21	33	− ·021	− 0·69
	15	2*, 2	21	29	+ ·127	+ 3·68

Mean correction to solar parallax . . . . . −″·006 ± ″·0049

Total number of plates used 117

Total weight 1246

* These plates, having been compared both with preceding and succeeding observations, are given half-weight in each comparison.

TABLE 23.

Determination of the Solar Parallax from Right Ascensions of Eros (contd.).

Astrographic Photographs—Comparison Stars.

Date.		No. of Plates compared.	Approximate Difference of Parallax.	Weight.	Correction to Solar Parallax 8″·800.	Correction to Parallax × Weight.
1900.						
October	14–15	2, 1	11″	8	− ″·119	− 0·95
	20	2, 1	13	11	+ ·108	+ 1·19
	21	2, 2	24	58	+ ·028	+ 1·62
	26	3, 2	25	75	+ ·022	+ 1·65
	27	3, 2	25	75	+ ·044	+ 3·30
	28–29	1, 2*	26	34	·000	0·00
	29–31	2*, 2	27	49	+ ·047	+ 2·30
November	6–7	1, 2	28	52	− ·017	− 0·88
	9	2, 3	26	81	+ ·039	+ 3·16
	10	3, 2	15	27	+ ·032	+ 0·86
	11	3, 1	11	9	+ ·091	+ 0·82
	13	3, 3	28	117	− ·003	− 0·35
	14–15	2, 3*	25	53	− ·022	− 1·17
	15	3*, 2	10	9	+ ·070	+ 0·63
	22	2, 5	27	105	+ ·009	+ 0·95
	23	2, 2	13	17	− ·006	− 0·10
	25–27	2, 3*	10	9	+ ·102	+ 0·92
	27	3*, 2	12	12	+ ·014	+ 0·17
December	6–7	3, 1	17	22	+ ·054	+ 1·19
	7–9	1, 1*	29	28	+ ·015	+ 0·42
	9	1*, 1	27	24	+ ·039	+ 0·94
	13	3, 2	20	48	− ·041	− 1·97
	15	2, 3*	27	62	− ·075	− 4·65
	15–16	3*, 1	27	44	+ ·004	+ 0·18
	19	2, 2	25	62	− ·050	− 3·10
	28–29	2, 2	13	17	+ ·040	+ 0·68
1901.						
January	5	2, 3	11	14	+ ·037	+ 0·51
	8	1, 3	21	33	− ·030	− 0·99
	9	1, 1	24	29	− ·005	− 0·14
	14–15	3, 2*	21	33	+ ·005	+ 0·16
	15	2*, 2	21	29	+ ·149	+ 4·32

Mean correction to solar parallax . . . . . +″·009 ± ″·0052

Total number of plates used 117

Total weight 1246

* These plates, having been compared both with preceding and succeeding observations, are given half-weight in each comparison.

TABLE 24.

Determination of the Solar Parallax from Right Ascensions of Eros (contd).

Thompson Photographs—Comparison Stars.

Date.	No. of Plates compared.	Approximate Difference of Parallax.	Weight.	Correction to Solar Parallax 8″·800.	Correction to Parallax × Weight.
1900.					
October 20–21	1, 2	9	5	− ·100	− 0·50
26	3, 2	25	75	·000	0·00
27	2, 2	25	62	+ ·028	+ 1·76
28–29	1, 3	26	51	− ·015	− 0·76
November 6–8	1, 2	21	29	− ·052	− 1·51
10–13	2, 2*	28	52	+ ·008	+ 0·42
13	2,* 2	29	56	− ·022	− 1·23
14–15	1, 2	22	32	− ·141	− 4·51
27	2, 2	18	32	− ·022	− 0·70
December 6–7	3, 2	15	27	+ ·087	+ 2·35
7–10	2, 2	26	68	+ ·007	+ 0·48
13	3, 1	21	33	− ·047	− 1·55
15	3, 3	24	86	+ ·019	+ 1·63
19	3, 3	26	98	+ ·037	+ 3·63
21	2, 3	26	81	+ ·051	+ 4·13
28	1, 1*	8	2	+ ·087	+ 0·17
28–29	1*, 1	12	5	+ ·025	+ 0·12
1901.					
January 2–4	2, 2	21	44	+ ·025	+ 1·10
5	2, 3	10	12	− ·053	− 0·64
14	2, 2	23	53	− ·030	− 1·59
15	3, 3	19	54	− ·047	− 2·54
17–18	2, 3	16	(31)	(+ ·277)	(+ 8·59)

Mean correction to solar parallax . . . . ″·000 ± ″·0063

Total number of plates used (excluding January 17–18) . . 84

Total weight 957

* These plates, having been compared both with preceding and succeeding observations, are given half-weight in each comparison.

TABLE 25.

Determination of the Solar Parallax from Right Ascensions of Eros (contd.).

Combined Discussion of Astrographic and Thompson Photographs.

Comparison Stars.

Date.		No. of Plates compared.	Approximate Difference of Parallax.	Weight.	Correction to Solar Parallax 8″·800.	Correction to Parallax × Weight.
1900.						
October	14–15	4, 1	10″	8	− ·045	− 0·36
	20	3, 1	13	13	+ ·117	+ 1·52
	21	4, 2	23	70	+ ·007	+ 0·49
	26	6, 4	25	150	+ ·006	+ 0·90
	27	5, 4	25	139	+ ·038	+ 5·28
	28–29	2, 5	26	97	− ·009	− 0·87
November	8–9	2, 2	19	36	− ·012	− 0·43
	9–10	3, 3	27	109	+ ·012	+ 1·31
	10–11	2, 3	27	88	+ ·012	+ 1·06
	13	5, 5	28	196	− ·011	− 2·16
	14–15	3, 5	24	108	− ·067	− 7·24
	22–23	4, 5	28	174	+ ·009	+ 1·57
	27	5, 4	15	50	− ·005	− 0·25
December	6–7	9, 3	16	58	+ ·054	+ 3·13
	9–10	3, 1	25	47	+ ·011	+ 0·52
	13	6, 3	21	88	− ·044	− 3·87
	15–16	6, 6	26	203	− ·018	− 3·65
	19	5, 5	25	156	+ ·003	+ 0·47
	21	2, 6	27	109	+ ·033	+ 3·60
	28–29	3, 3	12	22	+ ·033	+ 0·73
1901.						
January	5	4, 6	12	35	·000	0·00
	8–9	7, 4	18	82	− ·082	− 6·72
	13–14	6, 2	22	73	+ ·030	+ 2·19
	15	5, 5	20	100	+ ·034	+ 3·40
	17–18	2, 3	16	(31)	(+ ·277)	(+ 8·59)

Mean correction to solar parallax . . . . ″·000 ± ″·0044

Total number of plates used 192

Total weight 2211

The good agreement between the results derived from the Astrographic and Thompson photographs (Comparison Stars) and the fact that the same star-places were used for the two series seemed to justify the combined discussion of the results regarding the two sets of places as homogeneous, and this is given in the last of the foregoing tables. There is considerable gain in treating them together, as the two instruments had supplemented one another considerably. In this discussion comparisons between groups of observations with an interval of more than a day were rigorously excluded; thus, although the theoretical weight of this determination happens not to be appreciably greater than the sum of the weights of the two separate determinations, the comparisons were made under more favourable and satisfactory conditions. The resulting value of the parallax $8''{\cdot}800 \pm ''{\cdot}0044$ must be regarded as the principal conclusion of the whole investigation.

Without much loss of material the discussion could be rearranged, so that comparisons were only made between the evening and following morning observations. A very considerable reduction in the probable error (inferred from the discordances) took place notwithstanding the loss of material, owing to the elimination of erroneous star-places. A comparison was also made between the morning and following evening observations, the probable error in this case being more than twice as great

The results are as follows:—

TABLE 26.

Astrographic and Thompson photographs—Comparison Stars.

Evening to Morning Comparisons.

Date.	No. of Plates compared.	Approximate Difference of Parallax.	Weight.	Correction to Solar Parallax 8″·800.	Correction to Parallax × Weight.
1900.		″		″	″
October 8	3, 2	7	5	+ ·096	+ 0·48
20	3, 1	13	13	+ ·117	+ 1·52
21	4, 2	23	70	+ ·007	+ 0·49
26	6, 4	25	150	+ ·006	+ 0·90
27	5, 4	25	139	+ ·038	+ 5·28
November 9	2, 3	26	81	+ ·039	+ 3·16
10	3, 2	28	94	− ·008	− 0·75
11	3, 1	11	8	+ ·091	+ 0·73
13	5, 5	28	196	− ·011	− 2·16
15	5, 2	10	14	− ·015	− 0·21
22	2, 5	28	112	+ ·009	+ 1·01
23	2, 2	14	21	− ·011	− 0·23
27	5, 4	15	50	− ·005	− 0·25
December 7	3, 3	16	38	+ ·021	+ 0·80
9	1, 1	25	36	+ ·033	+ 1·19
13	6, 3	21	88	− ·044	− 3·87
15	5, 6	26	185	− ·025	− 4·62
17	4, 1	8	5	+ ·045	+ 0·22
19	5, 5	25	156	+ ·003	+ 0·47.
21	2, 6	27	109	+ ·033	+ 3·60
28	3, 3	9	12	+ ·127	+ 1·52
1901.					
January 5	4, 6	12	35	·000	0·00
8	1, 3	22	36	− ·030	− 1·08
9	6, 1	18	28	− ·018	− 0·50
14	2, 5	22	70	+ ·020	+ 1·40
15	5, 5	20	100	+ ·034	+ 3·40

Mean correction to solar parallax . . . +″·007 ± ″·0036

Total number of plates used 180

Total weight 1851

TABLE 27.

Astrographic and Thompson Photographs—Comparison Stars.

Morning to Evening Comparisons.

Date.		No. of Plates compared.	Approximate Difference of Parallax.	Weight.	Correction to Solar Parallax 8″·800.	Correction to Parallax × Weight.
1900.						
October	14–15	4, 1	10	8	− ·045	− 0·36
	20–21	1, 4	23	42	+ ·060	+ 2·52
	26–27	4, 5	25	140	+ ·048	+ 6·72
	28–29	2, 5	26	97	− ·009	− 0·87
November	8–9	2, 2	19	36	− ·012	− 0·43
	9–10	3, 3	27	109	+ ·012	+ 1·31
	10–11	2, 3	27	88	+ ·012	+ 1·06
	14–15	3, 5	24	108	− ·067	− 7·24
	22–23	5, 2	29	120	+ ·007	+ 0·84
December	6–7	6, 3	16	51	+ ·065	+ 3·31
	9–10	1, 2	24	38	− ·004	− 0·15
	15–16	6, 1	26	58	+ ·036	+ 2·09
	28–29	3, 3	12	22	+ ·033	+ 0·73
1901.						
January	8–9	3, 6	17	58	− ·120	− 6·96
	13–14	1, 2	22	32	+ ·075	+ 2·40
	14–15	5, 5	20	100	− ·044	− 4·40
	17–18	1, 3	16	(15)	(+ ·312)	(+ 4·68)

Mean correction to solar parallax . . . + ″·001 ± ″·0080

Total number of plates used (excluding January 17–18). . 103

Total weight 1107

Collecting the results of the six discussions given above, we obtain the following :—

	Solar Parallax.	Theoretical Weight.
Astrographic Photographs—Reference Stars . . .	8″·794 ± ″·0049	39·9
,, ,, Comparison Stars . . .	8·809 ± ·0052	39·9
Thompson Photographs—Comparison Stars . . .	8·800 ± ·0063	30·6
Combined Discussion—Comparison Stars . . .	8·800 ± ·0044	70·8
,, ,, Evening to Morning Comparisons .	8·807 ± ·0036	59·2
,, ,, Morning to Evening Comparisons .	8·801 ± ·0080	35·4

A more convenient unit of weight is used here, viz. the weight of a comparison between two plates on which the difference of parallax is 25″. (This is $31\frac{1}{4}$ times the unit previously used.)

The probable errors for unit weight in the various determinations (using comparison stars) are as follows :—

Astrographic Photographs	± 0″·033
Thompson ,, ...	± 0·035
Combined Discussion	± 0·037
Evening to Morning Comparisons	± 0·028
Morning to Evening ,, ...	± 0·048

The superiority of the evening to morning comparisons has already been explained. Contrary to expectation, the Thompson photographs show no superiority over the Astrographic, in spite of their larger scale. But it must be borne in mind that the circumstances of the comparisons have a large share in determining the accidental error (as the last two results show) ; and, owing to the smaller number of photographs, comparisons were more frequently made between plates with a considerable interval of time in the case of the Thompson than in the case of the Astrographic photographs.

The difference between the results derived from the reference stars and comparison stars is definitely systematic in character. It is found that when plates taken at a large hour-angle are compared with those taken near the meridian (on the same night and with the telescope on the same side of the pier) the comparison stars are displaced relatively to the reference stars always in the same direction, and in the

mean by about 0″·07 in R.A. This is shown in Table 28, which includes only plates taken with the telescope east of the pier (corresponding to westerly hour-angles for the low plates). The available material is not suitable for a corresponding discussion of plates taken with the telescope west, there being very few occasions when meridian and low plates were taken on the same night in this position. It has therefore not been possible to ascertain whether the displacement is symmetrical with respect to the meridian.

TABLE 28.

Mean Residuals of Comparison Stars.

Residuals (Calculated—Observed) referred to reference stars.

Date.		Mean Residual in Right Ascension.			Mean Residual in Declination.		
		Meridian Plates.	Low Plates. (W. hour-angles).	Mean Difference Meridian —Low.	Meridian Plates.	Low Plates. (W. hour-angles).	Mean Difference Meridian —Low.
Oct.	20	+″·09, −″·01	−″·07	+″·110	−″·05, +″·02	−″·02	+″·005
	21	+·01	−·12, +·01	+·065	−·01	+·06, +·07	−·075
	26	+·04, +·05	−·03, −·05	+·085	+·14, +·05	+·01, +·15	+·015
	27	−·04, −·04	+·02, −·10	·000	+·13, +·01	+·02, +·01	+·055
Nov.	9	+·04	−·10, −·12, −·17	+·170	+·17	−·08, −·08, −·06	+·243
Dec.	7	+·06, +·03	−·09	+·135	+·05, −·02	+·05	−·035
	13	+·03, +·03, +·02	+·12, −·03	−·018	+·11, +·02, −·04	+·01, −·04	+·045
	19	−·01, +·01	−·02, −·07	+·045	+·13, +·01	−·03, −·02	+·095
Jan.	5	+·18, +·01	+·15, −·01, −·02	+·045	−·14, +·16	+·03, −·02, −·15	+·057
	9	+·14, +·01	−·02	+·095	+·01, +·12	+·08	−·015
			Mean	+·073		Mean	+·039

The displacement in Declination is not so marked, but taking the mean result of the table as correct, the Declinations agree with the Right Ascensions in indicating that the comparison stars are displaced towards the zenith in the low plates (relatively to the reference stars).

In order to determine whether this relative displacement depends on the comparison stars being fainter than the reference stars, or to their being nearer to the centre of the plate, a similar table was made of the mean residuals (in R.A.) of the reference stars which fall within the area of the field over which the comparison stars are distributed (*i.e.* within 25′ of the plate centre). In general from 4 to 6 reference stars on each plate were sufficiently near the centre to be used for this purpose. The results given in Table 29 seem to show that these stars are also systematically displaced in the low plates, though not so much as the comparison stars (+″·038 instead of +″·073). It would seem, then, that part, if not all, of the displacement depends on proximity to the centre of the field.

TABLE 29.

Mean Residuals of Reference Stars within 25′ of the Plate Centre.

Residuals (Calculated—Observed) using the finally adopted places of reference stars.

Date.		Mean Residual in R.A.		Mean Difference Meridian—Low.
		On Meridian Plates.	On Low Plates. (W. hour-angles).	
October	20	+″·04, +″·10	+″·02	+″·050
	21	−·11	−·09, −·17	+·020
	26	−·02	−·14, −·02	+·060
	27	+·02, −·02	+·02, +·03	−·025
November	9	−·06	−·03, −·12, −·09	+·020
December	7	−·05, +·03	−·02	+·010
	13	+·11, +·08, +·08	−·02, −·02	+·110
	19	+·01, −·10	−·05, −·11	+·035
January	5	+·11, −·02	+·10, +·02, +·03	−·005
	9	−·01, −·02	−1·2	+·105
			Mean	+·038

Whatever may be the cause of the systematic difference, we must suppose that Eros will behave like the comparison stars rather than like the reference stars;

accordingly the value of the solar parallax derived from the latter is rejected as being affected by systematic error. It is to be noted that even if the results derived from the reference stars were trustworthy, not much advantage would be gained by taking the mean between the values derived from reference and comparison stars. The two series of places are not independent; accidental errors inherent in the image of Eros are repeated in each series, and the mean error in the adopted places of the reference stars used on any night is in the main repeated in the places of the comparison stars. Thus the accidental error of the determination would not be appreciably diminished by taking the mean of the two results.

In Section V. it was shown that the value of the solar parallax deduced depends systematically on the division error adopted for the central lines of the réseau. The corrections there deduced (additional to those which had been provisionally employed), amounting in the mean to +″·065 for Astrographic photographs, were applied to the positions of Eros before deducing the preceding results, as explained on p. lii. This quantity was very closely confirmed by a discussion of the residuals of the comparison stars, which indicated +″·068. The estimated probable errors of the two results separately are, however, about ±″·006 and ±″·008. In order that the effect of the uncertainty in the determination of division errors may be estimated, the results obtained before these corrections were applied are given below.

Provisional Results uncorrected for Residual Division Error.

Astrographic Photographs	—Reference Stars . . .	8″·758	± ·0054
,, ,,	Comparison Stars . . .	8·774	± ·0059
Thompson ,,	,, ,, . . .	8·802	± ·0071

It will be seen that the result from the Thompson photographs is practically unaltered by the application of the new division errors. This is due to the fact that, in the first place, the scale of the Thompson photographs is twice that of the Astrographic, and that the corrections for division error are consequently halved. Further, through the same cause, the accidental variations in the position of Eros relatively to the lines of the réseau were increased (including variations in position due to the motion of Eros during the night, the plate being centred for the position of Eros at midnight); the division errors of lines 13, 14, 15 are exceptionally great, so that when Eros falls beyond these limits a much smaller correction is applicable. During

part of the opposition the réseau was not reversed with the telescope in passing from E to W of the pier (see p. xi).

For the Astrographic photographs the application of the division correction ″·065 has increased the deduced value of the solar parallax by ″·035.

A discussion was also made using only comparisons between plates taken with the telescope on the same side of the pier, so that the division error of the réseau was eliminated.

*Results from Photographs taken with Telescope East of Pier.**

	Solar Parallax.	Theoretical Weight.
Astrographic Photographs—Reference Stars . . .	8″·748 ± ·009	12·5
,, ,, Comparison ,, . . .	8″·783 ± ·009	12·5

The weight of this determination is small, a large part of the material being wasted. It, however, shows very markedly the difference between the reference and comparison stars.

DECLINATIONS.

The weight of the determinations of the parallax of Eros from the Declinations is much smaller than that derived from the Right Ascensions, but it is not entirely insignificant. The greatest difference of parallax in Right Ascension actually attained was about 28″; the greatest difference of parallax in Declination was 15″·6 on December 6; or, if comparisons extending over more than one day are admitted, the difference of parallax in Declination amounted to 16″·5 in the group of observations November 13–15.

In order to take account of a large number of comparisons for the determination of parallax, each of small weight, a solution by least squares was made, the separate determinations being made by comparing each plate with the mean of the group instead of comparing the extreme plates directly with one another. The weights to

* These results are from a discussion by the method of least squares.

be used in combining the separate determinations are (as before) the squares of the difference of parallax.

No special determination of the division errors of the central lines of the réseau was needed for the declinations. The parallax being of the same sign on both sides of the meridian, comparisons were made between plates taken at a large hour-angle E or W and those near the meridian. About the same proportion of low plates were taken with the telescope E and W (réseau direct and reversed) as meridian plates; accordingly, the value of the division error of the central lines of the réseau does not affect systematically the deduced parallax.

In Tables 30 and 31 the values of the parallax resulting from the various groups are given.

TABLE 30.

Solar Parallax from Declinations of Eros.

Astrographic Photographs.

Date.	Weight.	Correction to Adopted Parallax 8″·800.	
		Reference Stars.	Comparison Stars.
October 14–15	5	″·000	+ ″·062
20–21	11	− ·112	− ·070
26–27	19	− ·161	− ·023
November 9–11	28	− ·099	+ ·018
13–15	30	+ ·004	+ ·049
22–23	21	− ·074	− ·082
December 6–7	18	+ ·065	+ ·047
13	14	·000	+ ·040
15–17	15	+ ·144	+ ·128
19–21	20	+ ·144	+ ·179
26–29	10	− ·114	− ·058
January 4–5	11	− ·008	+ ·060
8–19	13	− ·028	− ·040
14–15	7	− ·077	− ·100

Mean Correction to Solar Parallax—

from reference stars . . .	− ″·019 ± ″·018
from comparison stars . . .	+ ·019 ± ·014
Total Weight .	222

TABLE 31.

Solar Parallax from Declinations of Eros.

Thompson Photographs.

Date.		Weight.	Correction to Parallax 8″·800.
October	1–5	9	− ″·146
	7–8	9	− ·062
	20–21	4	+ ·068
	26–27	16	− ·003
November	6–7	4	− ·212
	13–15	10	− ·033
December	6–7	28	+ ·035
	13	10	+ ·129
	15–17	20	− ·076
	19–21	19	+ ·070
	26–29	4	− ·065
January	4–5	14	− ·059
	14–15	13	− ·096

Mean Correction to Solar Parallax $-″·017 \pm ″·016$

Total Weight . 160

The results from reference stars are perhaps affected by systematic error (as in the case of the Right Ascensions), and therefore cannot be trusted. The comparison stars give for the solar parallax—

Astrographic Photographs . . . . . 8″·819 ± ″·014
Thompson „ . . . . . 8·783 ± ·016

The mean agrees very closely with the result deduced from the Right Ascensions, but has about three times as great a probable error.

CONCLUSION.

The result $8''{\cdot}800 \pm ''{\cdot}0044$, deduced from the combined discussion of the Right Ascensions measured on both sets of photographs (Table 25), must be regarded as the value of the solar parallax determined from the Greenwich observations.

It is, however, worth while to call attention to various considerations which seem to favour a value slightly higher than $8''{\cdot}800$ (which, however, in no way contradict the foregoing result, having regard to the assigned limits of probable error). These considerations are :—

(1) The value $8''{\cdot}807 \pm ''{\cdot}0036$, derived from comparisons in which the accidental errors of star-places are completely eliminated, is entitled to great weight on account of its exceptionally small probable error. Although we have considered it safer to derive the final value of the parallax from morning to evening as well as evening to morning comparisons, it hardly seems possible that any error would be introduced when one set only is used.

(2) Of the four other principal results derived by discussions of parts of the same material, three are greater than $8''{\cdot}800$, viz. $8''{\cdot}801$, $8''{\cdot}807$, and $8''{\cdot}809$, and one equal to $8''{\cdot}800$. This suggests that the incidence of accidental error has happened to lead to a somewhat small value in the present case.

(3) Of the 24 separate comparisons on which the result $8''{\cdot}800$ is founded, 9 comparisons, with a total weight 868, lead to values less than $8''{\cdot}800$, and 14 comparisons, with a total weight 1308, lead to values greater than $8''{\cdot}800$.

Thus the median value is greater than $8''{\cdot}800$.

A value very slightly higher than $8''{\cdot}800$ would satisfy these considerations, whilst lying well within the limits of probable error of the result given. Further, the

systematic error of $''\cdot0015$ (referred to on page lx.) should, strictly speaking, be allowed for, leading to an increase of the parallax by that amount.

For these reasons it is permissible to conclude that in giving the value $8''\cdot800$ as a final result, the tendency is, if anything, to underestimate rather than overestimate the amount.

W. H. M. CHRISTIE.

ROYAL OBSERVATORY, GREENWICH.
1907, *December* 18.

DETERMINATIONS OF THE SOLAR PARALLAX—COLLECTED RESULTS.

(Determinations which are known to be affected by systematic error, and are accordingly not considered trustworthy within the limits of the probable errors given, are enclosed in brackets.)

RIGHT ASCENSIONS—

	Solar Parallax.	Theoretical Weights.
Astrographic—from Reference Stars . . .	(8″·794 ± ″·0049)	(39″·9)
,, ,, Comparison Stars . .	8·809 ± ·0052	39·9
Thompson ,, Comparison Stars . .	8·800 ± ·0063	30·6
Combined Discussion, Astrographic and Thompson from Comparison Stars .	**8·800 ± ·0044**	**70·8**
,, Evening to Morning comparisons .	8·807 ± ·0036	59·2
,, Morning to Evening comparisons .	8·801 ± ·0080	35·4

Provisional Results, uncorrected for Residual division error—

Astrographic—from Reference Stars . . .	(8·758 ± ·0054)	
,, ,, Comparison Stars . .	(8·774 ± ·0059)	
Thompson ,, Comparison Stars . .	(8·802 ± ·0071)	

Telescope East of the pier only—Réseau not reversed—

Astrographic—from Reference Stars . . .	(8·748 ± ·009)	(12·5)
,, ,, Comparison Stars . .	8·783 ± ·009	12·5

DECLINATIONS—

Astrographic—from Reference Stars . . .	(8·781 ± ·018)	(7·1)
,, ,, Comparison Stars . .	8·819 ± ·014	7·1
Thompson ,, Comparison Stars . .	8·783 ± ·016	5·5
Mean ,, Comparison Stars . .	8·801	

ROYAL OBSERVATORY, GREENWICH.

RESULTS OF MEASURES

OF

PHOTOGRAPHS OF THE PLANET EROS

FOR DETERMINATION OF THE SOLAR PARALLAX

1900-1901.

TABLE I.—List of Photographs of Eros.

Date.	Astrographic 13-inch Refractor.					Thompson 26-inch Refractor.				
	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer. / Thermometer.	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer. / Thermometer.
1900.			h m s	m m m m	in. °			h m s	m m m m	in. °
October 1	5126	W	− 3 10 58	3, 6, 4, 2	29·8 51	744	E	− 6 43 22	3, 3, 5, 4½	29·8 53
						745	E	− 2 56 32	2½, 3, 3, 3	29·8 51
						746	E	− 1 49 57	3, 2, 3	
2	5129	W	− 5 15 54	1½, 2, 2,		747	E	− 6 23 47	3, 3, 2	29·7 52
	5130	W	− 4 33 14	1½, 3, 2,	29·7 52					
	5131	W	− 3 33 9	4, 2, 4, 2						
	5133	W	− 1 7 54	3, 2	29·7 52					
3	5134	W	− 3 48 24	3, 2,	29·9 45	748	E	− 6 2 6	3, 2	
						749	E	− 4 47 59	3, 2	29·9 45
4	5138	W	− 6 30 6	3, 2	29·5 56	751	E	− 6 4 15	3, 3	29·5 56
	5139	W	− 5 48 4	3, 3, 2, 2		752	E	− 5 47 22	2, 2, 3, 3	
						753	E	− 1 33 7	2, 2, 3	29·6 53
5	5141	W	− 5 28 49	3, 3, 2, 2	29·8 52	754	E	− 7 0 0	3, 3, 2, 2	
						755	E	− 5 7 9	3, 3	29·8 52
7	5142	W	− 4 25 48	3, 3, 2, 2		756	E	− 5 7 2	3, 3, 2, 2	30·2 54
	5143	W	− 3 50 32	3, 3, 2, 2	30·2 54	757	E	− 1 19 24	3, 3, 2, 2	30·1 53
	5145	W	− 2 37 48	3, 3, 2, 2						
	5146	W	− 2 0 57	3, 3, 2, 2	30·1 53					
8	5148	W	− 5 51 48	3, 3	30·2 60	759	E	− 6 37 55	2, 2, 3, 3	
	5150	W	− 2 18 56	3, 3, 2, 2		760	E	− 6 15 4	2, 2, 3, 3	30·2 60
	5152	E	− 0 37 28	3, 3, 2, 2	30·1 59	761	E	− 1 36 28	2, 2, 3, 3	30·1 59
9						762	E	− 7 1 58	3, 3	30·0 60
10	5154	W	− 6 5 38	3, 3, 2, 2	30·0 52	763	E	− 6 56 27	3, 3	
						764	E	− 6 33 42	3, 3	30·0 52
13						766	E	− 0 26 8	3, 2, 2	30·0 52
14	5160	E	− 0 30 10	3, 3, 2, 2	29·7 39	770	E	− 1 17 7	3, 3, 2, 2	
	5161	E	+ 0 7 29	3, 3, 2, 2		771	E	− 0 50 35	3, 3, 2, 2	29·7 39
15	5162	W	− 5 56 8	3, 3, 2, 2	29·7 45					
20	5169	E	− 0 46 45	3, 3, 2	30·0 42	778	E	− 0 57 14	3, 3, 2, 2	30·0 42
	5170	E	− 0 15 43	3, 3, 2, 2						
	5172	E	+ 4 40 15	3, 3, 2	30·0 38					
21	5173	W	− 6 13 51	3, 3, 2, 2	30·2 42	782	E	− 5 33 9	3, 3, 2, 2	30·2 42
	5174	W	− 5 45 58	3, 3, 2		783	E	− 5 7 27	3, 3, 2, 2	
	5177	E	− 0 23 40	3, 3, 2, 2	30·3 40					
	5178	E	+ 4 15 25	3, 3, 2, 2						
	5179	E	+ 4 39 44	3, 3	30·3 37					
26	5183	W	− 5 49 55	3, 3, 2, 2	29·2 40	787	E	− 5 24 11	3, 3, 2, 2	29·2 40
	5184	W	− 5 7 21	3, 3, 2, 2		788	E	− 5 1 39	3, 3, 2, 2	
	5185	W	− 4 31 26	3, 3, 2, 2		789	E	− 4 36 10	3, 3, 2, 2	
	5186	E	− 0 41 15	3, 3, 2, 1¾		790	E	− 0 47 2	3, 3, 2, 2	
	5187	E	+ 0 14 11	3, 3, 2, 2	29·2 38	791	W	− 0 7 55	3, 3, 2, 2	29·2 38
	5189	E	+ 5 3 0	3, 3, 2, 2		792	W	+ 5 1 19	3, 3, 2, 2	
	5190	E	+ 5 34 37	3, 3	29·2 42	793	W	+ 5 22 18	3, 3, 2, 2	29·2 42

TABLE I.—List of Photographs of Eros.

Date.	Astrographic 13-inch Refractor.						Thompson 26-inch Refractor.					
	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer.	Thermometer.	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer.	Thermometer.
1900.			h m s	m m m m	in.	°			h m s	m m m m	in.	°
October 27	5191	W	− 5 25 25	3, 3, 2, 2			794	E	− 4 44 6	3, 3, 2, 2	29·5	46
	5192	W	− 4 59 46	3, 2, 2			795	E	− 4 12 5	3, 3, 2, 2		
	5193	W	− 4 37 48	3, 2, 2	29·5	46	796	E	− 0 22 50	3, 3, 2, 2	29·6	42
	5200	E	− 0 51 1	3, 3, 2, 2	29·6	42	797	W	+ 0 14 33	3, 3, 2, 2		
	5201	E	− 0 30 16	3, 3, 2, 2			798	W	+ 5 1 1	2, 1		
	5202	E	+ 4 57 27	3, 3, 2, 2			799	W	+ 5 26 6	3, 3, 2, 2	29·6	39
	5203	E	+ 5 25 41	3, 3, 2, 2	29·6	39						
28	5204	E	+ 5 25 23	3, 3, 2, 2	29·5	50	800	W	+ 5 16 14	3, 3, 2, 2	29·5	50
29	5205	W	− 5 34 25	3, 3, 2, 2	29·6	49	801	E	− 5 39 52	3, 3, 2, 2	29·6	49
	5206	W	− 5 8 44	3, 3, 2, 2			802	E	− 5 18 55	3, 2		
							803	E	− 4 57 31	3, 3, 2, 2		
31	5207	E	+ 5 23 34	3, 3, 2, 2	29·7	54						
	5208	E	+ 5 50 32	3, 3, 2								
November 6	5209	W	− 4 57 38	3, 3, 2	29·3	55	804	E	− 5 4 46	3, 3, 2, 2	29·3	55
7	5210	E	+ 6 18 54	3, 3, 2, 2								
	5211	E	+ 7 5 15	3, 3, 2, 2	29·8	40						
8							806	W	+ 1 47 8	3, 3, 2, 2	29·6	52
							807	W	+ 2 10 16	3, 3, 2		
9	5212	W	− 4 32 42	3, 3, 2, 2	29·6	47						
	5213	W	− 3 19 9	3, 3, 2, 2	29·6	46						
	5214	E	− 0 8 56	3, 3, 2, 2	29·5	43						
	5215	E	+ 3 42 15	2, 2	29·5	39						
	5216	E	+ 6 26 46	3, 2	29·5	39						
	5217	E	+ 6 56 26	3, 3, 2	29·5	38						
10	5218	W	− 4 39 52	3, 2, 2			811	W	+ 6 19 7	3, 3, 2	29·6	32
	5219	W	− 4 14 59	3, 3, 2, 2	29·5	45	812	W	+ 6 44 3	3, 2		
	5220	W	− 3 53 0	3, 2, 2								
	5222	E	+ 0 13 34	3, 3, 2, 2	29·5	39						
	5223	E	+ 0 33 40	3, 3, 2, 2								
11	5226	W	− 4 4 21	3, 3, 2, 2	29·8	39						
	5227	W	− 3 41 9	3, 3, 2, 2	29·8	39						
	5228	W	− 3 18 1	3, 3, 2, 2	29·8	39						
	5229	E	− 0 16 38	3, 3, 2, 2								
13	5230	W	− 4 46 46	3, 3, 2, 2			817	E	− 4 34 33	3, 3, 2, 2		
	5231	W	− 4 20 10	3, 3, 2, 2			818	E	− 4 12 48	3, 3, 2, 2	29·5	48
	5232	W	− 3 53 29	3, 3, 2, 2	29·5	48	819	W	+ 5 42 34	3, 3, 2, 2	29·5	46
	5234	E	+ 5 57 31	3, 3, 2, 2	29·5	46	820	W	+ 6 42 49	3, 3, 2, 2		
	5235	E	+ 6 56 27	3, 3, 2, 2								
	5236	E	+ 7 25 45	3, 3, 2, 2	29·5	43						
14	5237	E	+ 3 31 57	3, 3, 2, 2	29·6	40	821	W	+ 2 24 26	1¾, 1½, 1¾	29·6	40
	5238	E	+ 3 59 43	¾, 3, 2, 2	29·6	39						
15	5239	W	− 4 7 31	3, 3, 2, 2	29·2	45	822	E	− 4 6 10	3, 2, 3, 2	29·2	45
	5240	W	− 3 46 31	3½, 3, 2, 2			823	E	− 3 41 35	3, 3, 2, 2		
	5241	W	− 3 25 1	3, 3, 2, 2	29·2	44						
	5242	E	− 0 50 32	3, 3, 2, 2	29·1	43						
	5243	E	− 0 27 59	3, 3, 2, 2								

TABLE I.—List of Photographs of Eros.

Date.	Astrographic 13-inch Refractor.						Thompson 26-inch Refractor.					
	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer.	Thermometer.	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer.	Thermometer.
1900.			h m s	m m m m	in.	°			h m s	m m m m	in.	°
November 18	5248	E	− 0 37 14	3, 2, 2	30·2	41						
	5249	E	− 0 8 3	3, 3, 2, 2	30·2	40						
	5250	E	+ 0 18 10	3, 3, 2, 2	30·2	40						
22	5253	W	− 3 39 9	3, 3, 2, 2	29·6	41						
	5254	W	− 3 14 58	3, 2, 2								
	5256	E	+ 3 52 27	3, 3, 2, 2	29·6	37						
	5257	E	+ 4 19 23	3, 3, 2, 2	29·6	37						
	5258	E	+ 4 42 19	3, 3, 2, 2	29·6	37						
	5259	E	+ 6 15 5	3, 3, 2, 2	29·6	36						
	5260	E	+ 6 37 37	3, 3, 2, 2								
23	5261	W	− 4 1 40	3, 3, 2, 2								
	5262	W	− 3 38 48	3, 3	29·6	39						
	5263	E	− 0 9 9	3, 3, 2, 2								
	5264	E	+ 0 17 3	3, 3, 2, 2	29·6	38						
25	5267	W	− 2 11 44	2, 2	29·4	48						
	5268	E	− 0 49 43	3, 3, 2, 2	29·4	46						
	5269	E	− 0 28 1	3, 3, 2, 2	29·4	46						
27	5270	W	− 3 58 10	3, 3, 2, 2			844	E	− 3 53 9	3, 3, 2, 2		
	5271	W	− 3 35 26	3, 2, 2	29·4	42	845	E	− 3 30 17	3, 3, 2, 2	29·4	42
	5272	W	− 3 14 35	3, 3, 2, 2			846	E	+ 0 47 17	3, 3, 2, 2	29·3	43
	5273	E	− 0 27 45	3, 3, 2, 2			847	W	+ 1 34 50	3, 3, 2, 2		
	5274	E	− 0 2 56	3, 3, 2, 2	29·3	43						
29	5275	E	+ 0 38 6	3, 1¾, 2, 2	29·4	43						
December 6	5276	E	+ 4 22 58	3, 3, 2, 2			848	W	+ 4 34 30	2, 2, 1, 1		
	5277	E	+ 5 56 4	2, 2	29·6	42	849	W	+ 6 3 9	3, 3, 2, 2	29·6	42
	5278	E	+ 6 17 50	3, 3, 2, 2			850	W	+ 6 53 59	2, 2, 1½, 1		
7	5279	E	− 0 49 25	3, 2, 2	30·0	44	851	E	− 0 0 20	3, 3, 2, 2	30·0	44
	5280	E	− 0 17 9	3, 3, 2, 2			852	E	+ 0 32 18	2½, 2½, 2, 2		
	5283	W	+ 5 12 19	3, 3, 2, 2	30·1	42	853	E	+ 6 8 16	3, 3, 2, 2	30·1	42
							854	W	+ 6 52 36	2½, 2		
9	5285	W	− 3 4 6	3, 3, 2, 2	30·0	50						
	5286	E	+ 4 2 5	3, 3, 2	30·1	44						
10	5287	E	− 0 22 15	3, 3, 2, 2	30·2	42	855	E	− 2 16 3	3, 3		
							856	E	− 1 49 29	3, 3, 2, 2	30·2	42
13	5288	E	− 1 5 30	3, 3, 2, 2	30·0	45	858	E	− 1 22 56	3, 3, 2, 2		
	5289	E	− 0 44 5	3, 3, 1¾, 2			859	E	− 1 0 24	3, 3, 2, 2	30·0	45
	5290	E	− 0 20 10	3¾, 3, 2, 2			860	E	− 0 38 17	3, 2, 2		
	5294	E	+ 4 48 15	3, 3, 2, 2	30 1	42	861	W	+ 5 47 8	3, 3, 2, 2	30·1	42
	5297	E	+ 6 12 20	3, 3								
15	5299	W	− 2 42 25	3, 3, 2, 2			863	E	− 2 22 1	3, 2, 2	30·1	49
	5300	W	− 2 17 38	3, 3, 2, 2	30·1	49	864	E	− 1 58 19	3, 3, 2, 2		
	5304	E	+ 4 12 5	3, 3, 2	30·2	44	865	E	− 1 31 58	3, 3, 2, 2		
	5306	E	+ 5 37 52	3, 3, 2, 2			866	W	+ 3 58 25	3, 3, 2, 2	30·2	44
	5307	E	+ 6 7 29	3, 3, 2, 2	30·2	42	867	W	+ 6 0 5	3, 3, 2, 2	30·2	42
							868	W	+ 6 22 59	3, 2, 2		
16	5308	W	− 2 27 5	3, 2, 2	30·3	46						

TABLE I.—List of Photographs of Eros.

Date.	Astrographic 13-inch Refractor.						Thompson 26-inch Refractor.					
	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer.	Thermometer.	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer.	Thermometer.
1900.			h m s	m m m m	in.	°			h m s	m m m m	in.	°
December 17	5309	W	− 2 35 55	3, 3, 2, 2			869	E	− 2 24 18	3, 3, 2	30·0	39
	5310	W	− 2 5 55	3, 3, 2, 2	30·0	39	870	E	− 2 0 35	3, 3, 2, 2		
	5313	E	− 0 21 32	3, 3			871	E	− 1 41 7	3, 3, 2, 2		
19	5314	W	− 2 1 36	3, 2, 2	30·0	44	872	E	− 2 33 33	3, 3, 2, 2		
	5315	W	− 1 42 55	3, 3, 2, 2			873	E	− 2 13 4	3, 3, 2		
	5318	E	− 0 19 7	3, 3, 2, 2			874	E	− 1 51 26	3, 3, 2, 2	30·0	44
	5319	E	+ 0 0 58	3, 3, 2, 2	30·0	44	875	W	+ 4 34 55	3, 3, 2, 2		
	5322	E	+ 4 25 45	3, 3, 2, 2			876	W	+ 5 11 58	3, 3, 2, 2	29·9	45
	5324	E	+ 5 50 16	3, 3, 2, 2	29·9	45	877	W	+ 6 35 29	3, 2, 2		
20	5326	E	+ 6 15 35	3, 3, 2, 2	29·4	48						
21	5327	E	+ 4 37 58	3, 3, 2, 2	29·8	38	878	E	− 2 28 47	3, 3, 2, 2	29·7	44
	5328	E	+ 5 7 53	3, 2, 2			879	E	− 2 10 34	3, 3, 2		
	5329	E	+ 5 49 31	3, 3, 2, 2			880	W	+ 4 6 46	3, 3, 2, 2		
							881	W	+ 4 52 42	3, 3, 2, 2	29·8	38
							882	W	+ 5 36 8	3, 3, 2, 2		
24	5330	E	+ 2 25 25	3, 3, 2, 2	30·0	44						
26	5331	E	+ 2 28 24	3, 3, 2, 2	29·7	46	883	W	− 0 40 35	3, 3, 2		
							884	W	− 0 14 33	3, 3, 2, 2	29·7	46
28	5333	E	+ 1 21 47	3, 3, 2, 2	29·3	43	885	E	+ 1 52 50	3, 3, 2 2	29·3	43
	5334	E	+ 1 51 16	3, 3, 2, 2			886	W	+ 4 45 14	2, 2, 2	29·4	41
	5335	E	+ 5 4 10	2, 1¾	29·4	41						
	5336	E	+ 5 43 30	3, 2¼, 2, 1¼								
29	5337	E	+ 0 47 12	3, 3, 2, 2	29·6	39	887	W	+ 0 58 51	3, 3, 2, 1½	29·6	39
	5338	E	+ 1 11 57	3, 3, 2, 2								
1901.												
January 2	5339	E	+ 4 44 0	3, 3, 2, 2	30·2	35	889	W	+ 5 9 9	3, 3, 2	30·2	35
							890	W	+ 5 35 12	3, 3, 2		
4	5341	W	− 1 40 3	3, 3, 2, 2			891	E	− 1 3 8	3½, 3	30·3	34
	5342	W	− 1 11 40	3, 3, 2, 2	30·3	34	892	E	− 0 33 29	3, 3, 2		
	5343	W	− 0 40 54	3, 3, 2, 2								
5	5344	E	+ 0 56 3	3, 3, 2, 2			894	W	+ 1 18 37	3, 3, 2, 2	30·2	33
	5345	E	+ 1 23 4	3, 2, 1¾,	30·2	33	895	W	+ 1 43 48	2, 1, 2		
	5346	E	+ 4 35 48	3, 2, 2			896	W	+ 4 29 7	3, 2, 2		
	5347	E	+ 5 15 24	3, 3, 2, 2	30·1	30	897	W	+ 5 43 29	3, 3, 2, 2	30·1	30
	5348	E	+ 5 39 28	3, 3, 2			898	W	+ 6 13 23	3, 3, 2, 2		
8	5349	W	− 0 59 57	3, 3, 2, 2	29·6	28						
	5350	E	+ 5 5 9	3, 2								
	5351	E	+ 5 28 14	3, 3, 2, 2								
	5352	E	+ 5 51 20	3, 3, 2, 2	29·7	26						
9	5353	W	− 1 31 32	3, 3	29·7	38	899	E	− 0 55 46	3, 3, 2, 2	29·7	38
	5354	E	+ 0 47 15	3, 3, 2, 2			900	E	− 0 31 44	2		
	5355	E	+ 1 3 53	3, 2¾	29·7	40	901	E	− 0 16 3	3, 2, 2		
	5356	E	+ 5 27 33	3, 3, 1½	29·7	43						
13	5359	E	+ 5 6 45	3, 3, 2								
	5360	E	+ 5 32 44	3, 2	30·3	34						

TABLE I.—List of Photographs of Eros.

Date.	Astrographic 13-inch Refractor.						Thompson 26-inch Refractor.					
	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer.	Thermometer.	No.	Position of Telescope.	Hour Angle West.	Exposures	Barometer.	Thermometer.
1901.			h m s	m m m m	in.	°			h m s	m m m m	in.	°
January 14	5365	E	+ 4 49 1	3, 3, 2, 2			904	W	− 1 25 20	3, 3, 2, 2	30·2	34
	5366	E	+ 5 14 2	3, 3, 2, 2			905	W	− 1 6 40	3, 3, 2, 2		
	5367	E	+ 5 38 37	3, 3, 2, 2	30·2	29	906	W	+ 5 28 29	3, 3, 2	30·2	29
							907	W	+ 5 51 10	3, 3, 2, 2		
15	5368	W	− 1 12 45	3, 3, 2, 2	29·9	33	908	E	− 0 56 6	3, 2, 2	29·9	33
	5369	W	− 0 49 49	3, 3, 2, 2	29·9	30	909	E	− 0 37 13	3, 3, 2, 2		
	5371	E	+ 5 1 14	3, 3, 2			910	E	− 0 18 27	3, 3, 2, 2	29·9	30
	5372	E	+ 5 20 17	3	29·8	30	912	W	+ 4 35 48	3, 3, 2, 2		
							913	W	+ 4 56 4	3, 2, 2		
							914	W	+ 5 15 12	3, 2, 2	29·8	30
17	5379	E	+ 4 45 46	3, 3, 2, 2	30·0	39	915	W	+ 4 18 4	3, 3	30·0	39
18							917	E	− 0 44 13	3	29·9	45
							918	E	− 0 16 20	3, 3, 2, 2		
							919	E	+ 0 20 49	3, 3, 3, 3		
							920	W	+ 4 22 27	3, 3, 2	29·9	45
22							921	E	+ 1 27 37	3, 1, 1	30·2	48
							922	E	+ 1 49 43	3, 3, 2, 2		
23	5387	E	+ 3 48 0	3, 3, 2, 2	30·3	36						
24	5390	E	+ 5 5 36	3, 2, 2, 1¼	29·9	45	925	W	+ 4 20 8	2, 2, 1		
							926	W	+ 4 55 55	2¼, 2	29·9	45
28							927	E	− 0 32 55	2½, 3	29·3	36
29	5393	E	+ 4 51 7	3, 3, 2, 2	29·3	33	928	E	+ 1 29 54	3, 3, 2, 2	29·3	34
							930	W	+ 4 49 40	3, 3, 2, 2	29·3	33
February 1	5394	E	+ 0 48 33	3, 3, 2, 2	29·5	33	931	W	+ 0 55 45	3, 3, 2, 2	29·5	33
							933	W	+ 2 17 35	3, 3, 2		
3	5397	E	+ 4 40 36	3, 3, 2, 2			934	W	+ 5 0 29	3, 3	29·4	31
	5398	E	+ 4 59 8	3	29·4	31	935	W	+ 5 24 13	3, 2⅓, 2		
5	5404	E	+ 4 43 7	3, 3, 2, 2	29·5	32	936	W	+ 4 8 10	3, 3, 2, 2		
							937	W	+ 4 32 34	3, 3, 2, 2	29·5	32
6	5407	W	+ 1 13 58	3, 3, 2, 2	29·7	34	938	W	− 0 45 4	3, 3, 2, 2		
							939	W	− 0 19 47	3, 3, 2, 2		
							940	W	+ 0 26 58	2, 2	29·7	34
11	5408	W	− 0 20 10	3, 3, 2, 2	30·2	32	941	W	− 0 25 33	3, 3, 2, 2	30·2	32
	5409	W	+ 0 13 39	3, 3, 2, 2	30·2	32	942	W	− 0 1 54	3, 3, 2, 2		
	5412	E	+ 4 8 15	3, 3, 2, 2			943	W	+ 3 21 41	3, 2, 2		
	5413	E	+ 4 44 13	3, 3, 2, 2	30·2	30	944	W	+ 4 27 7	3, 3, 2, 2	30·2	30
							945	W	+ 4 58 55	3, 3, 2		
12	5414	W	− 0 33 43	3, 3, 2, 2	30·1	34	946	W	+ 0 6 18	3, 3, 2, 2	30·1	34
	5415	W	− 0 13 20	3, 2			947	W	+ 0 26 8	3, 2, 2		
	5416	W	+ 0 6 36	3, 3, 2, 2			948	W	+ 0 47 18	3, 3, 2, 2		

TABLE I.—List of Photographs of Eros.

Date.	Astrographic 13-inch Refractor.						Thompson 26-inch Refractor.					
	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer.	Thermometer.	No.	Position of Telescope.	Hour Angle West.	Exposures.	Barometer.	Thermometer.
1901.			h m s	m m m m	in.	°			h m s	m m m m	in.	°
February 13	5420	W	− 0 24 5	3, 3, 2, 2			949	W	+ 1 35 1	3, 3½, 2, 2	30·3	28
	5421	E	+ 1 31 0	3, 3, 2, 2	30·3	28						
	5422	E	+ 1 50 33	3, 3, 2, 2								
	5426	E	+ 4 11 26	3, 3, 2, 2								
	5427	E	+ 4 32 20	3, 3, 2, 2	30·3	26						
14	5428	E	+ 3 37 41	3, 3, 2, 2	30·3	30	952	W	+ 3 50 26	3, 3, 2, 2	30·3	30
15	5429	W	− 0 17 35	3, 3, 2, 2								
	5430	W	+ 0 8 9	3, 3, 2, 2								
	5431	W	+ 0 41 15	3, 3, 2, 2	30·4	26						
17	5434	E	+ 2 45 39	3, 2, 2	30·2	34	954	W	+ 2 41 31	3, 3, 2, 2	30·2	34
							955	W	+ 3 2 30	3		
20	5436	W	+ 0 21 21	3, 3, 2, 2	30·1	30	958	W	+ 0 30 39	3, 2	30·1	30
	5438	W	+ 1 33 16	3, 3, 2, 2	30·1	29	959	W	+ 1 31 53	3¼, 3, 2, 2	30·1	29
	5441	E	+ 2 51 1	3, 3								
25	5452	E	+ 3 52 55	3, 3	29·5	41						

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 1	44 573	1578·59	+·01	4656·90	−·01	+·05	−·21	166	3015·69	·00	5476·46	·00	+·09	+·02
5126	45 660	2122·72	+·01	6332·99	−·01	+·35	−·16	171	3300·82	·00	3477·21	·00	−·02	−·15
	44 577	2381·78	+·01	3986·47	·00	+·04	−·21	172	3335·09	·00	4230·37	·00	+·07	−·13
	44 582	3703·69	·00	4490·90	·00	+·16	+·25	177	3954·29	·00	6649·52	−·01	+·04†	+·19†
	45 665	4295·43	·00	6054·26	·00	+·15	+·12	182	4754·86	·00	6485·97	·00	+·04†	−·03†
	43 586	4361·25	+·01	728·68	−·01	+·49*	+·12*	184	4870·65	·00	5372·62	·00	−·03	−·64
	45 667	4391·21	+·01	6904·29	−·01	−·05	+·08	44° 591	5002·51	·00	3260·08	·00	−·04	−·18
	45 669	4876·06	·00	6600·44	·00	−·11	−·02	188	5327·28	·00	4832·77	·00	+·06	−·17
	44 591	5002·51	·00	3260·08	·00	−·25	−·11							
	44 593	5112·37	·00	2666·43	·00	−·23	+·22							
	45 679	7609·25	+·02	6120·24	·00	−·35*	−·39*					Mean	+·02	−·11
	44 598	7805·83	+·02	3036·80	−·01	−·26*	+·31*							
	Eros	4223·08	·00	4336·37	·00	...	...							
October 2	44 573	1049·27	+·04	3633·13	−·02	+·07	−·09	166	2488·71	+·01	4448·95	−·01	·00	+·03
5129	45 660	1598·36	+·03	5307·97	−·02	+·37	−·45	171	2767·72	+·01	2449·04	−·01	+·07†	+·04†
	44 577	1850·16	+·02	2960·67	−·01	+·27	−·11	172	2804·46	+·01	3201·99	·00	−·11	+·05
	45 662	3094·29	+·03	7057·04	−·03	+·12	+·34	177	3430·73	+·01	5619·66	−·01	−·17	−·15
	44 582	3173·56	·00	3461·87	·00	+·23	+·05	182	4230·41	·00	5453·64	·00	+·07	+·01
	45 665	3769·75	·00	5023·62	·00	+·27	−·25	184	4342·84	·00	4339·95	·00	+·10	+·15
	45 667	3867·86	+·01	5872·95	−·01	+·22	−·05	44° 591	4468·60	+·01	2227·24	−·01	−·03	−·17
	45 669	4352·07	·00	5567·94	·00	−·21	−·19	188	4797·80	·00	3799·24	·00	+·24	−·15
	44 591	4468·60	+·01	2227·24	−·01	−·21	+·21							
	44 593	4576·97	+·02	1633·44	−·02	−·44	+·40					Mean	+·01	−·03
	45 679	7082·99	+·03	5080·37	−·01	−·31	−·31							
	44 598	7270·86	+·06	1996·73	−·05	−·42*	+·55*							
	Eros	3748·57	·00	4523·28	·00	...	...							
October 2	44 573	1042·03	+·03	3632·00	−·01	−·14	−·04	166	2481·16	+·01	4448·13	·00	+·02	+·01
5130	45 660	1590·58	+·02	5307·03	−·01	+·29	−·40	171	2760·87	+·01	2447·98	·00	−·03†	+·15†
	44 577	1843·25	+·01	2959·81	·00	−·03	−·28	172	2797·33	+·01	3201·08	·00	−·14	+·07
	45 662	3085·83	+·02	7056·58	−·02	+·35	+·21	177	3422·71	+·01	5618·80	·00	+·07	+·06
	44 582	3166·42	·00	3461·01	·00	+·12	+·08	182	4222·79	·00	5452·96	·00	·00	+·13
	45 665	3762·12	·00	5022·75	·00	+·27	−·03	184	4335·50	·00	4339·46	·00	+·05	+·01
	45 667	3860·36	+·01	5872·27	·00	−·12	+·05	44° 591	4461·79	+·01	2226·61	−·01	−·01	+·03
	45 669	4344·13	·00	5567·29	·00	−·01	−·08	188	4790·79	·00	3798·47	·00	+·06	·00
	44 591	4461·79	+·01	2226·61	−·01	−·22	+·07							
	44 593	4570·05	+·01	1632·71	−·01	−·17	+·34					Mean	+·01	+·04
	45 679	7075·58	+·02	5080·19	−·01	−·30	−·38							
	44 598	7263·93	+·04	1996·26	−·03	−·06*	+·58*							
	Eros	3741·86	·00	4563·27	·00	...	...							
October 2	44 573	1530·87	+·01	3318·27	·00	+·24	−·05	166	2968·41	·00	4137·67	·00	−·02	+·05
5131	45 660	2075·35	+·01	4994·71	−·01	+·75	−·57	171	3252·67	·00	2137·97	·00	+·14†	+·19†
	44 577	2333·64	+·01	2647·72	·00	+·41	−·15	172	3287·36	·00	2891·26	·00	+·04	+·12
	45 662	3566·87	+·01	6747·88	−·01	+·40	−·13	177	3907·25	·00	5310·72	·00	·00	−·12
	44 582	3655·98	·00	3152·05	·00	+·27	+·10	182	4707·67	·00	5146·95	·00	+·03	−·27
	45 665	4247·86	·00	4715·31	·00	+·53	−·11	184	4823·14	·00	4033·40	·00	·00	−·13

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 2	45 667	4343·93	·00	5565·20	·00	+·26	−·13	44° 591	4954·57	+·01	1920·16	−·01	−·10	+·41
5131—*contd.*	45 669	4828·95	·00	5261·39	·00	−·10	−·35	188	5279·81	·00	3493·28	·00	−·34	−·01
	44 591	4954·57	+·01	1920·16	−·01	−·22	+·41							
	44 593	5064·78	+·01	1326·42	−·01	−·70	+·72					Mean	−·06	+·01
	45 679	7562·33	+·02	4780·45	−·01	−·85	−·62							
	44 598	7758·62	+·04	1696·16	−·03	−·94*	+·85*							
	Eros	4229·20	·00	4313·19	·00	...	...							
October 2	44 573	1532·16	·00	3268·64	·00	+·08	−·42	166	2969·81	·00	4087·42	·00	+·10	−·09
5133	45 660	2077·52	·00	4944·59	·00	+·28	−·55	171	3253·86	·00	2087·87	·00	−·14†	−·25†
	44 577	2335·00	·00	2597·67	·00	+·04	−·35	172	3288·39	·00	2840·82	·00	+·15	+·04
	45 662	3569·28	·00	6697·02	·00	+·40	+·24	177	3909·14	·00	5260·08	·00	+·09	−·11
	44 582	3657·34	·00	3101·50	·00	+·17	+·02	182	4709·64	·00	5095·82	·00	+·07	−·02
	45 665	4249·72	·00	4664·58	·00	+·49	−·16	184	4824·65	·00	3982·31	·00	+·14	+·01
	45 667	4345·96	·00	5514·16	·00	+·32	+·13	44° 591	4955·38	·00	1869·49	·00	+·08	+·03
	45 669	4830·81	·00	5210·27	·00	+·09	−·15	188	5281·28	·00	3441·94	·00	−·28	+·24
	44 591	4955·38	·00	1869·49	·00	−·05	+·02							
	44 593	5065·55	·00	1275·52	·00	−·66	+·51					Mean	+·05	+·01
	45 679	7563·87	+·01	4728·34	·00	−·25	−·26							
	44 598	7759·78	+·01	1644·10	−·01	−·94*	+·99*							
	Eros	4229·55	·00	4399·31	·00	...	...							
October 3	44 573	1553·62	+·02	2099·43	·00	−·04	−·13	164	2773·16	+·01	6469·96	−·01	+·04†	+·11†
5134	45 660	2098·45	+·01	3775·95	·00	+·16	−·65	166	2991·18	·00	2918·89	·00	−·17	−·02
	44 577	2356·53	+·01	1428·81	−·01	+·02	−·18	169	3110·96	·00	5281·68	·00	−·12	−·01
	46 638	2933·87	+·02	7549·40	−·02	−·09	(+·60)	172	3310·08	+·01	1672·68	·00	−·05†	−·17†
	45 662	3589·42	·00	5528·84	·00	+·25	+·02	177	3929·86	·00	4091·78	·00	+·02	+·02
	44 582	3678·76	·00	1933·15	·00	·00	+·20	182	4730·22	·00	3927·79	·00	+·03	+·14
	45 665	4270·51	·00	3496·39	·00	+·34	+·09	184	4845·87	·00	2814·42	·00	−·13	−·18
	45 667	4366·33	·00	4346·28	·00	+·27	+·05	186	5257·60	+·01	6894·01	−·01	−·08†	+·25†
	45 669	4851·43	·00	4042·48	·00	−·15	−·15	188	5302·19	+·01	2274·46	−·01	+·25†	+·09†
	46 648	4888·64	+·01	7123·92	−·01	−·23	+·36	191	5762·79	·00	5705·94	·00	−·23	+·19
	44 591	4977·21	+·01	701·72	−·02	−·24	−·02							
	45 679	7584·19	+·03	3561·47	−·01	−·35	−·14					Mean	−·10	+·02
	Eros	4269·83	·00	4409·37	·00	...	...							
October 4	46 628	1448·65	+·13	7177·19	−·13	−·65*	+·77*	164	2783·55	+·02	5118·06	−·02	−·01	−·35
5138	45 660	2091·83	+·02	2427·90	−·01	+·44	−·28	166	2978·83	+·02	1566·10	−·03	+·15†	+·46†
	46 638	2950·96	+·04	6196·33	−·04	−·07	−·25	165	3045·63	+·06	6979·74	−·07	−·23†	+·13†
	46 641	3350·11	+·05	7109·39	−·07	−·31	+·18	169	3113·39	+·01	3927·90	·00	+·21	+·02
	45 662	3593·46	·00	4172·57	·00	+·43	−·33	177	3924·76	+·01	2733·66	−·01	+·10	+·26
	46 644	4037·01	+·06	7811·73	−·07	+·68*	+·14*	182	4724·15	+·02	2565·46	−·02	−·10	+·17
	45 665	4261·87	+·02	2136·38	−·03	+·28	+·38	183	4757·39	+·02	6732·40	−·03	−·32†	−·42†
	45 667	4363·19	+·01	2985·83	−·01	·00	−·05	184	4832·77	+·04	1451·61	−·06	−·16†	+·25†
	45 669	4845·91	+·02	2679·58	−·02	−·09	−·35	186	5269·61	·00	5528·01	·00	−·03	−·20
	46 648	4902·19	·00	5759·49	·00	−·11	+·17	191	5767·11	+·01	4337·52	−·01	+·09	−·13
	46 652	6312·96	+·02	6921·68	−·02	−·40	−·30							
	45 679	7574·87	+·14	2183·23	−·11	−·20*	−·13*					Mean	+·04	−·04
	Eros	4216·58	·00	4217·65	·00	...	...							

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The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparisen Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 4	46 628	1427·33	+·08	7136·22	−·08	−·48*	+·83*	164	2775·07	+·02	5084·41	−·01	+·24	−·07
5139	45 660	2100·43	+·01	2390·13	−·01	+·17	−·45	166	2992·91	+·01	1533·73	−·02	−·14†	·00†
	46 638	2935·74	+·03	6164·07	−·02	+·23	−·20	165	3025·65	+·03	6948·25	−·03	+·01†	+·12†
	46 641	3329·48	+·03	7079·66	−·04	−·20	+·22	169	3112·87	·00	3896·31	·00	−·10	−·01
	45 662	3591·34	·00	4143·57	·00	+·23	−·08	177	3931·62	·00	2706·99	·00	−·11	−·10
	46 644	4012·27	+·04	7786·12	−·05	+·63*	+·66*	182	4731·99	+·01	2543·45	−·01	−·15	−·14
	45 665	4272·23	+·01	2111·83	−·01	+·30	−·21	183	4739·25	+·01	6710·81	−·02	+·31†	−·23†
	45 667	4368·39	+·01	2961·53	−·01	−·08	−·13	184	4847·28	+·02	1430·03	−·03	+·02†	−·04†
	45 669	4852·84	+·01	2657·99	−·01	+·04	−·36	186	5258·95	·00	5509·37	·00	+·12	−·14
	46 648	4890·28	·00	5738·50	·00	−·19	+·45	191	5763·99	+·01	4321·63	−·01	+·13	−·06
	46 652	6294·02	+·02	6909·40	−·02	−·52	−·18							
	45 679	7585·29	+·09	2178·14	−·07	−·18*	−·55*					Mean	+·02	−·09
	Eros	4257·73	·00	4232·75	·00	...	...							
October 5	45 660	2163·87	+·02	1079·32	−·02	+·13*	−1·13*	164	2838·33	+·01	3773·43	−·01	−·49	−·25
5141	46 638	2998·22	+·01	4853·08	−·01	−·10	−·16	165	3087·70	+·01	5637·27	−·01	−·14	·00
	47 702	3307·44	+·02	7235·27	−·03	−·35	+1·25	169	3175·82	·00	2585·45	·00	−·07	−·27
	46 641	3391·43	+·01	5768·42	−·01	−·34	+·58	177	3994·91	+·02	1396·59	−·02	+·15†	−·73†
	45 662	3654·24	·00	2833·02	·00	+·23	−·34	182	4795·21	+·02	1232·92	−·03	+·27†	−·47†
	46 644	4074·09	+·01	6475·17	−·01	+·32	+·48	183	4801·19	·00	5399·84	·00	+·31	+·15
	45 665	4336·02	+·02	801·24	−·03	+·25	−·53	186	5321·33	·00	4199·21	·00	+·17	−·37
	45 667	4431·64	+·01	1651·11	−·02	+·08	−·41	187	5322·80	+·01	6457·64	−·01	+·61†	+·52†
	45 669	4916·58	+·03	1347·61	−·02	−·12	−·60	191	5826·97	+·02	3011·43	−·01	·00	−·17
	46 648	4952·60	·00	4428·33	·00	−·21	+·26							
	46 652	6355·20	+·02	5598·68	−·01	+·09	+·57					Mean	−·04	−·15
	Eros	4267·13	·00	4252·26	·00	...	...							
October 7	47 692	1867·90	+·03	6752·76	−·02	+·38*	−·24*	156	2976·29	+·01	5872·34	−·01	+·07	+·13
5142	46 628	2076·01	+·01	3474·16	·00	−·23	−·03	164	3430·86	+·01	1425·30	−·01	+·20†	+·04†
	47 698	3300·11	+·01	6946·51	−·01	+·06	−·18	165	3675·12	·00	3290·59	·00	+·11	−·19
	46 638	3588·01	·00	2505·98	·00	+·20	−·29	170	3866·84	·00	5231·45	·00	+·02	+·10
	47 702	3889·77	·00	4890·03	·00	+·19	+·14	174	4055·51	+·01	7109·14	−·01	−·16†	−·08†
	46 641	3978·60	·00	3422·69	·00	−·20	+·28	179	4817·53	+·01	6878·81	−·01	+·03†	−·09†
	47 709	4520·90	+·01	6771·05	−·01	−·12	−·17	183	5390·05	+·01	3057·98	−·01	−·02	+·03
	46 644	4659·03	·00	4131·78	·00	+·57	−·22	47° 720	5900·99	+·01	5949·13	·00	+·21	+·03
	47 711	4842·99	+·01	7294·81	−·01	−·38	+·09	187	5908·53	+·01	4117·76	·00	+·16	−·05
	46 648	5544·33	+·01	2086·43	−·01	−·30	+·39	186	5913·93	+·02	1857·98	−·02	−·05†	+·12†
	47 720	5900·99	+·01	5949·13	·00	+·30	−·08							
	46 652	6943·96	+·02	3261·30	−·01	−·51	+·33					Mean	+·09	+·01
	Eros	4626·17	·00	4560·23	·00	...	...							
October 7	47 692	1496·90	+·03	6406·62	−·02	+·37*	−·15*	156	2603·77	+·01	5523·96	−·01	−·24	−·05
5143	46 628	1697·80	+·01	3127·67	·00	−·06	−·16	164	3048·80	+·01	1075·52	−·01	−·08†	+·08†
	47 698	2929·48	+·01	6597·05	−·01	+·16	+·03	165	3296·88	·00	2940·50	·00	−·02	−·24
	46 638	3207·76	·00	2156·02	·00	+·39	−·33	170	3492·51	·00	4881·10	·00	+·14	−·05
	47 702	3515·07	·00	4539·49	·00	−·01	+·12	174	3685·35	+·01	6758·18	−·01	−·18†	−·04†
	46 641	3600·81	·00	3072·00	·00	−·44	+·15	179	4446·78	+·01	6526·05	−·01	+·12†	+·06†
	47 709	4149·97	+·01	6418·88	−·01	−·07	+·03	183	5011·02	+·01	2704·15	−·01	+·26	−·09
	46 644	4282·53	·00	3779·56	·00	+·58	−·29	47° 720	5528·56	·00	5594·32	·00	+·01	−·18

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

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Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 7	47 711	4472·93	+·01	6942·01	−·01	−·08	+·19	187	5532·12	·00	3762·82	·00	+·07	−·15
5143—*contd.*	46 648	5163·59	+·01	1732·31	−·01	−·36	+·17	186	5532·48	+·01	1503·19	−·01	+·12†	−·23†
	47 720	5528·56	·00	5594·32	·00	+·11	−·30							
	46 652	6565·75	+·02	2903·79	−·01	−·56	+·49					Mean	+·04	−·13
	Eros	4245·94	·00	4240·75	·00	...	...							
October 7	47 692	1500·19	+·01	6347·12	−·01	+·56*	−·17*	156	2602·95	·00	5459·31	·00	+·11	·00
5145	46 628	1686·26	+·01	3067·23	·00	+·17	−·15	164	3028·40	·00	1009·02	·00	−·18†	−·04†
	47 698	2933·99	+·01	6531·23	·00	+·05	−·26	165	3284·76	·00	2872·48	·00	+·03	·00
	46 638	3192·25	·00	2088·35	·00	+·26	−·01	170	3489·35	·00	4812·37	·00	+·01	+·01
	47 702	3510·30	·00	4470·90	·00	−·10	−·06	174	3690·07	·00	6688·56	·00	+·27†	·00†
	46 641	3589·35	·00	3002·78	·00	−·46	+·21	179	4450·71	·00	6453·10	·00	+·35†	−·08†
	47 709	4153·42	·00	6347·38	·00	+·13	−·16	183	4998·27	·00	2628·41	·00	−·05	·00
	46 644	4274·26	·00	3706·94	·00	+·59	+·04	186	5514·22	+·01	1424·77	−·01	−·08†	+·15†
	47 711	4479·09	·00	6869·16	·00	−·21	−·15	187	5523·86	·00	3684·86	·00	+·07	−·23
	46 648	5146·10	+·01	1655·65	−·01	−·33	+·50	47° 720	5528·51	·00	5516·23	·00	+·06	−·12
	47 720	5528·51	·00	5516·23	·00	+·14	−·23							
	46 652	6553·86	+·01	2821·05	·00	−·79	+·45					Mean	+·04	+·06
	Eros	4230·24	·00	4235·21	·00	...	...							
October 7	47 692	1506·05	+·01	6310·50	−·01	+·16*	−·21*	156	2607·47	·00	5421·57	·00	+·11	−·08
5146	46 628	1688·49	+·01	3030·20	·00	−·01	+·02	164	3028·35	+·01	970·49	·00	−·23†	+·20†
	47 698	2939·72	+·01	6493·14	·00	−·02	−·34	165	3286·44	·00	2834·05	·00	+·20	−·11
	46 638	3193·31	·00	2050·05	·00	+·26	−·16	170	3493·38	·00	4773·72	·00	−·16	−·11
	47 702	3513·84	·00	4431·88	·00	−·11	+·18	174	3696·09	·00	6649·57	·00	+·08†	+·04†
	46 641	3590·96	·00	2963·86	·00	−·07	+·27	179	4456·68	·00	6413·34	·00	−·04†	−·08†
	47 709	4158·79	·00	6307·70	·00	+·26	+·06	183	4999·93	·00	2588·08	·00	−·11	−·02
	46 644	4276·93	·00	3667·57	·00	+·67	−·17	186	5514·49	+·01	1384·00	−·01	+·01†	+·04†
	47 711	4485·05	·00	6829·39	·00	−·11	−·17	187	5526·61	·00	3643·77	·00	+·03	−·04
	46 648	5146·70	+·01	1615·23	·00	−·30	+·42	47° 720	5533·18	·00	5475·37	·00	·00	−·16
	47 720	5533·18	·00	5475·37	·00	+·11	−·27							
	46 652	6555·79	+·01	2779·20	·00	−·87	+·33					Mean	+·01	−·09
	Eros	4228·47	·00	4229·28	·00	...	...							
October 8	47 692	1641·54	+·04	5289·07	−·03	+·66	−·39	156	2749·01	+·01	4407·88	−·01	−·06	−·18
5148	46 628	1845·57	+·02	2010·73	−·01	−·20	−·25	157	2788·18	+·03	6515·37	−·03	−·24†	−·18†
	47 698	3073·99	+·01	5481·50	−·01	+·08	−·45	165	3444·57	+·01	1825·19	−·01	−·13†	+·08†
	47 700	3317·20	+·02	6406·92	−·02	+·15	−·07	170	3638·45	·00	3766·15	·00	+·07	−·05
	47 702	3661·23	·00	3424·37	·00	−·04	+·38	174	3829·38	+·01	5642·93	−·01	−·07	+·09
	46 641	3748·04	+·01	1957·31	−·01	−·25	+·23	179	4591·21	·00	5412·14	·00	−·13	−·13
	47 709	4294·13	·00	5304·87	·00	+·10	−·37	183	5158·76	+·03	1590·95	−·03	+·13†	+·29†
	46 644	4429·23	+·01	2665·18	−·01	+·59	+·28	185	5272·13	+·01	6780·80	−·01	−·29†	+·33†
	47 711	4616·86	·00	5827·81	−·01	−·23	+·24	47° 720	5673·75	+·01	4481·56	·00	−·36	+·08
	47 720	5673·75	+·01	4481·56	·00	−·27	−·03	187	5678·94	+·02	2650·27	−·02	−·19	+·16
	47 721	5797·64	+·01	6311·32	−·01	−·16	+·07							
	46 652	6712·92	+·06	1793·06	−·05	−·48	+·36					Mean	−·12	−·01.
	Eros	4239·56	·00	4293·93	·00	...	...							

* Not used in forming the finally adopted values of a. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 8 5150	47 692	1662·91	+·01	5061·32	·00	+·30	−·26	156	2771·36	·00	4180·79	·00	−·32	−·38
	46 628	1869·55	+·01	1782·41	·00	−·16	−·07	157	2808·13	+·01	6288·15	·00	+·02†	+·17†
	47 698	3095·15	·00	5254·42	·00	+·14	−·32	165	3469·13	·00	1597·68	·00	−·08†	+·12†
	47 700	3337·63	·00	6180·10	·00	+·16	+·10	170	3661·33	·00	3538·96	·00	+·09	+·13
	47 702	3684·37	·00	3197·67	·00	+·03	+·01	174	3850·58	·00	5416·53	·00	·00	−·07
	46 641	3772·64	·00	1730·12	·00	−·28	+·12	179	4613·01	·00	5185·64	·00	−·25	+·11
	47 709	4315·83	·00	5078·26	·00	+·10	−·19	183	5184·35	+·01	1364·29	−·01	−·20†	+·20†
	46 644	4453·32	·00	2438·52	·00	+·59	+·08	185	5292·71	·00	6555·57	·00	−·26†	−·15†
	47 711	4637·91	·00	5601·76	·00	+·03	+·11	47° 720	5696·25	·00	4256·02	·00	−·06	−·34
	47 720	5696·25	·00	4256·02	·00	+·03	−·45	187	5703·25	·00	2423·89	·00	−·06	+·23
	47 721	5818·84	·00	6085·57	·00	−·19	+·26							
	46 652	6738·67	+·01	1566·81	−·01	−·75	+·61					Mean	−·10	−·05
	Eros	4230·21	·00	4261·41	·00	...	...							
October 8 5152	47 692	1731·40	·00	5101·00	·00	+·29	−·20	156	2839·02	·00	4219·37	·00	+·20	+·30
	46 628	1936·42	·00	1821·72	·00	+·15	+·24	157	2877·02	·00	6327·40	·00	+·15†	+·18†
	47 698	3163·73	·00	5293·39	·00	+·13	−·15	165	3536·14	·00	1636·68	·00	+·07†	+·05†
	47 700	3406·75	·00	6219·39	·00	+·04	−·15	170	3729·56	·00	3577·40	·00	−·19	+·56
	47 702	3752·56	·00	3236·33	·00	−·34	+·21	174	3919·24	·00	5455·13	·00	+·05	+·13
	46 641	3839·97	·00	1769·13	·00	−·38	−·09	179	4681·34	·00	5223·96	·00	+·06	+·26
	47 709	4384·56	·00	5116·81	·00	−·05	−·14	183	5251·25	·00	1402·45	·00	+·03†	+·24†
	46 644	4520·95	·00	2477·06	·00	+·51	+·06	185	5361·29	·00	6593·70	·00	+·37†	−·08†
	47 711	4707·06	·00	5640·36	·00	−·31	−·03	47° 720	5764·09	·00	4293·67	·00	+·40	+·01
	47 720	5764·09	·00	4293·67	·00	+·49	−·10	187	5770·85	·00	2462·04	·00	−·08	+·07
	47 721	5887·64	·00	6123·59	·00	+·06	+·20							
	46 652	6805·84	·00	1604·77	·00	−·64	+·16					Mean	+·07	+·22
	Eros	4279·83	·00	4390·15	·00	...	...							
October 10 5154	47 692	2100·51	+·01	2726·13	−·01	+·31	−·09	156	3209·47	+·01	1847·49	−·01	+·14	+·27
	48 750	2114·40	+·04	5659·51	−·03	−·04	+·35	157	3243·55	·00	3955·45	·00	+·09	−·22
	48 752	2520·01	+·06	7110·35	−·05	+·03	−·09	158	3271·48	+·03	6600·95	−·03	+·18†	+·12†
	47 698	3532·00	·00	2922·22	·00	+·17	−·25	161	3420·82	+·01	5060·48	−·01	(·00)	(·00)
	47 700	3773·33	·00	3848·29	·00	−·09	·00	174	4287·07	·00	3085·83	·00	−·06	−·05
	48 764	4369·95	·00	5387·48	·00	+·16	+·01	179	5049·44	+·01	2856·75	−·01	−·12	−·05
	47 709	4752·80	+·01	2748·60	−·01	−·08	−·09	181	5425·57	·00	5025·30	·00	(·00)	(·00)
	47 711	5074·11	+·01	3272·63	−·01	−·28	+·20	185	5726·44	+·01	4227·50	−·01	+·20	−·11
	48 770	5320·61	+·01	7091·97	−·02	+·08	−·35							
	48 777	5931·07	+·01	5419·43	·00	−·26	−·08					Mean	+·05	−·03
	47 720	6134·18	+·05	1928·67	−·05	−·11	+·29							
	47 721	6253·31	+·02	3758·99	−·02	+·11	+·10							
	Eros	4250·52	·00	4240·54	·00	...	...							
October 14 5160	49 741	1171·06	·00	4435·62	·00	+·46	+·09	150	3697·31	·00	5309·56	·00	−·04	+·05
	49 743	1243·00	·00	4819·56	·00	+·32	+·21	151	3779·34	·00	4220·92	·00	−·02	+·10
	49 752	2621·72	·00	5774·38	·00	−·28	−·09	152	3982·74	·00	2737·96	·00	·00	+·01
	49 753	2647·46	·00	6539·79	·00	+·05	+·03	154	4512·09	·00	5189·50	·00	−·09	+·02
	50 620	3390·77	·00	7008·66	·00	−·15	−·16	158	5015·12	·00	1589·93	·00	−·15†	−·15†
	48 750	3866·86	·00	637·37	·00	−·13*	−·08*	162	5352·14	·00	1794·86	·00	(·00)	(·00)
	50 627	4201·17	·00	6616·96	·00	−·18	−·07	163	5393·98	·00	3985·57	·00	+·10	+·03

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 14	48 752	4258·23	·00	2091·75	·00	−·11	+·11	168	5718·21	·00	4952·75	·00	−·08	+·09
5160—*contd.*	49 773	5129·26	·00	4686·92	·00	−·08	+·16	176	6517·91	·00	3483·36	·00	+·04†	+·05†
	48 760	5344·39	·00	1598·23	·00	−·13	−·02							
	49 782	6236·79	·00	4475·39	·00	+·53	+·18					Mean	−·03	+·05
	48 770	7060·06	·00	2100·11	·00	−·33*	−·32*							
	Eros	4498·65	·00	4337·05	·00	...	...							
October 14	49 741	1191·44	·00	4435·53	·00	+·48	+·03	150	3718·88	·00	5305·74	·00	+·07	−·04
5161	49 743	1264·03	·00	4819·47	·00	+·26	+·03	151	3799·40	·00	4217·09	·00	·00	−·10
	49 752	2644·13	·00	5772·17	·00	−·31	−·19	152	4000·52	·00	2733·56	·00	+·12	+·07
	49 753	2670·99	·00	6537·37	·00	+·03	+·10	154	4533·40	·00	5184·35	·00	+·11	+·05
	50 620	3414·81	·00	7005·27	·00	·00	−·24	158	5031·22	·00	1583·89	·00	−·03†	+·03†
	48 750	3881·86	·00	633·14	·00	−·29*	+·01*	163	5413·81	·00	3979·15	·00	+·01	+·03
	50 627	4224·65	·00	6612·19	·00	−·05	+·05	168	5739·22	·00	4945·91	·00	+·08	+·04
	48 752	4275·15	·00	2087·11	·00	−·06	+·03	176	6536·91	·00	3475·39	·00	+·06†	−·06†
	49 773	5149·94	·00	4680·88	·00	+·03	+·27							
	48 760	5360·73	·00	1591·83	·00	−·21	+·04					Mean	+·07	+·01
	49 782	6257·41	·00	4467·57	·00	+·40	+·34							
	48 770	7076·99	·00	2091·40	·00	−·25*	−·47*							
	Eros	4505·66	·00	4362·44	·00	...	...							
October 15	49 741	1306·20	+·03	3146·69	−·01	+·16	+·02	150	3830·82	·00	4023·71	·00	−·05	−·02
5162	49 743	1377·99	+·03	3531·00	−·01	−·11	−·21	152	4118·30	+·02	1452·82	−·02	−·15	−·08
	49 752	2755·18	+·01	4487·16	−·01	−·29	−·32	154	4645·39	·00	3904·70	·00	−·04	−·06
	49 753	2780·28	+·02	5252·15	−·01	+·11	+·04	163	5528·28	+·02	2701·79	−·02	−·12	+·13
	50 617	3145·38	+·04	7508·33	−·05	+·09*	(+·76*)	168	5851·38	+·02	3669·67	−·01	−·02	−·13
	50 620	3522·87	+·01	5721·74	−·01	·00	−·07	176	6652·27	+·05	2201·29	−·04	−·10	+·01
	50 627	4333·19	·00	5331·55	·00	+·09	−·36							
	48 752	4394·22	+·03	806·91	−·03	−·26	+·02					Mean	−·08	−·03
	49 773	5262·80	+·01	3402·79	−·01	−·08	+·30							
	50 636	5539·74	+·01	6355·78	−·01	+·25	−·08							
	49 782	6370·53	+·03	3192·72	−·02	+·23	+·18							
	48 770	7195·18	+·10	818·61	−·09	−·15*	−·29*							
	Eros	4292·74	·00	3934·76	·00	...	...							
October 20	50 587	981·87	·00	2040·83	·00	+·47*	+·15*	137	2422·12	·00	5310·90	·00	+·15†	−·09†
5169	51 598	1558·63	·00	6710·78	·00	−·62*	+·35*	138	2770·17	·00	6618·52	·00	+·11†	−·02†
	51 599	1899·65	·00	4813·13	·00	−·41	−·18	139	3156·49	·00	3790·30	·00	+·18	+·02
	50 589	2672·79	·00	872·14	·00	−·31*	−·40*	140	3159·93	·00	4209·37	·00	+·16	·00
	51 604	2852·38	·00	5230·17	·00	+·43	−·25	141	3347·99	·00	5127·32	·00	+·10	−·04
	50 601	4014·75	·00	3597·51	·00	−·22	+·46	144	4404·85	·00	3340·60	·00	·00	−·13
	51 616	4937·84	·00	6526·93	·00	−·14	+·04	145	4990·11	·00	5334·58	·00	+·07	−·16
	51 618	5103·53	·00	4616·24	·00	+·19	+·07	146	5107·50	·00	4138·70	·00	+·03	−·01
	51 620	5644·55	·00	6466·47	·00	+·43	+·01							
	50 613	5686·77	·00	3296·52	·00	+·15	+·05					Mean	+·09	−·05
	50 617	6112·33	·00	2187·86	·00	+·31	−·22							
	50 623	6746·69	·00	3504·10	·00	−·29	−·04							
	Eros	4285·63	·00	4207·28	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 20 5170	50 587	970·82	·00	2035·61	·00	−·01*	+·10*	138	2758·12	·00	6613·42	·00	−·07†	+·12†
	51 598	1546·54	·00	6705·39	·00	−·71*	+·62*	139	3144·87	·00	3785·27	·00	−·02	+·12
	51 599	1887·78	·00	4807·98	·00	−·45	−·12	140	3148·21	·00	4204·44	·00	−·01	+·01
	50 589	2661·49	·00	867·35	·00	−·36*	−·64*	141	3336·06	·00	5122·36	·00	+·02	+·04
	51 604	2840·62	·00	5225·12	·00	+·23	−·16	144	4393·00	·00	3335·71	·00	+·10	+·02
	50 601	4002·87	·00	3592·89	·00	−·06	+·28	145	4978·27	·00	5329·80	·00	−·10	−·01
	51 616	4925·69	·00	6522·19	·00	−·11	+·14	146	5095·74	·00	4134·15	·00	−·05	−·09
	51 618	5091·53	·00	4611·48	·00	+·34	+·20							
	51 620	5632·24	·00	6461·83	·00	+·64	+·13					Mean	−·01	+·02
	50 613	5674·96	·00	3292·20	·00	+·29	−·19							
	50 617	6100·80	·00	2183·30	·00	+·33	−·17							
	50 623	6734·86	·00	3499·89	·00	−·15	−·21							
	Eros	4257·84	·00	4224·00	·00	...	...							
October 20 5172	50 587	881·59	−·05	2051·84	−·02	+·30*	−·03*	137	2323·88	−·01	5320·42	·00	−·43†	−·06†
	51 598	1460·78	−·02	6720·77	·00	−·63*	+·51*	138	2672·50	−·01	6627·67	·00	−·35†	+·05†
	51 599	1800·57	−·01	4823·12	·00	−·34	−·18	139	3056·84	·00	3799·49	·00	+·01	−·10
	50 589	2571·19	−·03	881·73	−·02	−·15*	−·41*	140	3060·61	·00	4218·30	·00	−·11	+·12
	51 604	2753·74	·00	5239·25	·00	+·12	−·10	141	3249·13	·00	5136·33	·00	−·13	−·20
	50 601	3914·59	·00	3605·73	·00	−·17	+·66	142	4096·17	−·01	6321·37	−·01	−·20†	+·01†
	51 616	4839·30	−·01	6534·44	−·01	−·17	+·07	144	4304·61	·00	3348·50	·00	−·08	+·11
	51 618	5003·72	·00	4623·91	·00	+·29	·08	145	4890·99	·00	5342·00	·00	−·08	·00
	51 620	5545·95	−·02	6473·51	−·01	+·30	−·01	146	5007·58	·00	4146·29	·00	−·02	−·05
	50 613	5586·09	·00	3303·71	·00	+·24	·00							
	50 617	6011·10	−·01	2194·86	·00	+·24	−·36					Mean	−·07	−·02
	50 623	6645·82	−·01	3510·42	·00	−·08	−·05							
	Eros	4018·85	·00	4434·36	·00	...	...							
October 21 5173	50 587	1584·65	+·03	1004·50	−·02	−·31*	−·35*	138	3351·66	+·01	5589·61	−·01	+·04	−·23
	51 598	2140·23	+·04	5675·57	−·03	−·65*	+·41*	139	3750·28	·00	2763·81	·00	+·02	+·02
	51 599	2489·22	+·01	3780·24	−·01	−·30	−·18	140	3751·68	·00	3183·00	·00	+·20	−·19
	52 602	3043·07	+·04	6847·50	−·04	−·09	+·06	141	3935·74	·00	4101·71	·00	+·08†	−·26†
	51 604	3440·14	·00	4201·75	·00	+·17	−·14	142	4776·72	·00	5291·41	·00	+·04	−·14
	50 601	4608·60	+·01	2575·28	−·01	−·10	+·42	143	4923·62	+·02	2184·49	−·02	+·05†	+·06†
	51 616	5518·79	+·01	5508·53	·00	+·01	+·04	145	5576·53	+·01	4316·67	−·01	−·04	−·05
	51 618	5693·13	+·02	3599·28	−·01	+·06	−·07	146	5699·15	+·02	3121·72	−·02	−·10	+·02
	52 617	6042·58	+·01	6680·78	−·01	+·09	+·02							
	51 620	6225·62	+·01	5451·62	−·01	+·52	−·03					Mean	+·03	−·10
	50 613	6281·63	+·04	2282·60	−·03	+·44	−·07							
	50 617	6712·40	+·08	1175·92	−·07	+·21*	−·12*							
	Eros	4354·49	·00	3932·17	·00	...	...							
October 21 5174	50 587	1588·03	+·02	1000·34	−·02	−·14*	−·21*	138	3355·74	+·01	5585·33	−·01	+·24	−·11
	51 598	2144·49	+·03	5671·70	−·02	−·68*	+·45*	139	3754·09	·00	2759·26	·00	+·13	+·11
	51 599	2493·28	+·01	3776·29	−·01	−·39	−·30	140	3755·66	·00	3178·53	·00	+·18	−·14
	52 602	3047·27	+·03	6843·58	−·03	+·13	−·03	141	3939·77	·00	4096·96	·00	+·15†	+·07†
	51 604	3444·25	·00	4197·66	·00	+·12	−·33	142	4780·98	·00	5286·88	·00	+·09	−·17
	50 601	4612·56	+·01	2570·57	−·01	−·17	+·41	143	4927·49	+·01	2179·62	−·02	+·06†	+·11†

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in columu 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 21	51 616	5523·08	·00	5503·65	·00	+·05	+·16	145	5580·53	+·01	4311·90	·00	+·16	−·13
5174—*contd.*	51 618	5697·10	+·01	3594·16	−·01	+·16	+·10	146	5703·05	+·01	3116·74	−·01	+·03	+·04
	52 617	6047·14	+·01	6676·06	−·01	+·06	−·08							
	51 620	6230·18	+·01	5446·48	−·01	+·31	+·17					Mean	+·14	−·07
	50 613	6285·70	+·03	2277·47	−·03	+·28	−·14							
	50 617	6716·15	+·06	1170·59	−·06	+·23*	−·18*							
	Eros	4344·89	·00	3947·18	·00	...	...							
October 21	50 587	1655·27	·00	1056·70	·00	+·38*	+·19*	137	3081·42	·00	4332·75	·00	+·28†	+·14†
5177	51 598	2211·96	·00	5729·04	·00	−·48*	+·31*	138	3424·13	·00	5641·99	·00	−·03	−·02
	51 599	2561·21	·00	3832·97	·00	−·45	−·16	139	3822·63	00	2815·57	·00	−·06	+·02
	52 602	3115·36	·00	6900·70	·00	−·10	−·09	140	3824·23	·00	3234·52	·00	−·05	−·13
	51 604	3512·32	·00	4254·00	·00	+·16	−·13	141	4008·21	·00	4153·41	·00	+·06†	−·05†
	50 601	4681·35	·00	2626·53	·00	−·46	+·36	142	4849·47	·00	5342·89	·00	+·11	+·02
	51 616	5592·09	·00	5559·64	·00	−·36	+·17	143	4996·30	·00	2235·58	·00	−·04†	−·12†
	51 618	5765·87	·00	3649·91	·00	+·14	+·02	145	5649·50	·00	4367·46	·00	−·03	+·11
	52 617	6115·87	·00	6732·03	·00	+·01	−·08	146	5771·86	·00	3172·41	·00	+·09	−·06
	51 620	6298·93	·00	5502·24	·00	+·36	+·14							
	50 613	6354·64	·00	2332·70	·00	+·30	−·09					Mean	+·01	−·01
	50 617	6784·96	·00	1225·98	·00	+·56*	−·59*							
	Eros	4244·56	·00	4227·62	·00	...	...							
October 21	50 587	1577·51	−·03	1062·53	−·02	−·03*	+·21*	138	3347·05	·00	5646·97	·00	−·19	+·05
5178	51 598	2135·22	−·01	5734·38	·00	−·77*	+·45*	139	3744·85	·00	2820·69	·00	−·32	−·14
	52 602	3038·96	−·01	6905·61	·00	−·56	+·09	140	3746·38	·00	3239·61	·00	−·12	·00
	51 604	3434·86	·00	4259·08	·00	·00	−·21	141	3930·79	·00	4158·03	·00	−·24†	+·18†
	50 601	4603·27	·00	2631·35	·00	−·60	+·12	142	4772·09	·00	5347·24	·00	−·04	+·15
	51 616	5514·34	−·01	5563·82	−·01	−·19	+·12	143	4918·12	·00	2240·10	·00	−·23†	−·13†
	51 618	5687·50	·00	3654·09	·00	+·39	−·04	146	5693·73	−·01	3176·22	·00	−·02	+·31
	52 617	6038·35	−·02	6735·68	−·01	+·16	+·17							
	51 620	6221·03	−·02	5506·09	−·01	+·54	+·15					Mean	−·12	+·06
	50 613	6276·07	−·01	2336·93	·00	+·33	−·38							
	50 617	6705·92	−·02	1229·90	·00	+·70*	−·71*							
	Eros	4016·79	·00	4412·24	·00	...	...							
October 21	50 587	1590·74	−·04	1063·06	−·03	+·36*	+·20*	137	3018·24	·00	4338·28	·00	−·04†	+·10†
5179	51 598	2149·20	−·01	5734·72	·00	−·54*	+·46*	138	3360·85	·00	5646·95	·00	+·20	+·15
	51 599	2497·63	−·01	3838·79	·00	−·49	−·26	139	3758·32	·00	2820·64	·00	+·03	−·01
	52 602	3053·03	−·01	6905·79	−·01	−·30	+·06	140	3760·39	·00	3239·62	·00	−·27	+·06
	51 604	3448·80	·00	4259·42	·00	+·04	−·41	141	3944·53	·00	4157·97	·00	·00†	+·26†
	50 601	4616·97	·00	2630·97	·00	−·56	+·47	142	4786·20	·00	5347·08	·00	−·05	+·15
	51 616	5528·56	−·01	5563·42	−·01	−·33	+·26	143	4931·42	·00	2239·78	·00	+·16†	+·09†
	52 617	6052·61	−·03	6735·45	−·02	+·12	+·01	145	5585·44	−·01	4371·25	·00	+·08	+·22
	51 620	6235·12	−·02	5505·56	−·01	+·51	+·29	146	5707·47	−·01	3176·41	·00	+·05	−·16
	50 613	6289·82	−·01	2336·50	·00	+·22	−·29							
	50 617	6719·12	−·02	1229·63	−·01	+1·00*	−·84*					Mean	+·01	+·07
	Eros	4018·02	·00	4427·77	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 26 5183	52 580	579·33	+·05	4520·35	−·03	−·24	−·20	120	2632·20	+·02	4890·39	−·01	+·01	−·14
	53 525	886·84	+·09	7240·33	−·07	−1·34*	+·88*	123	2852·52	·00	3897·52	·00	+·17	−·20
	52 581	1378·88	+·04	4981·22	−·02	−·09	−·16	130	3797·55	·00	4043·70	·00	+·24	−·23
	52 585	2141·10	+·03	5127·11	−·02	+·18	−·26	131	3855·91	·00	5539·35	−·01	+·17	−·01
	52 587	2643·24	+·01	3395·74	·00	+·02	−·17	132	4363·35	·00	5644·15	·00	+·16	−·35
	53 532	2787·33	+·02	6243·13	−·02	+·12	+·43	134	5270·43	+·01	3509·58	−·01	+·08	−·13
	52 592	3830·58	·00	2582·43	−·01	+·37	−·15	136	5626·99	+·01	3517·92	−·01	−·19	−·10
	53 539	4084·27	+·03	7897·33	−·03	+·36	−·36							
	53 540	4254·51	+·01	6701·60	−·01	+·09	+·20					Mean	+·09	−·17
	52 595	5055·39	+·01	2581·80	−·01	+·04	+·14							
	52 597	5100·86	·00	4651·51	·00	+·37	−·11							
	53 546	5714·29	+·01	5680·23	·00	+·02	−·23							
	53 547	5718·37	+·02	7946·86	−·02	+·31*	−·15*							
	51 598	6157·52	+·05	1363·47	−·03	−·28*	+·17*							
	52 602	7030·96	+·05	2557·55	−·03	+·05	+·05							
	Eros	4393·53	·00	3984·90	·00	...	...							
October 26 5184	52 580	586·06	+·04	4504·32	−·02	−·02	−·33	120	2638·62	+·01	4878·48	−·01	−·11	−·18
	53 525	887·17	+·06	7225·26	−·04	−·71*	+·60*	123	2861·36	+·01	3886·06	·00	−·13	−·28
	52 581	1384·84	+·03	4966·59	−·01	−·06	−·01	130	3806·05	·00	4034·18	·00	−·01	−·30
	52 585	2146·56	+·02	5114·13	−·01	+·46	−·19	131	3861·09	·00	5530·12	·00	−·06	−·14
	52 587	2652·85	·00	3383·58	·00	−·01	+·01	132	4368·24	·00	5635·70	·00	+·01	−·21
	53 532	2790·78	+·02	6231·71	−·01	−·03	+·36	134	5280·24	+·01	3503·16	·00	−·21	−·29
	52 592	3842·23	·00	2572·92	·00	+·19	−·21	136	5636·61	+·01	3512·34	·00	−·28	−·36
	53 539	4083·90	+·02	7888·48	−·02	+·44	−·18							
	53 540	4256·99	+·01	6693·15	−·01	−·01	+·22					Mean	−·11	−·25
	52 595	5066·90	+·01	2574·80	−·01	+·09	+·10							
	52 597	5107·93	·00	4644·59	·00	+·29	·00							
	53 547	5718·36	+·02	7941·84	−·02	+·08*	−·42*							
	53 546	5719·19	+·01	5674·58	·00	−·15	−·05							
	51 598	6171·93	+·03	1358·72	−·03	−·33*	+·10*							
	52 602	7042·97	+·04	2554·63	−·02	−·23	+·02							
	Eros	4375·79	·00	4001·20	·00	...	...							
October 26 5185	52 580	582·30	+·03	4521·01	−·01	−·13	−·11	120	2635·47	+·01	4890·68	·00	+·10	−·24
	53 525	889·69	+·05	7241·64	−·03	−·93*	+·50*	123	2855·90	·00	3897·63	·00	+·15	−·27
	52 581	1381·89	+·02	4981·82	−·01	+·10	−·18	130	3801·03	·00	4043·58	·00	+·20	−·32
	52 585	2144·10	+·02	5127·53	−·01	+·49	−·29	131	3859·54	·00	5539·54	·00	+·06	−·27
	52 587	2646·50	+·01	3395·68	·00	+·02	−·04	132	4366·94	·00	5643·70	·00	+·15	−·10
	53 532	2790·90	+·01	6243·63	−·01	−·03	+·24	134	5274·01	·00	3508·94	·00	+·07	−·15
	52 592	3834·10	·00	2582·10	·00	+·20	−·16	136	5630·34	+·01	3517·15	·00	+·07	−·08
	53 539	4088·08	+·02	7897·54	−·02	+·19	−·42							
	53 540	4258·23	+·01	6701·62	−·01	−·01	+·15					Mean	+·11	−·20
	52 595	5058·77	+·01	2581·21	−·01	+·15	+·07							
	52 597	5104·56	·00	4650·95	·00	+·28	−·02							
	53 546	5718·16	+·01	5679·54	·00	−·13	−·07							
	53 547	5722·45	+·02	7946·36	−·01	+·10*	+·06*							
	51 598	6160·98	+·03	1362·60	−·02	−·15*	−·03*							
	52 602	7034·88	+·03	2556·11	−·02	−·17	+·29							
	Eros	4348·53	·00	4029·58	·00	...	...							

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† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 26 5186	53 525	888·32	·00	7296·68	·00	−·76	+·32*	120	2633·31	·00	4944·00	·00	+·21	+·05
	52 581	1379·70	·00	5036·26	·00	+·05	−·17	123	2853·48	·00	3950·64	·00	+·08	+·15
	52 585	2142·13	·00	5181·31	·00	+·41	−·12	130	3799·03	·00	4096·02	·00	−·06	+·06
	52 587	2643·72	·00	3449·25	·00	·00	−·05	131	3853·13	·00	5592·00	·00	−·06	+·12
	53 532	2789·58	·00	6297·04	·00	−·09	+·41	132	4365·64	·00	5695·96	·00	+·06	+·16
	52 592	3831·14	·00	2634·72	·00	+·14	−·01	134	5271·74	·00	3560·31	·00	+·05	+·31
	53 539	4087·79	·00	7950·18	·00	+·11	−·26	136	5628·15	·00	3568·57	·00	+·03	+·10
	53 540	4257·29	·00	6754·41	·00	−·02	·00							
	52 595	5056·13	·00	2633·25	·00	−·04	−·01					Mean	+·04	+·14
	52 597	5102·76	·00	4702·86	·00	+·27	+·08							
	53 546	5717·01	·00	5731·19	·00	−·19	−·06							
	53 547	5722·22	·00	7998·04	·00	+·23*	+·12*							
	51 598	6157·56	·00	1413·93	·00	+·02*	−·18*							
	52 602	7032·35	·00	2607·13	·00	−·17	−·06							
	Eros	4196·73	·00	4209·48	·00	...	...							
October 26 5187	52 580	574·66	·00	4576·54	·00	−·16	+·08	120	2628·35	·00	4944·87	·00	+·10	−·05
	53 525	883·26	·00	7297·20	·00	−·78*	+·57*	123	2848·48	·00	3951·38	·00	+·01	+·19
	52 581	1374·68	·00	5036·90	·00	−·01	−·04	130	3793·83	·00	4096·67	·00	+·06	+·19
	52 585	2137·12	·00	5182·23	·00	+·35	−·27	131	3852·99	·00	5592·95	·00	+·01	−·06
	52 587	2638·66	·00	3450·00	·00	−·02	−·03	132	4360·58	·00	5696·83	·00	+·06	+·07
	53 532	2784·46	·00	6297·96	·00	−·05	+·26	134	5266·68	·00	3561·38	·00	+·04	+·01
	52 592	3826·09	·00	2635·67	·00	+·12	−·18	136	5623·05	·00	3569·44	·00	+·05	+·01
	53 539	4082·65	·00	7950·84	·00	+·18	−·15							
	53 540	4252·24	·00	6755·04	·00	−·04	+·14					Mean	+·05	+·05
	52 595	5050·96	·00	2634·07	·00	+·06	−·07							
	52 597	5097·75	·00	4703·68	·00	+·21	+·03							
	53 546	5711·92	·00	5732·10	·00	−·17	−·21							
	53 547	5716·86	·00	7998·68	·00	+·52*	+·24*							
	51 598	6152·64	·00	1414·84	·00	−·13*	−·32*							
	52 602	7027·18	·00	2607·79	·00	−·07	+·05							
	Eros	4154·76	·00	4239·66	·00	...	...							
October 26 5189	53 525	893·38	−·03	7301·29	−·01	−·32*	+·14*	120	2638·17	−·01	4948·09	·00	+·16	−·18
	52 581	1384·87	−·02	5040·60	−·01	−·05	−·14	123	2858·30	−·01	3954·50	·00	−·12	+·12
	52 585	2147·14	−·01	5185·37	·00	+·34	−·11	130	3803·47	·00	4099·33	·00	−·05	+·21
	52 587	2648·43	−·01	3453·11	−·01	−·14	+·06	131	3862·77	·00	5595·51	·00	−·02	−·05
	53 532	2794·23	−·01	6301·05	·00	+·23	+·25	132	4370·37	·00	5699·36	·00	−·08	−·10
	52 592	3835·53	−·01	2638·32	−·01	−·04	−·05	134	5275·95	·00	3563·51	·00	−·07	+·02
	53 539	4092·73	−·02	7953·46	−·02	+·13	−·40	136	5632·24	−·01	3571·40	·00	−·06	+·05
	53 540	4262·03	−·01	6757·36	−·01	−·01	+·20							
	52 595	5060·24	·00	2636·21	·00	−·18	+·11					Mean	−·03	+·01
	52 597	5107·04	·00	4705·58	·00	+·26	+·31							
	53 546	5721·31	−·02	5733·71	−·01	−·18	+·05							
	53 547	5727·02	−·03	8000·85	−·03	+· 6*	−·19*							
	51 598	6161·15	−·01	1416·45	−·01	−·01*	+·04*							
	52 602	7035·81	−·02	2609·55	−·01	−·06	−·16							
	Eros	3976·09	·00	4385·18	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	′	″		″	″	″	″	″	″
October 26 5190	52 580	598·72	−·04	4581·64	−·02	−·34	+·02	120	2651·99	−·01	4948·82	·00	−·07	−·11
	53 525	907·61	−·03	7301·87	−·01	−·78*	+·47*	123	2871·77	−·01	3955·27	·00	−·08	+·17
	52 581	1398·55	−·03	5041·52	−·01	−·10	−·11	130	3817·01	·00	4100·12	·00	−·09	+·09
	52 585	2160·85	−·01	5186·21	·00	+·33	−·12	131	3876·48	·00	5595·71	·00	−·19	+·34
	52 587	2661·90	−·01	3453·90	−·01	−·12	+·12	132	4384·02	·00	5699·66	·00	−·20	+·10
	53 532	2807·83	−·01	6301·69	−·01	+·26	+·19	134	5289·28	·00	3563·83	·00	−·01	+·18
	52 592	3848·91	−·01	2639·23	−·01	−·01	−·24	136	5645·26	−·01	3571·65	·00	+·31	+·27
	53 539	4106·46	−·03	7953·71	−·03	+·06	−·25							
	53 540	4275·90	−·01	6757·81	−·01	−·28	+·17					Mean	−·05	+·15
	52 595	5073·36	·00	2636·80	·00	+·06	+·05							
	52 597	5120·41	·00	4706·19	·00	+·35	+·11							
	53 546	5734·70	−·02	5734·17	−·01	−·10	−·13							
	53 547	5740·30	−·05	8000·93	−·05	+·39*	−·13*							
	51 598	6174·35	−·02	1417·01	−·01	+·04*	−·10*							
	52 602	7048·86	−·03	2609·65	−·01	+·17	−·03							
	Eros	3969·63	·00	4401·15	·00	...	...							
October 27 5191	52 580	1476·75	+·02	3768·93	−·01	+·38	−·24	116	3001·49	+·01	4422·04	·00	+·06	−·06
	53 525	1769·24	+·04	6490·79	−·03	−·75*	+·44*	120	3528·07	·00	4149·89	·00	+·05	+·07
	52 581	2274·13	+·01	4234·18	·00	+·07	−·22	127	4050·99	·00	2976·17	·00	+·02	+·09
	52 585	3035·44	·00	4384·17	·00	+·40	−·25	129	4267·23	·00	5256·69	·00	+·11	−·08
	52 587	3547·64	·00	2655·22	·00	−·21	+·14	130	4698·44	·00	3309·67	·00	−·01	−·13
	53 532	3675·69	+·01	5503·77	−·01	+·12	+·36	132	5255·28	·00	4913·17	·00	−·03	−·15
	52 592	4739·67	+·01	1848·27	−·01	+·01	+·20							
	53 539	4963·43	+·01	7164·96	−·01	+·32	−·32					Mean	+·03	−·04
	53 540	5140·60	+·01	5970·34	·00	−·20	+·11							
	52 595	5964·35	+·02	1854·60	−·02	−·07	+·18							
	52 597	5998·42	+·01	3924·88	−·01	+·11	−·22							
	53 546	6606·01	+·02	4956·80	−·01	−·10	−·13							
	Eros	4389·70	·00	4007·12	·00	...	...							
October 27 5192	52 580	1469·62	+·02	3772·07	−·01	+·29	−·19	116	2994·94	·00	4423·83	·00	+·03	+·08
	53 525	1764·28	+·03	6493·78	−·02	−·57*	+·42*	120	3521·33	·00	4151·30	·00	−·01	+·09
	52 581	2267·40	+·01	4236·58	·00	+·01	−·19	127	4043·29	·00	2976·86	·00	−·12	+·23
	52 585	3028·77	·00	4385·86	·00	+·46	−·21	129	4261·34	·00	5257·35	·00	+·10	+·02
	52 587	3539·54	·00	2656·41	·00	−·26	+·12	130	4691·14	·00	3309·51	·00	−·22	+·31
	53 532	3670·03	·00	5504·97	·00	+·18	+·30	132	5249·12	·00	4912·85	·00	+·06	−·02
	52 592	4730·96	+·01	1848·44	−·01	−·12	+·04							
	53 539	4959·18	+·01	7164·94	−·01	+·50	−·36					Mean	−·03	+·12
	53 540	5135·31	·00	5970·13	·00	−·05	+·08							
	52 595	5955·71	+·02	1853·42	−·02	−·21	+·21							
	52 597	5991·40	+·01	3923·61	−·01	+·18	−·06							
	53 546	6600·18	+·02	4955·20	·00	−·28	−·20							
	Eros	4366·49	·00	4021·53	·00	...	...							
October 27 5193	52 580	1471·00	+·02	3770·79	·00	+·05	−·27	116	2996·55	·00	4421·08	·00	+·14	−·15
	53 525	1767·93	+·03	6492·39	−·02	−·77*	+·24*	120	3522·74	·00	4148·14	·00	+·07	−·21
	52 581	2269·06	+·01	4234·55	·00	−·09	−·23	127	4043·58	·00	2973·33	·00	+·10	−·20
	52 585	3030·46	·00	4383·08	·00	+·46	−·20	129	4263·75	·00	5253·41	·00	+·14	−·16

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 27	52 587	3539·56	·00	2653·31	·00	−·04	−·03	130	4691·68	·00	3305·30	·00	+·04	·00
5193—*contd.*	53 532	3672·89	·00	5501·62	·00	−·01	+·33	132	5251·45	·00	4907·85	·00	−·09	−·04
	52 592	4730·36	+·01	1844·10	−·01	+·06	+·03							
	53 539	4963·58	+·01	7160·25	−·01	+·21	−·12					Mean	+·07	−·13
	53 540	5138·56	·00	5965·22	·00	−·20	+·34							
	52 595	5954·94	+·02	1847·88	−·02	+·17	+·29							
	52 597	5992·54	+·01	3917·98	·00	+·44	+·10							
	53 546	6602·33	+·02	4948·94	·00	−·16	+·06							
	Eros	4353·78	·00	4029·23	·00	...	...							
October 27	52 580	1479·12	·00	3822·47	·00	+·01	−·23	116	3003·26	·00	4476·29	·00	+·09	+·10
5200	53 525	1769·15	·00	6545·08	·00	−·82*	+·11*	120	3530·34	·00	4204·39	·00	−·08	+·24
	52 581	2275·97	·00	4288·09	·00	+·04	−·10	127	4054·25	·00	3030·96	·00	−·02	+·07
	52 585	3037·18	·00	4438·58	·00	+·52	−·15	129	4268·65	·00	5311·61	·00	−·02	+·17
	52 587	3550·86	·00	2709·91	·00	−·06	+·01	130	4701·53	·00	3364·75	·00	−·01	+·01
	53 532	3677·07	·00	5558·91	·00	−·19	+·12	132	5257·32	·00	4968·50	·00	−·18	+·19
	52 592	4743·82	·00	1903·80	·00	+·16	−·19							
	53 539	4963·61	·00	7220·67	·00	+·14	−·30					Mean	−·04	+·13
	53 540	5141·52	·00	6025·94	·00	−·11	+·24							
	52 595	5968·81	·00	1910·54	·00	+·04	+·03							
	52 597	6001·06	·00	3980·35	·00	+·36	+·32							
	53 546	6608·10	·00	5012·90	·00	−·03	+·20							
	Eros	4209·69	·00	4206·53	·00	...	...							
October 27	52 580	1478·62	·00	3820·83	·00	−·19	−·09	116	3003·13	·00	4473·87	·00	−·04	−·01
5201	53 525	1770·22	·00	6543·42	·00	−·77*	+·07*	120	3529·95	·00	4201·80	·00	−·12	−·05
	52 581	2275·80	·00	4286·08	·00	−·18	−·13	127	4052·98	·00	3027·90	·00	+·03	−·09
	52 585	3037·14	·00	4436·01	·00	+·27	−·18	129	4268·94	·00	5308·38	·00	·00	+·03
	52 587	3549·31	·00	2707·13	·00	+·05	−·09	130	4700·57	·00	3361·11	·00	−·05	−·01
	53 532	3677·50	·00	5555·75	·00	−·15	+·30	132	5257·29	·00	4964·48	·00	−·08	+·16
	52 592	4741·87	·00	1900·18	·00	+·13	−·25							
	53 539	4965·07	·00	7216·59	·00	+·27	−·06					Mean	−·04	+·01
	53 540	5142·21	·00	6022·13	·00	−·03	+·09							
	52 595	5966·67	·00	1906·18	·00	+·20	−·12							
	52 597	6000·52	·00	3975·87	·00	+·30	+·27							
	53 546	6608·02	·00	5007·99	·00	+·15	+·17							
	Eros	4195·02	·00	4213·73	·00	...	...							
October 27	52 580	1469·32	−·02	3817·83	−·01	−·06	−·10	116	2994·12	·00	4469·61	·00	−·07	−·07
5202	53 525	1762·41	−·02	6539·91	·00	−·52*	+·14*	120	3520·64	·00	4196·82	·00	−·12	+·19
	52 581	2266·72	−·01	4282·33	·00	−·14	−·10	127	4042·67	·00	3022·76	·00	+·21	−·06
	52 585	3028·01	·00	4431·57	·00	+·31	−·10	129	4260·23	·00	5303·02	·00	−·06	−·05
	52 587	3539·14	·00	2702·37	·00	−·03	·00	130	4690·38	·00	3355·35	·00	+·09	+·09
	53 532	3668·86	·00	5550·90	·00	−·04	+·19	132	5248·00	·00	4958·40	·00	+·04	+·04
	52 592	4731·08	−·01	1894·49	−·01	−·05	−·19							
	53 539	4957·48	−·02	7210·57	−·02	+·09	−·16					Mean	+·02	+·02
	53 540	5133·81	−·01	6015·91	−·01	−·15	+·11							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 27	52 595	5955·47	−·01	1899·45	·00	+·21	−·01							
5202—*contd.*	52 597	5990·46	−·01	3969·23	·00	+·41	+·12							
	53 546	6598·73	−·02	5000·73	−·01	+·01	+·07							
	Eros	3964·48	·00	4361·73	·00	...	...							
October 27	52 580	1467·81	−·02	3818·04	−·01	−·10	−·22	116	2992·46	−·01	4469·82	·00	−·15	−·03
5203	53 525	1760·47	−·02	6539·96	−·01	−·69*	+·12*	120	3518·86	·00	4197·24	·00	−·07	+·10
	52 581	2264·94	−·01	4282·58	−·01	−·05	−·18	127	4041·42	·00	3023·24	·00	−·04	−·11
	52 585	3026·23	·00	4431·94	·00	+·34	−·21	129	4258·34	·00	5303·38	·00	−·15	−·03
	52 587	3537·68	−·01	2702·78	−·01	+·02	−·02	130	4688·96	·00	3355·93	·00	−·08	+·01
	53 532	3666·88	·00	5551·18	·00	−·05	+·21	132	5246·18	−·01	4958·83	−·01	−·08	+·11
	52 592	4729·62	−·01	1894·98	−·01	+·11	−·11							
	53 539	4955·21	−·02	7211·00	−·02	−·01	−·21					Mean	−·10	+·01
	53 540	5131·69	−·01	6016·29	−·01	−·17	+·19							
	52 595	5953·99	−·01	1900·14	−·01	+·34	+·01							
	52 597	5988·73	−·01	3969·84	·00	+·39	+·14							
	53 546	6596·82	−·02	5001·22	−·01	−·07	+·25							
	Eros	3944·43	·00	4374·55	·00	...	...							
October 28	52 580	1974·77	−·02	3084·04	−·02	+·01	+·21	114	2825·27	−·01	3886·49	·00	+·05	+·03
5204	53 525	2258·94	−·01	5807·18	·00	−·23	+·14	115	3359·04	·00	5688·43	·00	+·22	+·03
	52 581	2770·73	−·01	3551·06	−·01	−·18	+·20	116	3497·39	·00	3740·78	·00	+·02	+·08
	52 585	3531·49	·00	3703·06	·00	+·27	−·17	117	3526·18	·00	5743·38	·00	+·03	+·01
	52 587	4048·29	−·01	1975·48	−·01	−·22	−·11	120	4024·82	·00	3469·98	·00	−·13	+·01
	53 532	4168·79	·00	4824·22	·00	−·15	+·26	127	4550·98	−·01	2297·33	−·01	−·16†	−·02†
	53 539	5451·76	−·02	6488·03	−·02	+·20	−·29	129	4760·70	·00	4578·26	·00	+·05	·00
	53 540	5631·84	−·01	5293·98	−·01	+·08	+·03	130	5197·45	·00	2632·24	·00	−·11†	−·14†
	52 597	6495·46	−·02	3250·10	−·01	+·29	−·02	132	5749·65	−·01	4236·77	·00	+·09†	+·05†
	53 546	7100·31	−·03	4283·67	−·01	−·03	−·22							
	Eros	3523·20	·00	4325·01	·00	...	...					Mean	+·04	+·03
October 29	53 519	2479·36	+·02	5379·49	−·01	+·02	−·11	108	1540·46	+·03	4938·64	−·02	−·22†	+·03†
5205	53 521	2538·45	+·01	3879·48	·00	−·09	−·11	111	2598·96	+·02	6269·24	−·02	−·07†	+·10†
	52 576	2582·69	+·01	2703·43	·00	−·10	+·02	112	2735·28	+·01	4381·65	·00	−·03	−·04
	52 580	3373·85	·00	2420·81	·00	+·09	+·09	113	3411·42	·00	4435·42	·00	+·04	−·03
	53 525	3633·46	·00	5146·27	·00	−·25	+·18	114	4217·01	·00	3231·27	·00	+·08	−·01
	52 581	4165·35	·00	2895·51	·00	+·06	+·04	115	4734·75	·00	5038·29	·00	−·04	−·09
	52 585	4924·99	+·01	3054·62	−·01	+·20	−·11	116	4890·52	+·01	3092·10	·00	−·04	+·01
	52 587	5457·27	+·03	1331·86	−·03	−·10	+·09	117	4901·17	·00	5094·74	·00	−·04	+·04
	53 532	5551·80	+·01	4182·04	·00	+·08	+·15	120	5420·24	+·01	2826·19	−·01	−·04†	+·15†
	53 539	6820·07	+·02	5858·06	−·01	+·07	−·25	129	6146·41	+·02	3941·71	−·01	−·19†	−·04†
	Eros	4422·57	·00	4019·96	·00	...	...					Mean	−·01	−·02
October 29	53 519	2487·11	+·01	5380·45	−·01	+·18	−·07	108	1548·40	+·03	4939·31	−·01	−·06†	−·04†
5206	53 521	2547·15	+·01	3880·48	·00	−·13	−·15	111	2606·39	+·02	6270·36	−·02	−·02†	+·06†
	52 576	2591·93	+·01	2704·48	·00	−·11	−·08	112	2743·67	+·01	4382·78	·00	−·01	−·10
	52 580	3383·21	·00	2422·16	·00	+·14	−·01	113	3419·76	·00	4436·81	·00	+·11	−·06
	53 525	3641·58	·00	5147·85	·00	−·28	+·07	114	4226·08	·00	3232·71	·00	+·06	+·18

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
October 29	52 581	4174·72	·00	2897·05	·00	−·11	+·10	115	4743·03	·00	5040·00	·00	−·15	+·12
5206—*contd.*	52 585	4934·07	·00	3056·45	·00	+·28	−·02	116	4899·66	·00	3094·04	·00	−·05	−·03
	52 587	5467·34	+·02	1333·86	−·02	−·15	+·15	117	4909·28	·00	5096·71	·00	+·01	+·06
	53 532	5560·50	+·01	4184·12	·00	+·01	+·28	120	5429·59	+·01	2828·25	−·01	−·10†	+·20†
	53 539	6827·81	+·02	5860·84	·00	+·18	−·22	129	6155·06	+·01	3944·03	−·01	−·07†	+·09†
	Eros	4413·91	·00	4034·07	·00	...	...					Mean	−·01	+·03
October 31	53 497	1405·30	−·02	4614·74	−·01	−·06	+·04	108	3532·05	·00	3843·04	·00	+·11	·00
5207	52 563	1637·93	−·04	2079·71	−·03	+·13	−·25	111	4571·97	·00	5187·67	·00	+·13	−·07
	53 501	1673·85	−·02	3950·11	−·01	+·04	−·22	112	4734·58	·00	3301·78	·00	+·10	+·13
	53 507	2877·47	−·01	5437·81	·00	−·39	+·15	113	5410·19	−·01	3364·59	·00	−·13	+·11
	54 530	3626·25	−·02	7491·62	−·02	+·53	+·28	114	6232·56	−·01	2171·38	·00	−·09	−·13
	53 521	4544·99	·00	2797·15	·00	−·23	−·16	115	6724·93	−·02	3985·08	−·01	·00	+·03
	52 576	4605·16	−·01	1621·84	−·01	+·16	−·16	117	6890·66	−·02	4043·84	−·01	−·07	+·08
	53 525	5622·10	−·01	4078·52	·00	−·18	+·03							
	52 581	6185·67	−·01	1834·95	−·01	−·22	−·24					Mean	+·01	+·02
	54 554	6783·16	−·05	7163·73	−·04	+·24*	+·56*							
	Eros	3976·73	·00	4326·17	·00	...	...							
October 31	53 497	1408·57	−·03	4617·61	−·01	−·19	+·22	108	3534·58	·00	3844·80	·00	+·20	−·01
5208	52 563	1639·69	−·05	2082·61	−·04	+·18	−·12	111	4575·43	·00	5188·71	·00	−·05	−·08
	53 501	1676·68	−·03	3952·97	−·01	−·01	−·18	112	4737·05	·00	3302·93	·00	−·06	+·03
	53 507	2880·70	−·01	5439·90	·00	−·11	+·16	113	5412·39	−·01	3365·35	·00	−·02	−·02
	53 521	4547·04	·00	2798·34	·00	−·19	−·13	114	6234·22	−·01	2171·54	−·01	−·09	−·10
	52 576	4606·60	−·01	1623·13	−·01	+·20	−·21	115	6727·57	−·02	3985·00	−·01	−·01	−·10
	53 525	5624·81	−·01	4079·01	·00	−·16	+·03	117	6893·18	−·02	4043·78	−·01	+·04	−·17
	52 581	6187·16	−·01	1835·30	−·01	−·16	−·32							
	54 554	6787·27	−·06	7163·35	−·05	+·42*	+·56*					Mean	·00	−·06
	Eros	3960·87	·00	4335·60	·00	...	...							
November 6	53 453	2434·56	+·01	3630·07	·00	−·07	+·12	95	3272·99	·00	3116·50	·00	+·01	−·01
5209	54 469	3272·08	+·01	6814·60	−·01	−·02	−·13	96	3985·97	·00	5058·56	·00	+·20	+·10
	53 459	3346·71	·00	2650·20	·00	+·13	+·01	99	4158·40	+·01	1637·82	−·01	(·00)	(·00)
	54 470	3428·70	+·01	6111·16	−·01	−·07	−·21							
	53 470	4220·98	·00	3447·34	·00	+·09	+·29					Mean	(+·10)	(+·05)
	54 483	4845·76	·00	5470·73	·00	+·16	−·19							
	53 474	4987·94	+·01	2258·44	−·01	+ 05	+·18							
	54 494	5626·13	+·01	6225·53	·00	+·01	−·20							
	53 486	5853·39	+·01	3400·00	·00	−·10	+·09							
	54 497	5938·90	+·01	5405·20	·00	−·20	+·06							
	Eros	4450·39	·00	4143·20	·00	...	...							
November 7	54 452	1618·22	−·03	4085·64	−·02	−·03	−·06	88	1227·43	−·04	4309·70	−·02	+·25†	+·25†
5210	54 457	2244·31	−·02	4697·65	−·01	+·17	+·01	90	1750·39	−·04	2953·87	−·03	+·30†	+·03†
	53 451	2695·97	−·02	2462·49	−·02	+·12	+·15	92	2388·83	−·01	3976·32	−·01	+·18	−·14
	53 453	3530·10	·00	3525·12	·00	−·10	+·28	93	2464·04	−·01	4615·91	−·01	+·29	+·07
	54 469	4346·12	−·02	6714·48	−·02	+·05	−·38	94	3322·51	·00	5024·85	·00	−·01	+·04

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 7	53 459	4448·61	−·01	2551·06	−·01	+·10	−·02	95	4371·60	·00	3016·77	·00	+·09	+·09
5210—*contd.*	54 470	4507·31	−·01	6012·07	−·01	+·09	−·42	96	5072·08	·00	4962·80	−·01	−·27	+·13
	53 470	5317·66	·00	3353·23	·00	−·16	+·30	98	5252·85	·00	3643·31	·00	−·13	·00
	54 483	5928·98	−·02	5379·84	−·02	−·21	+·06							
	53 474	6092·28	−·01	2169·18	−·01	−·02	+·12					Mean	+·03	+·03
	Eros	3930·39	·00	4245·07	·00	...	...							
November 7	54 452	1613·92	−·04	4085·53	−·03	+·03	−·07	88	1223·43	−·04	4309·67	−·03	−·04†	+·08†
5211	54 457	2239·90	−·01	4697·45	−·01	+·13	+·02	90	1746·80	−·05	2953·84	−·04	−·02†	+·14†
	53 451	2692·32	−·03	2462·69	−·04	−·05	+·18	92	2384·89	−·02	3976·11	−·02	−·14	+·01
	53 453	3526·01	−·01	3525·35	−·01	−·19	+·15	93	2459·85	−·01	4616·03	−·01	+·03	−·21
	54 469	4340·84	−·02	6714·27	−·03	+·13	−·55	94	3317·65	·00	5024·80	·00	+·22	−·07
	53 459	4444·70	−·01	2551·37	−·01	+·05	+·01	95	4367·73	·00	3017·19	−·01	−·12	−·08
	54 470	4502·27	−·02	6011·90	−·02	+·13	−·49	96	5067·04	−·01	4963·11	−·01	+·06	−·23
	53 470	5313·26	·00	3353·29	·00	−·02	+·52	98	5248·24	·00	3643·51	·00	+·14	+·01
	54 483	5923·94	−·02	5379·93	−·03	−·06	−·07							
	53 474	6088·44	−·01	2169·52	−·01	−·12	+·30					Mean	+·03	−·10
	Eros	3892·03	·00	4246·00	·00	...	...							
November 9	53 437	2384·93	+·01	1262·44	·00	+·08	−·12	86	2758·71	·00	3034·92	·00	−·07†	−·02†
5212	54 444	2997·59	+·01	5638·18	−·01	−·12	−·10	87	3060·25	·00	5029·27	·00	−·01	−·02
	53 440	3138·98	·00	3699·04	·00	+·01	−·21	88	3386·13	·00	4144·11	·00	+·03	−·08
	55 484	3333·09	+·02	7569·23	−·02	−·17*	+·35*	90	3929·38	·00	2796·26	·00	−·03	−·08
	54 448	3336·35	·00	5235·96	·00	+·32	−·05	92	4552·41	·00	3828·43	·00	+·04	−·08
	54 452	3779·83	·00	3925·95	·00	+·12	−·18	93	4618·20	·00	4469·43	·00	−·08	−·07
	54 453	3963·54	+·01	7049·48	−·01	+·02	−·01	94	5470·21	·00	4891·71	·00	·00	−·05
	54 457	4396·71	·00	4547·62	·00	+·36	−·05							
	53 451	4882·07	+·01	2319·39	−·01	−·05	+·14					Mean	−·01	−·06
	53 453	5700·25	+·01	3395·08	·00	−·17	+·19							
	54 469	6468·87	+·02	6597·32	·00	−·14	−·33							
	53 459	6633·57	+·02	2434·98	−·01	−·10	+·09							
	54 470	6640·34	+·02	5897·33	·00	+·13	−·32							
	53 470	7490·62	+·03	3250·47	−·01	−·19*	+·67*							
	Eros	4448·81	·00	4188·20	·00	...	...							
November 9	53 437	2377·49	+·01	1233·48	·00	+·20	−·22	81	1909·02	·00	4851·74	·00	+·15†	+·06†
5213	54 444	3011·43	·00	5605·96	·00	−·15	+·06	86	2759·85	·00	3004·01	·00	+·02†	−·03†
	53 440	3143·36	·00	3665·99	·00	+·09	+·07	87	3071·05	·00	4996·86	·00	+·07	−·01
	54 448	3348·30	·00	5202·27	·00	+·25	−·10	88	3392·82	·00	4110·12	·00	−·06	−·09
	55 484	3356·07	+·01	7535·72	·00	−·01*	+·14*	90	3929·51	·00	2759·38	·00	−·03	+·11
	54 452	3785·50	·00	3889·85	·00	+·04	−·01	92	4557·51	·00	3788·61	·00	+·09	−·01
	54 453	3984·13	+·01	7012·61	·00	+·06	+·03	93	4626·28	·00	4429·36	·00	+·09	−·08
	54 457	4405·53	·00	4508·61	·00	+·14	+·01	94	5480·45	·00	4847·45	·00	+·07	−·05
	53 451	4879·98	·00	2278·00	·00	−·09	+·17							
	53 453	5703·42	·00	3349·81	·00	−·24	+·08					Mean	+·04	−·02
	54 469	6487·34	+·01	6548·15	·00	−·03	−·32							
	53 459	6631·92	+·01	2385·18	·00	+·06	−·09							
	53 470	7493·07	+·02	3196·67	·00	−·16*	+·27*							
	Eros	4398·26	·00	4152·10	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″			″	″	″	″	″
November 9 5214	53 437	2395·88	·00	1284·20	·00	+·41	−·07	81	1911·08	·00	4900·21	·00	+·18†	+·35†
	54 444	3009·94	·00	5659·86	·00	+·09	−·05	86	2770·47	·00	3056·40	·00	·00†	+·14†
	53 440	3151·06	·00	3720·31	·00	−·01	+·10	87	3072·53	·00	5050·68	·00	+·14	+·16
	55 484	3345·91	·00	7591·34	·00	+·15*	−·10*	88	3398·35	·00	4165·29	·00	+·04	+·17
	54 448	3348·94	·00	5257·46	·00	+·23	+·02	90	3941·34	·00	2817·18	·00	−·03	+·14
	54 452	3792·50	·00	3947·14	·00	−·33	−·05	92	4564·73	·00	3849·05	·00	+·06	+·22
	54 453	3976·73	·00	7070·97	·00	−·06	−·13	93	4630·74	·00	4490·03	·00	−·09	+·24
	54 457	4409·69	·00	4568·57	·00	−·14	+·09	94	5482·86	·00	4912·17	·00	+·13	+·06
	53 451	4894·06	·00	2340·16	·00	−·09	+·17							
	53 453	5712·67	·00	3415·54	·00	−·21	+·23					Mean	+·04	+·17
	54 469	6481·98	·00	6617·36	·00	+·13	−·07							
	53 459	6645·59	·00	2455·16	·00	+·16	−·02							
	54 470	6653·59	·00	5917·46	·00	+·09	−·25							
	53 470	7503·30	·00	3270·59	·00	−·23*	+·29*							
	Eros	4251·07	·00	4215·02	·00	...	...							
November 9 5215	53 437	2390·52	−·02	1285·35	−·01	+·06	+·10	81	1904·88	−·01	4901·74	·00	+·01†	+·01†
	54 444	3003·57	·00	5661·13	·00	−·20	−·01	86	2764·55	·00	3057·93	·00	−·18†	−·06†
	53 440	3144·79	·00	3721·73	·00	−·02	+·05	87	3066·10	·00	5052·34	·00	+·04	−·17
	55 484	3339·13	−·01	7592·77	·00	−·15*	−·23*	88	3392·06	·00	4166·87	·00	−·06	−·02
	54 448	3342·42	·00	5258·83	·00	+·13	+·01	90	3935·14	·00	2818·93	·00	−·01	−·13
	54 452	3785·75	·00	3948·51	·00	+·02	+·02	92	4558·49	·00	3850·76	·00	−·15	+·06
	54 457	4402·94	·00	4570·07	·00	+·02	+·10	93	4624·29	·00	4492·01	·00	−·23	−·20
	53 451	4887·84	·00	2341·82	·00	−·06	+·13	94	5476·42	·00	4913·91	·00	−·20	−·04
	53 453	5706·11	·00	3417·18	·00	−·15	+·29							
	54 469	6474·58	−·02	6619·27	−·01	+·29	−·24					Mean	−·10	−·08
	53 459	6639·14	−·01	2457·17	·00	+·19	−·19							
	54 470	6646·56	−·02	5919·20	−·01	+·02	−·21							
	53 470	7496·43	−·02	3272·59	·00	−·02*	+·23*							
	Eros	4059·62	·00	4208·98	·00	...	...							
November 9 5216	53 437	2405·92	−·06	1299·40	−·06	+·63	+·02	81	1919·09	−·02	4915·09	−·01	−·05†	−·13†
	54 444	3017·06	−·01	5674·40	·00	−·16	−·14	86	2779·34	−·02	3071·59	−·01	−·02†	−·06†
	53 440	3159·45	·00	3735·43	·00	−·16	−·10	87	3080·10	·00	5065·53	·00	−·14	−·06
	55 484	3351·61	−·02	7605·31	−·03	−·20*	+·03*	88	3406·34	·00	4180·59	·00	−·11	−·24
	54 448	3356·17	·00	5272·11	·00	+·05	−·01	90	3950·03	−·01	2832·92	−·01	−·07	−·30
	54 452	3800·43	·00	3962·28	·00	−·38	−·19	92	4572·70	·00	3864·59	·00	−·20	−·10
	54 453	3982·57	−·02	7085·11	−·03	−·37	+·09	93	4638·04	·00	4505·18	·00	−·16	+·18
	54 457	4416·98	·00	4583·58	·00	−·20	+·09	94	5489·68	−·01	4927·40	·00	−·05	+·02
	53 451	4904·88	−·01	2355·92	−·01	−·19	+·01							
	53 453	5719·99	−·01	3431·24	·00	+·14	+·07					Mean	−·12	−·08
	54 469	6487·19	−·07	6632·43	−·05	·00	−·13							
	53 459	6653·39	−·02	2471·03	−·01	+·43	+·06							
	54 470	6658·85	−·05	5932·46	−·04	+·38	−·05							
	53 470	7510·10	−·04	3286·48	−·02	+·19*	+·37*							
	Eros	3948·49	·00	4211·81	·00	...	...							
November 9 5217	53 437	2401·89	−·07	1284·14	−·07	+·48	+·01	81	1916·74	−·02	4899·65	−·01	·00†	+·01†
	54 444	3014·95	−·01	5658·22	−·01	+·01	−·07	86	2776·16	−·02	3055·87	−·02	−·12†	−·03†
	53 440	3156·49	−·01	3719·21	−·01	−·14	+·11	87	3077·91	·00	5049·52	·00	−·20	−·14

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O. x.	Residuals. C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 9 5217—*contd.*	55 484	3350·64	−·03	7588·69	−·04	−·16*	+·13*	88	3403·61	·00	4164·14	·00	−·11	−·01
	54 448	3353·97	·00	5255·93	·00	+·11	−·12	90	3946·66	−·01	2816·19	−·01	−·14	−·01
	54 452	3797·48	·00	3945·63	·00	−·28	·00	92	4569·77	·00	3847·73	·00	−·21	−·20
	54 453	3981·15	−·03	7068·40	−·04	−·19	−·10	93	4635·47	·00	4488·30	·00	−·20	·00
	54 457	4414·18	·00	4566·82	·00	+·05	−·07	94	5487·36	−·01	4909·73	−·01	−·15	+·02
	53 451	4899·09	−·01	2338·79	−·01	−·13	+·12							
	53 453	5717·20	−·01	3413·46	·00	−·27	+·18					Mean	−·17	−·06
	54 469	6485·52	−·07	6613·97	−·07	+·10	−·18							
	53 459	6649·80	−·02	2453·00	−·01	+·28	−·09							
	54 470	6657·03	−·06	5914·06	−·05	+·27	−·19							
	53 470	7506·91	−·04	3267·66	−·03	+·03*	+·35*							
	Eros	3923·96	·00	4913·15	·00	...	...							
November 10 5218	54 424	1332·82	+·03	6179·33	−·02	+·27	+·07	77	1984·80	+·02	4579·78	·00	−·04†	−·12†
	53 428	1483·06	+·02	3433·23	·00	−·30	+·11	80	2761·03	·00	2959·41	·00	+·01†	−·01†
	54 429	1840·36	+·03	6937·44	−·02	−·11*	+·19*	81	2949·37	+·01	4907·74	·00	−·02	−·01
	53 437	3460·17	+·01	1295·33	−·01	+·26	−·18	86	3821·62	·00	3070·25	·00	+·08	·00
	53 439	3608·65	·00	2989·87	·00	+·09	+·05	87	4109·36	·00	5066·55	·00	+·02	+·08
	54 444	4042·46	·00	5675·06	·00	−·11	−·10	88	4441·64	·00	4183·82	·00	−·20	−·11
	53 440	4197·17	·00	3736·89	·00	+·28	−·11	90	4993·92	+·01	2839·57	·00	+·11	+·10
	55 484	4364·59	+·01	7608·58	−·01	−·25*	+·18*	92	5609·93	+·01	3876·14	·00	·00	+·06
	54 448	4384·13	·00	5275·40	·00	+·20	−·21	93	5671·05	+·01	4517·54	·00	+·09	+·09
	54 452	4836·82	·00	3968·36	·00	−·08	−·19	94	6520·33	+·01	4945·80	·00	−·04†	+·11†
	54 453	4998·79	+·01	7093·06	−·01	−·20	+·03							
	54 457	5449·42	+·01	4594·29	·00	+·09	−·03					Mean	+·01	+·03
	53 451	5950·10	+·02	2369·45	−·01	−·11	+·16							
	53 453	6760·85	+·02	3450·90	−·01	−·26	+·15							
	53 459	7700·34	+·04	2497·24	−·02	+·40*	+·06*							
	Eros	4435·76	·00	4198·83	·00	...	...							
November 10 5219	54 424	1409·51	+·03	6170·12	−·01	+·01	+·14	77	2062·59	+·01	4571·19	·00	+·12†	−·12†
	53 428	1562·02	+·02	3424·27	·00	−·21	+·01	80	2840·38	·00	2951·59	·00	+·16†	−·10†
	54 429	1916·03	+·03	6928·71	−·02	−·05*	+·25*	81	3026·93	+·01	4900·22	·00	+·09	−·19
	53 437	3541·17	+·01	1288·07	·00	+·40	−·22	86	3900·89	·00	3063·40	·00	+·25	−·09
	54 444	4119·33	·00	5668·27	·00	+·02	+·01	87	4186·87	·00	5060·18	·00	+·06	−·19
	53 440	4276·10	·00	3730·34	·00	+·20	−·15	88	4519·71	·00	4177·34	·00	+·13	+·02
	55 484	4439·61	+·01	7602·30	−·01	−·11*	+·11*	90	5073·79	+·01	2833·88	·00	−·07	−·09
	54 448	4461·44	·00	5268·77	·00	+·27	+·04	92	5688·61	+·01	3871·09	·00	+·04	−·19
	54 452	4915·26	·00	3962·34	·00	+·12	−·17	93	5749·35	·00	4512·52	·00	−·09	−·13
	54 453	5074·36	+·01	7087·30	−·01	−·10	+·01	94	6598·08	+·02	4941·69	·00	−·06†	−·24†
	54 457	5527·48	·00	4588·83	·00	+·09	+·01							
	53 451	6030·40	+·01	2364·51	−·01	−·22	+·08					Mean	+·06	−·12
	53 453	6839·96	+·02	3446·64	−·01	−·18	+·16							
	Eros	4495·02	·00	4192·57	·00	...	...							
November 10 5220	54 424	1349·73	+·02	6175·88	−·01	+·05	+·17	77	2002·62	+·01	4576·75	·00	−·10†	−·09†
	53 428	1501·48	+·01	3429·92	·00	−·18	+·10	80	2779·81	·00	2956·91	·00	+·13†	−·09†
	54 429	1856·61	+·02	6934·39	−·01	−·15*	+·18*	81	2967·10	·00	4905·37	·00	−·14	−·07
	53 437	3480·17	+·01	1293·14	·00	+·35	−·20	86	3840·43	·00	3068·19	·00	+·16	+·11

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 10	54 444	4059·56	·00	5673·26	·00	−·01	−·07	87	4126·78	·00	5064·88	·00	+·17	·00
5220—*contd.*	53 440	4215·71	·00	3735·11	·00	+·25	−·06	88	4459·56	·00	4182·44	·00	+·06	−·29
	55 484	4380·51	+·01	7607·07	−·01	−·26*	+·15*	90	5013·14	·00	2838·31	·00	+·01	+·10
	54 448	4401·48	·00	5273·86	·00	+·32	−·25	92	5628·32	·00	3875·38	·00	+·06	−·07
	54 452	4855·11	·00	3966·91	·00	+·01	−·08	93	5689·12	·00	4516·74	·00	+·05	+·06
	54 453	5015·10	+·01	7092·06	·00	−·22	−·15	94	6538·09	+·01	4945·54	·00	−·01†	+·05†
	54 457	5467·31	·00	4593·40	·00	+·20	−·10							
	53 451	5969·52	+·01	2368·68	−·01	−·01	+·22					Mean	+·05	−·02
	53 453	6779·65	+·02	3450·59	·00	−·21	+·25							
	Eros	4417·80	·00	4197·25	·00	...	...							
November 10	54 424	1345·17	·00	6222·38	·00	+·33	+·19	77	1996·65	·00	4622·00	·00	+·20†	+·39†
5222	53 428	1494·25	·00	3475·82	·00	+·14	+·53	80	2772·37	·00	2701·54	·00	−·25†	−·02†
	54 429	1852·86	·00	6980·88	·00	+·09*	−·27*	81	2961·54	·00	4949·93	·00	+·15	+·12
	53 437	3471·29	·00	1337·34	·00	+·49	−·15	86	3833·65	·00	3111·93	·00	+·01	+·18
	54 444	4055·18	·00	5717·03	·00	−·11	−·12	87	4122·02	·00	5108·36	·00	−·05	+·08
	53 440	4209·80	·00	3778·44	·00	−·17	+·14	88	4453·99	·00	4225·23	·00	−·17	+·12
	55 484	4377·56	·00	7650·82	·00	+·11*	−·17*	90	5006·19	·00	2880·97	·00	−·07	+·04
	54 448	4397·04	·00	5317·05	·00	−·05	−·08	92	5622·40	·00	3917·06	·00	+·02	+·25
	54 452	4849·27	·00	4009·56	·00	−·18	+·15	93	5683·65	·00	4558·62	·00	+·19	+·12
	54 453	5012·14	·00	7135·02	·00	−·26	−·34	94	6533·23	·00	4986·53	·00	+·01†	+·12†
	54 457	5462·25	·00	4635·46	·00	−·11	+·09							
	53 451	5962·23	·00	2410·44	·00	−·16	+·15					Mean	+·01	+·13
	53 453	6773·23	·00	3491·46	·00	−·11	+·27							
	53 459	7712·97	·00	2537·61	·00	+·18*	−·09*							
	Eros	4215·48	·00	4234·23	·00	...	...							
November 10	54 424	1361·59	·00	6219·66	·00	+·04	+·28	77	2013·45	·00	4619·64	·00	−·02†	+·32†
5223	53 428	1511·35	·00	3473·42	·00	−·07	+·32	80	2789·77	·00	2999·28	·00	+·04†	+·22†
	54 429	1868·98	·00	6977·96	·00	−·08*	+·15*	81	2978·21	·00	4947·79	·00	−·02	+·09
	53 437	3488·89	·00	1335·26	·00	+·34	−·14	86	3850·76	·00	3110·11	·00	−·13	+·07
	54 444	4071·39	·00	5715·10	·00	−·07	−·09	87	4138·43	·00	5106·48	·00	−·03	+·11
	53 440	4226·49	·00	3776·78	·00	−·08	−·05	88	4470·59	·00	4223·67	·00	−·09	−·09
	55 484	4393·48	·00	7648·84	·00	−·09*	·00*	90	5023·08	·00	2879·42	·00	+·07	−·03
	54 448	4413·45	·00	5315·19	·00	−·11	−·02	92	5638·96	·00	3915·69	·00	+·21	+·15
	54 452	4865·98	·00	4008·02	·00	−·17	+·01	93	5700·27	·00	4557·39	·00	+·13	−·09
	54 453	5027·89	·00	7133·12	·00	−·15	−·08	94	6549·52	·00	4985·35	·00	+·17†	+·09†
	54 457	5478·62	·00	4633·93	·00	+·06	+·11							
	53 451	5979·38	·00	2409·14	·00	−·18	+·07					Mean	+·02	+·03
	53 453	6789·99	·00	3490·39	·00	−·03	+·17							
	53 459	7729·43	·00	2537·09	·00	+·80*	−·48*							
	Eros	4216·11	·00	4231·28	·00	...	...							
November 11	54 413	806·21	+·02	3962·90	·00	−·17	−·13	72	2450·27	+·01	4675·28	·00	+·01†	−·03†
5226	53 419	867·34	+·02	2017·64	·00	−·35*	−·15*	74	2774·04	+·01	3283·87	·00	+·11†	−·04†
	54 424	2419·09	+·01	6253·63	−·01	+·19	+·05	77	3078·73	·00	4657·29	·00	+·16	−·09
	53 428	2582·76	+·01	3508·47	·00	−·09	+·06	80	3863·14	·00	3040·73	·00	+·07	+·10
	54 429	2922·68	+·01	7014·12	−·01	−·07	+·27	81	4041·54	·00	4990·01	·00	+·26	+·03
	53 437	4570·42	+·01	1380·27	−·01	+·57	−·17	86	4923·41	·00	3156·87	·00	−·05	+·02

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O. x.	Residuals. C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 11	54 444	5130·95	·00	5762·68	·00	+·05	+·07	87	5200·99	·00	5154·79	·00	+·06	−·09
5226—*contd.*	53 440	5295·51	·00	3825·27	·00	+·23	+·05	88	5537·52	·00	4273·33	·00	+·03	+·08
	54 448	5474·74	·00	5364·79	·00	+·25	−·13							
	54 452	5934·03	+·01	4060·01	·00	−·05	−·13					Mean	+·09	+·01
	54 453	6080·28	+·01	7185·71	−·01	−·08*	·00*							
	54 457	6543·68	+·01	4688·82	·00	−·01	+·22							
	53 451	7055·64	+·02	2466·44	−·01	−·25	+·31							
	Eros	4438·32	·00	4191·94	·00	...	...							
November 11	54 413	809·44	+·02	3961·76	·00	−·20	−·10	72	2451·46	+·01	4678·89	·00	·00†	−·11†
5227	53 419	876·16	+·02	2016·93	·00	−·45*	−·41*	74	2779·37	+·01	3288·33	·00	−·07†	−·07†
	54 424	2415·65	+·01	6257·00	−·01	+·34	+·15	77	3080·12	·00	4662·62	·00	+·02	−·11
	53 428	2587·25	+·01	3512·35	·00	−·05	+·06	80	3868·97	·00	3048·47	·00	+·11	−·14
	54 429	2917·19	+·01	7018·91	−·01	−·01	+·37	81	4042·02	·00	4998·15	·00	+·11	−·07
	53 437	4581·11	+·01	1389·86	−·01	+·50	−·27	86	4928·87	·00	3167·56	·00	+·06	−·18
	54 444	5129·20	·00	5773·77	·00	−·03	+·09	87	5200·90	·00	5166·01	·00	+·05	·00
	53 440	5299·42	·00	3837·03	·00	+·01	−·14	88	5539·86	·00	4285·63	·00	+·09	+·03
	54 448	5474·11	·00	5376·88	·00	+·20	−·13							
	54 452	5936·97	+·01	4073·25	·00	+·03	−·01					Mean	+·07	−·08
	54 453	6074·53	+·01	7199·27	·00	−·19*	+·25*							
	54 457	6544·98	+·01	4703·97	·00	−·06	+·16							
	53 451	7062·80	+·02	2483·06	−·01	+·17	+·19							
	Eros	4423·24	·00	4199·94	·00	...	...							
November 11	54 413	810·55	+·02	3963·16	·00	−·44	−·21	72	2452·47	·00	4679·71	·00	+·01†	+·03†
5228	53 419	876·71	+·02	2018·25	·00	−·43*	−·46*	74	2780·00	·00	3289·33	·00	+·11†	−·18†
	54 424	2417·05	+·01	6257·97	·00	+·21	+·19	77	3081·13	·00	4663·41	·00	+·03	−·05
	53 428	2588·01	+·01	3513·39	·00	+·02	−·01	80	3869·60	·00	3049·04	·00	+·27	−·04
	54 429	2918·89	+·01	7019·82	−·01	−·30	+·38	81	4043·01	·00	4998·70	·00	+·22	+·04
	53 437	4581·50	+·01	1390·37	·00	+·64	−·22	86	4929·71	·00	3167·97	·00	+·03	−·11
	54 444	5130·34	·00	5774·19	·00	+·07	+·17	87	5202·16	·00	5166·35	·00	−·07	+·14
	53 440	5300·28	·00	3837·18	·00	+·10	+·14	88	5540·97	·00	4285·98	·00	−·01	+·06
	54 448	5475·20	·00	5377·32	·00	+·30	−·15							
	54 452	5938·00	·00	4073·60	·00	−·01	−·04					Mean	+·08	+·01
	54 453	6076·09	+·01	7199·85	·00	−·24*	−·01*							
	54 457	6545·78	+·01	4704·15	·00	+·25	+·18							
	53 451	7063·67	+·02	2482·99	−·01	+·05	+·36							
	Eros	4406·20	·00	4199·39	·00	...	...							
November 11	54 413	803·55	·00	4017·12	·00	−·07	+·03	72	2446·00	·00	4733·45	·00	+·13†	+·15†
5229	53 419	869·44	·00	2071·97	·00	−·09*	·00*	74	2773·50	·00	3342·61	·00	+·05†	+·33†
	54 424	2410·68	·00	6312·08	·00	+·45	−·07	77	3074·92	·00	4716·93	·00	−·06	+·16
	53 428	2581·43	·00	3566·69	·00	+·04	+·51	80	3863·40	·00	3102·43	·00	−·03	+·15
	54 429	2912·65	·00	7074·07	·00	−·03	−·11	81	4037·23	·00	5052·18	·00	−·17	+·08
	53 437	4574·98	·00	1443·58	·00	+·43	−·04	86	4923·32	·00	3221·09	·00	+·03	+·12
	54 444	5124·48	·00	5827·77	·00	−·05	−·13	87	5196·12	·00	5219·63	·00	−·07	+·11
	53 440	5294·14	·00	3890·43	·00	−·06	+·14	88	5534·67	·00	4339·11	·00	+·13	+·14
	54 448	5469·43	·00	5430·43	·00	+·03	−·05							
	54 452	5932·01	·00	4126·68	·00	−·21	−·01					Mean	−·03	+·13

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 11	54 453	6070·41	·00	7253·24	·00	−·25*	−·31*							
5229—*contd.*	54 457	6540·16	·00	4757·12	·00	−·18	+·20							
	53 451	7057·15	·00	2536·16	·00	+·21	+·06							
	Eros	4256·22	·00	4240·38	·00	...	...							
November 13	54 393	1173·02	+·03	5047·54	−·01	+·02	−·08	67	3177·37	·00	4675·71	·00	+·04	+·05
5230	53 416	2829·10	+·01	1312·79	−·01	−·11	+·01	70	3645·49	·00	3967·77	·00	+·18	·00
	54 413	2909·62	·00	4326·04	·00	−·11	+·08	71	4321·85	·00	3004·05	·00	+·05	−·05
	53 419	3002·96	·00	2382·39	·00	−·07	+·02	72	4541·10	·00	5066·04	·00	+·25	−·03
	54 424	4483·89	+·01	6643·49	−·01	+·10	+·18	74	4888·32	·00	3680·40	·00	+·04	−·14
	53 428	4693·22	·00	3901·56	·00	−·07	+·14	77	5170·18	·00	5058·57	·00	−·05	−·03
	54 429	4974·68	+·01	7412·76	−·01	−·15*	+·04*	80	5981·32	+·01	3455·61	·00	−·01†	−·10†
	53 437	6716·27	+·03	1807·07	−·02	+·39*	−·29*	81	6127·69	+·01	5407·58	·00	−·33†	−·06†
	53 440	7400·57	+·01	4263·90	−·01	+·11	·00							
												Mean	+·09	+·03
	Eros	4473·88	·00	4229·70	·00	...	...							
November 13	54 393	1171·86	+·02	5046·79	−·01	+·02	−·01	67	3176·50	·00	4675·39	·00	−·15	−·20
5231	53 416	2828·46	+·01	1312·08	·00	−·12	+·06	70	3644·63	·00	3967·36	·00	+·07	−·13
	54 413	2908·44	·00	4325·54	·00	+·06	−·01	71	4320·95	·00	3003·51	·00	+·11	−·05
	53 419	3002·23	·00	2381·87	·00	−·12	−·11	72	4540·12	·00	5065·49	·00	+·16	+·05
	54 424	4482·68	+·01	6643·06	·00	+·06	+·17	74	4887·28	·00	3679·78	·00	+·19	−·01
	53 428	4692·35	·00	3901·13	·00	−·10	+·08	77	5169·12	·00	5058·08	·00	−·05	+·02
	54 429	4973·48	+·01	7412·25	−·01	−·28*	+·15*	80	5980·55	+·01	3455·05	·00	−·07†	+·04†
	53 437	6715·60	+·03	1806·71	−·01	+·47*	−·33*	81	6126·38	+·01	5407·26	·00	−·08†	−·10†
	53 440	7399·65	+·02	4263·45	−·01	+·15	+·13							
												Mean	+·06	−·05
	Eros	4452·89	·00	4226·05	·00	...	...							
November 13	54 393	1171·60	+·01	5047·24	−·01	+·18	−·24	67	3176·20	·00	4674·54	·00	−·05	−·07
5232	53 416	2826·82	+·01	1311·52	·00	−·22	+·02	70	3644·14	·00	3966·37	·00	+·05	−·09
	54 413	2908·16	·00	4325·00	·00	−·04	−·08	71	4320·09	·00	3002·24	·00	+·07	−·06
	53 419	3001·04	·00	2381·00	·00	−·18	−·02	72	4540·37	·00	5064·23	·00	−·07	−·06
	54 424	4483·31	+·01	6641·71	·00	+·15	+·16	74	4886·88	·00	3678·26	·00	−·01	−·03
	53 428	4691·84	·00	3899·50	·00	−·11	+·22	77	5169·25	·00	5056·48	·00	−·14	−·05
	54 429	4974·38	+·01	7410·72	−·01	−·10*	+·09*	80	5979·97	+·01	3453·11	·00	−·15†	−·10†
	53 437	6714·33	+·02	1804·13	−·01	+·34*	−·23*	81	6126·69	+·01	5405·09	·00	−·17†	−·07†
	53 440	7399·45	+·02	4260·67	·00	+·08	+·15							
												Mean	−·03	−·06
	Eros	4432·72	·00	4221·37	·00	...	...							
November 13	54 393	1179·15	−·03	5094·87	−·01	−·26	+·14	67	3182·98	·00	4722·16	·00	+·10	+·10
5234	53 416	2834·79	−·03	1359·76	·00	−·02	+·08	70	3651·37	·00	4013·95	·00	−·07	+·15
	54 413	2915·18	−·01	4372·86	·00	+·04	−·05	71	4327·44	·00	3050·08	·00	+·06	−·03
	53 419	3008·78	−·02	2429·18	−·01	−·15	+·04	72	4547·07	·00	5111·69	·00	−·19	+·05
	54 424	4489·35	−·02	6689·19	−·02	+·17	+·09	74	4894·02	·00	3725·76	·00	−·13	+·18
	53 428	4698·72	·00	3947·21	·00	·00	+·25	77	5175·66	−·01	5103·95	·00	−·05	−·04
	54 429	4980·25	−·03	7458·05	−·03	−·26*	+·01*	80	5986·74	−·01	3500·50	−·01	+·02†	+·12†
	53 437	6721·64	−·02	1851·99	−·01	+·44*	−·32*	81	6132·71	−·03	5452·37	−·02	+·04†	−·01†
	53 440	7405·87	−·04	4308·29	−·02	+·12	−·12							
												Mean	−·05	+·07
	Eros	3988·97	·00	4155·57	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the etar being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the refcrence number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals	
						x.	y.						x.	y
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 13	54 393	1179·58	−·03	5095·97	−·01	−·25	·00	67	3183·31	·00	4722·68	·00	+·01	−·01
5235	53 416	2835·12	−·06	1360·88	−·06	−·15	+·05	70	3651·45	·00	4014·55	·00	+·04	−·07
	54 413	2915·25	−·01	4373·35	·00	+·25	+·01	71	4327·69	·00	3050·41	·00	−·10	−·01
	53 419	3008·90	−·03	2429·93	−·03	−·06	+·13	72	4547·24	·00	5111·69	·00	−·21	−·01
	54 424	4489·62	−·02	6688·97	−·03	+·12	·00	74	4894·14	·00	3725·98	·00	−·18	+·02
	53 428	4698·71	·00	3947·37	·00	+·13	+·18	77	5175·87	−·01	5103·70	−·01	−·17	−·03
	54 429	4980·52	−·05	7457·47	−·07	−·32*	·00*	80	5986·94	−·01	3500·36	−·01	−·21†	+·04†
	53 437	6721·66	−·02	1851·86	−·02	+·32*	−·35*	81	6132·91	−·03	5451·82	−·03	−·14†	−·06†
	53 44°	7405·81	−·05	4307·35	−·03	+·08	+·04							
												Mean	−·10	−·02
	Eros	3947·47	·00	4141·55	·00	...	...							
November 13	54 393	1189·58	−·03	5099·15	−·02	−·20	−·07	67	3193·12	·00	4724·34	·00	·00	+·01
5236	53 416	2842·94	−·07	1363·16	−·08	−·11	+·19	70	3660·75	·00	4015·91	·00	+·11	+·01
	54 413	2925·01	−·01	4375·26	−·01	+·07	+·03	71	4336·36	·00	3051·50	−·01	+·05	−·03
	53 419	3017·20	−·03	2432·04	−·04	+·12	+·17	72	4557·03	−·01	5112·37	−·01	−·02	−·08
	54 424	4500·47	−·03	6689·44	−·05	+·13	−·03	74	4903·25	·00	3726·60	·00	−·11	−·04
	53 428	4708·22	·00	3948·04	·00	−·10	+·19	77	5185·54	−·01	5104·04	−·01	+·11	−·22
	54 429	4991·63	−·07	7457·43	−·09	−·16*	+·01*	80	5995·85	−·01	3500·31	−·01	−·10†	−·14†
	53 437	6729·60	−·02	1851·37	−·02	+·41*	−·38*	81	6142·96	−·05	5451·26	−·05	−·06†	−·11†
	53 440	7415·34	−·06	4306·00	−·05	−·03	+·02							
												Mean	+·02	−·06
	Eros	3936·73	·00	4135·74	·00	...	..							
November 14	54 388	1724·70	−·01	6435·69	·00	−·03	−·10	60	2011·07	−·01	4681·15	·00	+·01†	+·26†
5237	54 392	2118·53	−·01	7114·38	·00	−·08*	+·01*	61	2416·84	−·01	4700·41	·00	+·15†	+·23†
	54 393	2198·14	−·01	5379·34	·00	−·02	−·12	62	3283·48	·00	4733·55	·00	−·08	+·15
	53 402	2321·28	−·01	1569·47	·00	−·05	+·24	63	3288·02	·00	3484·77	·00	+·20	+·13
	53 416	3895·43	−·01	1662·73	·00	−·21	+·02	64	3438·49	·00	2940·27	·00	+·01	+·03
	54 413	3942·38	·00	4676·69	·00	+·07	+·02	67	4206·70	·00	5029·21	·00	−·19	+·01
	53 419	4057·44	·00	2734·06	·00	−·14	+·04	70	4682·83	·00	4326·07	·00	−·25	+·23
	54 424	5491·34	−·01	7011·27	−·01	+·09	+·02	71	5369·60	·00	3369·71	·00	−·13	+·16
	53 428	5730·89	·00	4271·23	·00	−·06	+·33							
	53 437	7777·19	−·02	2198·81	·00	+·45*	−·38*					Mean	−·07	+·12
	Eros	4107·83	·00	4201·67	·00	...	...							
November 14	54 388	1739·35	−·01	6431·72	·00	−·17	−·13	60	2016·95	−·01	4675·93	·00	−·04†	+·11†
5238	54 392	2136·35	−·01	7108·57	·00	−·06*	−·14*	61	2422·93	−·01	4693·12	·00	−·04†	+·14†
	54 393	2207·38	−·01	5372·80	·00	+·04	+·09	63	3288·10	·00	3473·24	·00	·00	−·01
	53 402	2311·78	−·02	1562·78	−·01	−·01	+·05	62	3289·30	·00	4722·16	·00	+·14	−·12
	53 416	3886·24	−·01	1648·08	−·01	−·10	+·01	64	3435·39	·00	2927·86	·00	+·29	+·04
	54 413	3948·13	·00	4661·85	·00	+·10	−·10	67	4213·91	·00	5012·99	·00	+·05	−·01
	53 419	4053·67	·00	2718·54	·00	−·17	+·08	70	4686·70	·00	4307·55	·00	−·14	+·15
	54 424	5508·44	−·02	6988·52	−·01	+·20	+·09	71	5368·81	·00	3347·79	·00	−·09	+·11
	53 428	5734·43	·00	4247·50	·00	+·11	+·25							
	53 437	7770·88	−·03	2164·69	·00	+·17*	−·17*					Mean	+·04	+·03
	Eros	4090·89	·00	4178·38	·00	...	...							
November 15	53 395	2236·72	+·01	2055·38	·00	+·10	−·11	60	2997·35	·00	4993·53	·00	−·17	−·18
5239	54 388	2706·56	+·01	6746·63	−·01	−·14	−·23	61	3403·09	·00	5013·90	·00	−·10	−·24

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 15	54 393	3182·36	+·01	5691·69	·00	+·12	−·10	62	4269·23	·00	5049·11	·00	+·03	−·02
5239—*contd.*	53 402	3315·40	+·01	1882·23	·00	−·19	+·34	63	4277·25	·00	3800·52	·00	−·02	−·24
	53 416	4888·94	+·01	1979·75	−·01	−·10	·00	64	4428·94	·00	3256·25	·00	−·09	−·14
	54 413	4928·51	·00	4993·94	·00	·00	−·14	67	5191·62	·00	5347·18	·00	·00	−·08
	53 419	5048·20	·00	3051·47	·00	+·03	+·03	70	5669·42	·00	4645·79	·00	+·05†	−·35†
	53 428	6717·75	+·01	4593·28	·00	+·21	+·18							
												Mean	−·06	−·15
	Eros	4439·20	·00	4277·04	·00	...	...							
November 15	53 395	2238·18	+·01	2054·41	·00	+·33	−·06	60	2998·69	·00	4992·77	·00	+·05	−·28
5240	54 388	2707·93	+·01	6745·64	·00	−·18	−·08	61	3404·54	·00	5012·97	·00	+·01	−·13
	54 393	3183·33	·00	5690·77	·00	(+·58)	−·01	62	4270·90	·00	5048·33	·00	−·06	−·02
	53 402	3317·09	+·01	1881·64	·00	−·16	+·07	63	4278·92	·00	3799·54	·00	−·01	−·05
	53 416	4890·80	+·01	1978·82	·00	−·20	+·16	64	4430·52	·00	3255·43	·00	+·06	−·12
	54 413	4929·98	·00	4993·21	·00	+·05	−·15	67	5193·07	·00	5346·52	·00	+·12	−·16
	53 419	5050·03	·00	3050·69	·00	−·13	+·05	70	5671·20	·00	4644·86	·00	−·09†	−·15†
	53 428	6719·79	+·01	4592·76	·00	−·26	+·04							
									..			Mean	+·03	−·13
	Eros	4425·55	·00	4271·75	·00	...	...							
November 15	53 395	2235·79	+·01	2054·56	·00	+·08	+·02	60	2996·15	·00	4992·77	·00	+·02	−·11
5241	54 388	2705·64	+·01	6745·99	−·01	−·29	−·24	61	3402·03	·00	5013·16	·00	−·04	−·19
	54 393	3181·42	·00	5690·90	·00	+·04	·00	62	4268·30	·00	5048·58	·00	·00	−·20
	53 402	3314·31	·00	1881·64	·00	−·02	+·21	63	4276·37	·00	3799·57	·00	−·07	−·01
	53 416	4888·01	+·01	1978·99	·00	−·01	·00	64	4427·95	·00	3255·37	·00	·00	·00
	54 413	4927·50	·00	4993·28	·00	+·07	−·21	67	5190·65	·00	5346·39	·00	+·04	−·03
	53 419	5047·42	·00	3050·75	·00	−·06	−·01	70	5668·55	·00	4644·72	·00	+·02†	−·05†
	53 428	6716·92	+·01	4592·43	·00	+·19	+·24							
												Mean	−·01	−·09
	Eros	4407·28	·00	4267·15	·00	..	...							
November 15	53 395	2244·37	·00	2113·68	·00	+·25	+·06	60	3013·73	·00	5049·49	·00	+·08	·00
5242	54 388	2728·28	·00	6803·79	·00	−·05	−·33	61	3419·70	·00	5068·44	·00	+·02	+·12
	54 393	3201·40	·00	5747·07	·00	−·20	+·10	62	4286·14	·00	5101·18	·00	+·07	+·14
	53 402	3322·51	·00	1937·62	·00	+·10	+·09	63	4290·51	·00	3852·37	·00	−·05	+·11
	53 416	4897·07	·00	2030·22	·00	−·34	−·17	64	4440·48	·00	3307·79	·00	·00	+·05
	54 413	4945·11	·00	5044·04	·00	+·27	−·03	67	5209·67	·00	5396·41	·00	−·11	+·08
	53 419	5059·48	·00	3101·36	·00	−·16	−·05	70	5685·26	·00	4693·24	·00	+·12†	+·11†
	53 428	6733·70	·00	4637·83	·00	+·13	+·32							
												Mean	·00	+·08
	Eros	4307·77	·00	4283·57	·00	...	...							
November 15	53 395	2252·46	·00	2096·94	·00	+·25	+·27	60	3013·88	·00	5034·87	·00	+·05	+·17
5243	54 388	2723·56	·00	6788·53	·00	+·03	−·27	61	3419·75	·00	5055·14	·00	+·04	+·09
	54 393	3199·59	·00	5733·35	·00	−·15	−·11	62	4286·26	·00	5090·25	·00	−·06	+·08
	53 402	3331·21	·00	1924·04	·00	−·02	+·06	63	4293·89	·00	3841·44	·00	−·05	+·05
	53 416	4905·29	·00	2020·87	·00	−·23	−·18	64	4445·62	·00	3297·14	·00	−·28	+·11
	54 413	4945·48	·00	5034·80	·00	+·03	·00	67	5208·66	·00	5387·74	·00	+·10	+·27
	53 419	5064·82	·00	3092·52	·00	−·08	−·11	70	5686·55	·00	4686·02	·00	−·07†	+·13†
	53 428	6734·91	·00	4633·41	·00	+·17	+·37							
												Mean	−·03	+·13
	Eros	4293·25	·00	4266·94	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 18 5248	53 375	2032·09	·00	3625·03	·00	−·30	+·02	49	3367·51	·00	3878·99	·00	+·05	−·06
	54 368	2272·28	·00	7002·20	·00	−·30	+·02	51	3544·99	·00	4967·78	·00	−·14	+·08
	52 433	3254·49	·00	2390·20	·00	+·18	+·28	53	4063·50	·00	3177·11	·00	+·05	−·01
	53 388	4264·14	·00	3409·60	·00	+·20	+·07	54	4299·33	·00	3981·91	·00	−·14	+·05
	52 441	4423·65	·00	1101·64	·00	−·22	−·32	55	4521·68	·00	4908·49	·00	−·06	+·07
	54 383	4828·25	·00	7926·68	·00	+·16*	−·68*	59	5438·11	·00	4421·65	·00	−·09	+·11
	53 395	5120·59	·00	3506·74	·00	+·21	+·21							
	53 398	5568·42	·00	2893·61	·00	−·04	+·18					Mean	−·06	+·04
	54 393	5999·18	·00	7160·35	·00	+·09	−·18							
	53 402	6202·27	·00	3353·61	·00	·00	+·36							
	Eros	4290·31	·00	4281·44	·00	...	...							
November 18 5249	53 375	2038·03	·00	3621·16	·00	−·44	+·08	49	3373·40	·00	3875·34	·00	−·10	+·11
	54 368	2277·39	·00	6998·34	·00	−·45	+·13	51	3550·21	·00	4964·47	·00	+·12	−·05
	52 433	3260·63	·00	2386·77	·00	+·13	+·19	53	4069·48	·00	3173·73	·00	·00	+·06
	53 388	4269·90	·00	3406·31	·00	+·29	+·11	54	4304·90	·00	3978·79	·00	·00	−·08
	52 441	4430·16	·00	1098·49	·00	−·30	−·39	55	4527·15	·00	4905·34	·00	−·04	+·04
	54 383	4832·85	·00	7923·52	·00	+·27*	−·63*	59	5443·63	·00	4418·86	·00	−·01	−·06
	53 395	5126·42	·00	3503·78	·00	+·20	+·14							
	53 398	5574·46	·00	2890·69	·00	−·10	+·17					Mean	−·01	·00
	54 393	6003·92	·00	7157·47	·00	+·25	−·11							
	53 402	6207·95	·00	3350·89	·00	+·19	+·31							
	Eros	4275·62	·00	4267·11	·00	...	...							
November 18 5250	53 375	2037·83	·00	3622·05	·00	−·23	+·13	49	3373·18	·00	3876·81	·00	+·05	−·04
	54 368	2276·32	·00	6999·27	·00	−·31	+·21	51	3549·93	·00	4965·82	·00	+·02	−·03
	52 433	3261·21	·00	2388·12	·00	−·08	+·12	53	4069·64	·00	3175·36	·00	−·04	−·05
	53 388	4270·02	·00	3408·16	·00	+·25	−·19	54	4304·66	·00	3980·27	·00	+·14	+·02
	52 441	4430·86	·00	1099·88	·00	−·27	−·18	55	4526·66	·00	4907·13	·00	+·09	−·12
	54 383	4831·80	·00	7925·08	·00	+·13*	−·47*	59	5443·28	·00	4420·75	·00	+·12	−·06
	53 395	5126·36	·00	3505·55	·00	+·31	+·16							
	53 398	5574·58	·00	2892·73	·00	·00	+·05					Mean	+·06	−·05
	54 393	6003·24	·00	7159·36	·00	−·03	+·04							
	53 402	6207·97	·00	3353·14	·00	+·26	+·16							
	Eros	4257·21	·00	4258·44	·00	...	...							
November 22 5253	52 387	1623·64	+·01	3249·97	·00	+·46	−·12	30	3353·52	·00	4438·03	·00	−·08	−·13
	52 393	2655·18	·00	3715·17	·00	+·06	−·38	32	4156·24	·00	4267·91	·00	+·16	−·19
	53 355	3002·07	+·01	6942·58	−·01	+·14	+·03	37	4389·21	.00	3763·39	·00	+·12	−·05
	52 399	3019·80	·00	2548·69	·00	−·09	+·07	38	4439·29	·00	4656·97	·00	−·01	+·04
	51 360	3200·04	+·01	1580·30	·00	−·06	−·01	43	5184·97	·00	3905·62	·00	+·05	·00
	53 363	3405·35	·00	5978·54	·00	−·17	+·52	44	5211·72	·00	4878·48	·00	−·14	−·21
	52 406	4216·74	·00	4206·05	·00	+·28	+·18							
	52 420	5251·30	+·01	2442·59	·00	−·13	−·12					Mean	+·02	−·09
	53 375	5322·49	·00	6273·28	·00	−·33	−·22							
	52 424	5626·48	·00	3538·46	·00	−·13	+·05							
	52 433	6565·60	+·01	5059·59	·00	+·01	+·01							
	Eros	4375·24	·00	4360·19	·00	...	...							

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 22 5254	52 387	1609·01	+·01	3253·16	·00	+·40	+·03	30	3333·26	·00	4449·43	·00	−·06	−·19
	52 393	2638·51	·00	3723·31	·00	−·12	−·43	32	4136·93	·00	4282·74	·00	+·06	+·01
	53 355	2970·10	+·01	6952·04	−·01	−·01	+·32	37	4372·09	·00	3779·57	·00	+·22	−·13
	52 399	3008·57	·00	2558·86	·00	−·18	−·34	38	4417·95	·00	4673·46	·00	+·08	−·10
	51 360	3193·21	+·01	1591·04	·00	+·04	−·18	43	5167·30	·00	3925·42	·00	+·06	−·03
	53 363	3377·71	·00	5989·84	·00	−·08	+·80	44	5189·28	·00	4898·22	·00	+·02	−·04
	52 406	4197·71	·00	4221·30	·00	+·19	+·23							
	52 420	5240·46	·00	2462·65	·00	−·03	−·10					Mean	+·06	−·08
	53 375	5293·59	·00	6293·52	·00	−·30	−·02							
	52 424	5610·50	·00	3560·36	·00	−·07	−·05							
	52 433	6542·42	+·01	5086·01	·00	+·11	−·24							
	Eros	4341·87	·00	4364·34	·00	...	...							
November 22 5256	52 387	1274·37	−·02	3425·72	−·01	+·60	+·15	30	3001·54	·00	4617·92	·00	−·15	+·10
	52 393	2304·92	−·01	3893·57	·00	+·06	−·34	32	3804·79	·00	4449·70	·00	−·01	+·02
	53 355	2643·78	−·01	7122·01	·00	+·02	−·02	37	4038·87	·00	3945·94	·00	+·12	−·06
	52 399	2672·67	−·01	2728·16	·00	−·27	−·11	38	4086·56	·00	4839·78	·00	+·11	−·10
	51 360	2855·03	−·01	1760·21	·00	+·09	−·18	43	4834·31	·00	4090·01	·00	−·01	+·02
	53 363	3048·99	·00	6158·76	·00	+·23	+·57	44	4858·24	·00	5062·77	·00	+·18	−·01
	52 406	3865·64	·00	4388·04	·00	−·10	+·32							
	52 420	4904·44	·00	2627·23	·00	−·31	−·18					Mean	+·04	−·01
	53 375	4965·70	−·01	6458·01	−·01	−·22	−·18							
	52 424	5276·59	·00	3723·86	·00	−·04	+·09							
	52 433	6211·97	−·01	5247·33	·00	−·02	−·07							
	Eros	3763·35	·00	4298·32	·00	...	...							
November 22 5257	52 387	1633·97	−·02	3287·75	−·01	+·59	+·10	30	3359·23	·00	4482·15	·00	+·01	+·09
	52 393	2664·08	−·01	3756·72	·00	−·22	−·15	32	4162·91	·00	4314·92	·00	−·10	+·11
	53 355	2998·00	−·01	6985·66	·00	+·26	−·03	37	4397·74	·00	3811·44	·00	−·04	+·06
	52 399	3033·00	−·01	2592·10	−·01	−·15	−·20	38	4444·17	·00	4705·35	·00	−·01	·00
	51 360	3217·08	−·01	1624·08	−·01	−·19	+·02	43	5192·69	·00	3956·69	·00	+·13	+·01
	53 363	3404·73	·00	6022·80	·00	+·21	+·76	44	5215·30	·00	4929·45	·00	+·27	·00
	52 406	4223·60	·00	4253·53	·00	+·06	+·22							
	52 420	5265·11	·00	2494·25	·00	−·46	−·40					Mean	+·04	+·05
	53 375	5320·89	−·01	6324·74	−·01	−·16	−·11							
	52 424	5635·70	·00	3591·30	·00	−·14	−·07							
	52 433	6568·71	−·02	5115·88	−·01	+·15	−·10							
	Eros	4106·85	·00	4147·49	·00	...	...							
November 22 5258	52 387	1637·05	−·02	3286·17	−·01	+·62	+·15	30	3361·52	·00	4481·71	·00	+·02	−·01
	52 393	2666·65	−·01	3755·79	·00	·00	−·16	32	4165·24	·00	4314·91	·00	−·04	+·04
	53 355	2998·81	−·01	6985·00	−·01	+·18	−·15	37	4400·60	·00	3811·32	·01	−·20	+·24
	52 399	3036·53	−·01	2591·30	−·01	−·17	−·12	38	4446·35	·00	4705·35	·00	−·05	+·09
	51 360	3220·95	−·01	1623·63	−·01	+·06	−·14	43	5195·58	·00	3957·10	·00	−·18	+·12
	53 363	3406·24	·00	6022·51	·00	+·05	+·52	44	5217·69	·00	4929·86	·00	−·14	+·12
	52 406	4226·11	·00	4253·44	·00	−·02	+·26							
	52 420	5268·35	·00	2494·57	·00	−·18	−·15					Mean	−·10	+·10
	53 375	5322·23	−·01	6325·42	−·01	−·41	−·24							
	52 424	5638·64	·00	3592·08	·00	−·27	−·06							
	52 433	6570·56	−·02	5117·02	−·01	+·11	+·06							
	Eros	4097·16	·00	4133·55	·00	...	...							

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″			″	″	″	″	″
November 22	52 387	1642·58	−·04	3288·40	−·03	+·44	−·07	30	3366·73	·00	4482·92	·00	−·07	+·08
5259	52 393	2671·91	−·01	3757·58	−·01	−·06	−·33	32	4170·44	·00	4315·96	·00	−·22	+·06
	53 355	3003·83	−·01	6985·83	−·02	+·32	+·04	37	4405·51	·00	3812·52	·00	−·13	+·14
	52 399	3041·70	−·02	2593·10	−·02	−·18	−·22	38	4451·30	·00	4706·28	·00	−·03	+·08
	51 360	3226·24	−·03	1625·49	−·03	−·10	−·19	43	5200·39	·00	3958·10	·00	−·12	−·05
	53 363	3411·29	−·01	6023·44	−·01	+·10	+·63	44	5222·46	−·01	4930·65	−·01	−·04	−·01
	52 406	4231·21	·00	4254·60	·00	−·11	+·17							
	52 420	5273·24	−·01	2495·64	−·01	−·21	−·18					Mean	−·10	+·05
	53 375	5326·97	−·02	6325·59	−·02	−·29	+·01							
	52 424	5643·32	−·01	3592·59	·00	−·14	+·16							
	52 433	6575·14	−·03	5117·27	−·02	+·23	+·02							
	Eros	4054·09	·00	4078·82	·00	...	...							
November 22	52 387	1651·65	−·05	3290·67	−·03	+·41	+·03	30	3376·24	·00	4484·22	·00	−·05	−·05
5260	52 393	2681·33	−·01	3759·42	−·01	−·26	−·44	32	4179·69	·00	4316·78	·00	−·06	+·04
	53 355	3014·59	−·01	6987·00	−·02	+·28	+·17	37	4414·59	·00	3813·32	·00	−·03	+·03
	52 399	3050·38	−·02	2594·69	−·02	−·21	−·22	38	4460·93	·00	4706·97	·00	−·07	·00
	51 360	3234·12	−·04	1627·01	−·04	+·20	−·15	43	5209·48	·00	3958·36	·00	·00	−·10
	53 363	3421·58	−·01	6024·44	−·01	+·06	+·76	44	5232·23	−·01	4930·65	−·01	−·15	+·12
	52 406	4240·46	·00	4255·39	·00	+·03	+·16							
	52 420	5281·60	·00	2495·96	−·01	−·06	−·21					Mean	−·06	+·01
	53 375	5337·29	−·03	6325·66	−·03	−·30	−·07							
	52 424	5652·35	−·01	3592·67	·00	−·15	+·07							
	52 433	6585·02	−·04	5116·67	−·03	+·04	−·06							
	Eros	4051·97	·00	4066·20	·00	...	...							
November 23	52 387	2178·56	+·01	4106·60	·00	+·52	−·22	23	3012·24	·00	4696·30	·00	+·01	−·14
5261	51 344	2432·25	+·01	2393·30	·00	+·50	+·18	28	3738·51	·00	3372·29	·00	+·02	+·04
	52 393	3206·19	·00	4580·19	·00	+·06	−·32	30	3898·41	·00	5308·86	·00	+·06	−·05
	52 399	3580·65	·00	3417·01	·00	−·26	−·03	32	4702·75	·00	5145·40	·00	+·04	−·04
	51 360	3768·80	·00	2450·25	·00	−·11	−·14	37	4940·10	·00	4643·08	·00	−·12	+·17
	53 363	3937·40	+·01	6849·79	−·01	−·07	+·61	40	5013·50	·00	3466·81	·00	−·12	+·02
	51 364	4098·91	·00	2028·40	·00	+·15	+·48							
	52 406	4763·84	·00	5084·38	·00	+·03	−·05					Mean	−·02	·00
	52 420	5812·66	+·01	3329·27	·00	−·07	+·01							
	53 375	5852·41	+·01	7160·59	·00	−·49	−·11							
	52 424	6178·88	+·01	4428·44	·00	−·16	−·09							
	52 433	7105·57	+·02	5957·61	·00	−·13	−·28							
	Eros	4207·00	·00	4452·88	·00	...	...							
November 23	52 387	2191·83	+·01	4106·13	·00	+·76	−·13	23	3025·61	·00	4695·98	·00	+·15	−·19
5262	51 344	2445·77	+·01	2393·11	·00	+·56	−·04	28	3752·09	·00	3371·92	·00	+·01	+·03
	52 393	3219·71	·00	4579·93	·00	+·05	−·43	30	3911·73	·00	5308·60	·00	+·22	−·15
	52 399	3594·24	·00	3416·78	·00	−·30	−·20	32	4716·37	·00	5145·10	·00	−·06	−·11
	51 360	3782·51	·00	2450·01	·00	−·21	−·30	37	4953·50	·00	4642·57	·00	+·02	−·03
	53 363	3950·78	+·01	6849·33	·00	−·01	+·72	40	5027·05	·00	3466·42	·00	−·07	+·02
	51 364	4112·77	·00	2028·16	·00	−·08	+·32							
	52 406	4777·32	·00	5083·89	·00	+·07	+·06					Mean	+·05	−·07
	52 420	5826·24	+·01	3328·92	·00	−·03	−·04							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 23	53 375	5865·78	+·01	7160·25	·00	−·40	−·11							
5262—*contd.*	52 424	6192·68	+·01	4427·75	·00	−·39	+·23							
	52 433	7119·01	·00	5957·04	·00	−·04	−·07							
	Eros	4208·56	·00	4440·63	·00	...	...							
November 23	52 387	2202·35	·00	4134·81	·00	+·58	+·04	23	3036·53	·00	4723·96	·00	+·02	+·13
5263	51 344	2455·11	·00	2421·52	·00	+·62	+·21	28	3762·08	·00	3399·69	·00	+·11	+·06
	52 393	3230·64	·00	4607·80	·00	−·14	−·12	30	3923·14	·00	5336·12	·00	+·05	+·06
	52 399	3604·37	·00	3444·60	·00	−·32	−·11	32	4727·41	·00	5172·15	·00	+·12	+·04
	51 360	3791·83	·00	2477·66	·00	+·02	−·18	37	4964·23	·00	4669·58	·00	+·26	·00
	53 363	3963·01	·00	6877·40	·00	−·11	+·40	40	5037·16	·00	3493·45	·00	+·11	−·05
	51 364	4121·95	·00	2055·72	·00	+·09	+·31							
	52 406	4788·64	·00	5110·82	·00	−·05	+·31					Mean	+·11	+·04
	52 420	5836·52	·00	3355·53	·00	−·01	−·21							
	53 375	5878·16	·00	7187·07	·00	−·26	−·45							
	52 424	6203·44	·00	4454·19	·00	−·18	·00							
	52 433	7131·16	·00	5982·75	·00	−·22	−·15							
	Eros	4104·19	·00	4352·46	·00	...	...							
November 23	52 387	2212·39	·00	4134·18	·00	+·51	−·03	23	3046·58	·00	4723·23	·00	−·05	+·14
5264	51 344	2465·18	·00	2420·90	·00	+·46	+·12	28	3772·16	·00	3398·87	·00	−·03	+·13
	52 393	3240·56	·00	4606·98	·00	−·09	−·04	30	3933·15	·00	5335·27	·00	+·04	+·15
	52 399	3614·13	·00	3443·82	·00	−·15	−·07	32	4737·38	·00	5171·40	·00	+·15	·00
	51 360	3802·00	·00	2476·99	·00	−·23	−·26	37	4974·22	·00	4668·81	·00	+·24	−·02
	53 363	3972·96	·00	6876·47	·00	−·01	+·57	40	5047·12	·00	3492·50	·00	+·10	+·12
	51 364	4131·90	·00	2055·15	·00	+·04	+·11							
	52 406	4798·60	·00	5110·04	·00	−·02	+·30					Mean	+·08	+·09
	52 420	5846·63	·00	3354·67	·00	−·19	−·17							
	53 375	5888·04	·00	7186·12	·00	−·08	−·32							
	52 424	6213·47	·00	4453·38	·00	−·23	−·01							
	52 433	7140·99	·00	5981·89	·00	−·03	−·14							
	Eros	4100·30	·00	4337·27	·00	...	...							
November 25	51 334	2430·66	·00	2388·95	·00	+·17	+·15	11	2420·41	·00	3805·75	·00	+·03	−·06
5267	51 338	2885·35	·00	2423·29	·00	−·27	−·09	21	3789·14	·00	3474·43	·00	−·04	−·17
	52 387	3616·25	·00	5816·20	·00	+·75	−·07	23	4444·69	·00	6413·30	·00	+·15	+·02
	51 344	3885·55	·00	4105·45	·00	+·65	+·14	27	4875·78	·00	2878·00	·00	−·10	+·11
	52 393	4639·77	·00	6299·20	·00	+·17	−·37	28	5183·13	·00	5096·14	·00	−·03	−·19
	52 399	5024·82	·00	5139·44	·00	−·24	−·22	40	6457·34	·00	5202·00	·00	−·06	−·17
	51 357	5036·55	·00	2803·05	·00	+·10	+·43							
	51 360	5221·50	·00	4174·18	·00	+·11	−·11					Mean	−·01	−·08
	51 363	5501·64	+·01	1359·37	·00	(−·87)	−·01							
	51 364	5555·94	·00	3755·47	·00	−·14	+·34							
	52 406	6193·30	+·01	6817·42	·00	−·05	−·10							
	52 420	7258·30	+·01	5071·56	·00	−·38	−·12							
	Eros	4288·13	·00	4367·72	·00	...	...							

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† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 25 5268	51 334	1779·07	·00	2509·84	·00	+·08	−·02	11	1774·93	·00	3926·39	·00	+·22	+·12
	51 338	2233·99	·00	2541·97	·00	−·45	−·09	21	3142·33	·00	3588·82	·00	+·08	+·07
	52 387	2980·40	·00	5931·57	·00	+·47	−·03	23	3811·61	·00	6525·05	·00	−·14	−·07
	51 344	3241·89	·00	4219·57	·00	+·44	+·17	27	4226·02	·00	2987·85	·00	+·31	−·06
	52 393	4005·95	·00	6410·01	·00	+·06	−·42	28	4543·75	·00	5204·28	·00	+·04	−·05
	52 399	4385·51	·00	5248·23	·00	−·06	−·01	40	5818·37	·00	5304·31	·00	+·04	−·02
	51 357	4386·92	·00	2912·25	·00	+·01	+·21							
	51 360	4578·20	·00	4282·29	·00	−·11	−·10					Mean	+·09	·00
	51 363	4844·79	·00	1466·51	·00	−·30	−·22							
	51 364	4910·45	·00	3862·07	·00	−·08	+·34							
	52 406	5561·53	·00	6920·77	·00	+·15	+·21							
	52 420	6618·66	·00	5170·34	·00	−·27	−·06							
	Eros	3605·88	·00	4429·23	·00	...	...							
November 25 5269	51 334	1117·12	·00	2369·45	·00	+·16	+·22	11	1118·25	·00	3786·16	·00	+·18	+·26
	51 338	1572·14	·00	2400·28	·00	−·30	−·19	21	2484·48	·00	3443·68	·00	+·06	+·16
	52 387	2330·98	·00	5787·36	·00	+·54	−·25	23	3164·45	·00	6377·38	·00	−·14	+·13
	51 344	2586·18	·00	4074·26	·00	+·61	+·08	27	3566·22	·00	2838·81	·00	+·10	−·01
	52 393	3358·33	·00	6261·76	·00	+·13	−·37	28	3891·96	·00	5054·13	·00	−·12	−·05
	51 357	3726·57	·00	2762·67	·00	+·06	+·22	40	5166·79	·00	5149·43	·00	·00	+·06
	52 399	3733·87	·00	5098·64	·00	−·24	+·01							
	51 360	3922·86	·00	4131·94	·00	−·08	−·03					Mean	−·01	+·09
	51 363	4179·39	·00	1315·24	·00	−·44	−·19							
	51 364	4253·64	·00	3710·45	·00	−·10	+·49							
	52 406	4915·90	·00	6766·91	·00	+·05	+·13							
	52 420	5966·59	·00	5012·62	·00	−·37	−·09							
	Eros	2940·55	·00	4268·83	·00	...	...							
November 27 5270	51 317	1207·66	+·02	4143·00	·00	+·42	−·50	9	2923·94	·00	3078·75	·00	−·04	+·06
	51 323	1985·80	+·01	5481·56	−·01	−·26	+·08	11	3509·24	·00	5744·45	·00	+·04	−·13
	50 300	2499·20	+·01	1916·40	·00	+·54	+·10	13	3716·47	·00	3186·94	·00	+·02	+·16
	51 331	3177·96	·00	3175·47	·00	+·03	+·21	21	4878·16	·00	5413·75	·00	−·22	+·01
	51 334	3520·26	·00	4327·92	·00	+·07	−·05	26	5931·24	+·01	3867·69	·00	−·07	+·08
	51 339	4543·03	·00	2865·58	·00	−·34	+·03	27	5964·87	+·01	4818·26	·00	−·19	−·01
	51 344	4974·38	·00	6045·03	·00	+·27	+·06							
	51 357	6125·80	+·01	4743·35	·00	−·22	+·35					Mean	−·08	+·03
	51 360	6310·09	+·01	6114·50	·00	−·07	−·08							
	51 363	6590·62	+·01	3300·20	−·01	−·42	−·19							
	Eros	4321·34	·00	4447·47	·00	...	...							
November 27 5271	51 317	1204·56	+·02	4151·81	·00	+·31	−·44	9	2927·75	·00	3098·81	·00	+·03	+·10
	51 323	1973·79	+·01	5495·14	−·01	−·30	+·49	11	3495·58	·00	5768·25	·00	−·07	+·04
	50 300	2510·77	+·01	1933·80	·00	+·57	−·01	13	3719·70	·00	3212·21	·00	−·02	+·16
	51 331	3181·20	·00	3197·29	·00	+·06	+·16	21	4866·32	·00	5446·77	·00	+·06	−·07
	51 334	3515·86	·00	4351·85	·00	+·09	+·03	26	5929·91	+·01	3907·66	·00	−·01	−·07
	51 339	4548·19	·00	2896·27	·00	−·12	+·05	27	5957·26	+·01	4858·36	·00	−·15	−·07
	51 344	4958·70	·00	6078·63	·00	+·24	+·03							
	51 357	6118·47	+·01	4784·57	·00	+·05	+·24					Mean	−·03	+·02
	51 360	6294·12	+·01	6156·95	·00	−·25	−·18							
	51 363	6593·20	+·01	3344·47	·00	−·47	−·33							
	Eros	4307·43	·00	4461·84	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
November 27	51 317	1260·57	+·01	4150·32	·00	−·04	−·31	9	2983·00	·00	3096·54	·00	−·12	−·02
5272	51 323	2030·40	+·01	5493·48	·00	−·48	+·34	11	3552·23	·00	5765·39	·00	−·10	+·19
	50 300	2565·29	+·01	1931·76	·00	+·46	−·12	13	3774·83	·00	3209·55	·00	+·03	−·05
	51 331	3236·50	·00	3194·82	·00	−·09	+·08	21	4922·88	·00	5443·02	·00	−·02	+·13
	51 334	3571·74	·00	4349·25	·00	+·01	−·11	26	5985·55	·00	3903·54	·00	−·02	−·14
	51 339	4603·23	·00	2892·89	·00	−·18	+·05	27	6013·27	+·01	4853·98	·00	+·01	+·12
	51 344	5015·50	·00	6075·05	·00	+·26	+·02							
	51 357	6174·33	+·01	4780·21	·00	+·30	+·31					Mean	−·04	+·04
	51 360	6350·70	+·01	6152·30	·00	+·06	+·06							
	51 363	6648·29	+·01	3339·81	·00	−·27	−·27							
	Eros	4355·22	·00	4445·03	·00	...	...							
November 27	51 317	1229·44	·00	4174·27	·00	+·32	−·11	9	2952·02	·00	3120·44	·00	+·12	−·02
5273	51 323	1999·84	·00	5517·74	·00	−·53	+·14	11	3521·78	·00	5789·55	·00	−·13	−·11
	50 300	2534·18	·00	1955·75	·00	+·70	−·15	13	3744·16	·00	3233·37	·00	+·03	−·06
	51 331	3205·59	·00	3218·58	·00	+·11	+·20	21	4892·39	·00	5466·96	·00	+·05	−·12
	51 334	3541·05	·00	4373·06	·00	+·11	−·07	26	5954·99	·00	3926·93	·00	+·06	−·01
	51 339	4572·87	·00	2916·68	·00	−·46	−·03	27	5982·82	·00	4877·74	·00	+·06	−·11
	51 344	4985·07	·00	6098·76	·00	+·34	·00							
	51 357	6144·30	·00	4803·77	·00	−·05	+·26					Mean	+·03	−·07
	51 360	6320·57	·00	6175·94	·00	−·07	−·06							
	51 363	6618·02	·00	3363·15	·00	−·46	−·17							
	Eros	4257·71	·00	4356·01	·00	...	...							
November 27	51 317	1225·28	·00	4173·89	·00	+·43	−·22	9	2948·16	·00	3120·12	·00	+·08	·00
5274	51 323	1995·51	·00	5517·49	·00	−·41	−·02	11	3517·59	·00	5789·51	·00	−·16	−·30
	50 300	2530·30	·00	1955·41	·00	+·82	−·16	13	3740·17	·00	3233·13	·00	+·11	−·03
	51 331	3201·72	·00	3218·34	·00	+·05	+·16	21	4888·29	·00	5466·74	·00	−·01	+·02
	51 334	3537·06	·00	4372·86	·00	+·05	−·10	26	5951·05	·00	3926·84	·00	+·03	+·12
	51 339	4569·09	·00	2916·38	·00	−·54	+·14	27	5978·75	·00	4877·62	·00	+·05	+·06
	51 344	4980·93	·00	6098·64	·00	+·22	+·04							
	51 357	6140·20	·00	4803·78	·00	−·02	+·30					Mean	+·02	−·02
	51 360	6316·28	·00	6175·93	·00	−·01	+·03							
	51 363	6614·26	·00	3363·23	·00	−·60	−·15							
	Eros	4243·60	·00	4338·40	·00	...	...							
November 29	51 317	2071·11	·00	6286·05	·00	+·16	−·38	9	3798·84	·00	5240·30	·00	−·09	−·13
5275	50 298	3036·39	·00	2921·93	·00	+·41	+·38	13	4590·39	·00	5357·00	·00	−·14	−·16
	50 299	3121·57	·00	1702·76	·00	−·32	+·14							
	50 300	3386·38	·00	4073·43	·00	+·74	+·03					Mean	(−·11)	(−·15)
	50 301	3480·16	·00	1907·10	·00	+·02	+·20							
	51 331	4051·84	·00	5339·63	·00	−·06	+·09							
	51 334	4381·65	·00	6495·86	·00	+·05	−·26							
	51 338	4835·86	·00	6535·17	·00	−·34	−·38							
	51 339	5420·32	·00	5044·10	·00	−·37	+·02							
	50 314	5622·69	·00	3287·50	·00	−·34	+·17							
	Eros	4223·71	·00	4323·96	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O. x.	Residuals. C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals. x.	Residuals. y.
1900.	°	"	"	"	"	"	"		"	"	"	"	"	"
December 6	49 399	2712·44	−·01	7044·26	−·01	−·16	·00	2	3163·59	·00	4692·72	·00	+·14	−·06
5276	47 434	3174·48	−·02	1549·59	−·01	+·35	+·08	3	3193·45	−·02	1557·93	−·01	+·05†	−·06†
	48 453	3224·03	·00	4889·62	·00	−·45	+·18	5	3530·15	·00	2881·75	·00	−·07	+·02
	48 454	3529·09	·00	3792·38	·00	+·44	−·10	7	4167·44	·00	2466·48	·00	+·16	−·19
	48 455	3530·04	·00	2881·80	·00	−·07	−·18	8	4274·70	·00	5496·49	·00	+·12	−·11
	47 442	4032·10	−·01	1554·23	−·01	+·02	−·13	14	5621·19	−·01	4486·77	·00	−·13	+·12
	48 463	4626·81	·00	3720·94	·00	−·05	+·22	17	5945·43	−·01	3764·04	·00	−·01	·00
	47 450	5123·08	−·01	1571·96	−·01	−·01	+·27							
	48 470	5255·77	−·01	5689·30	−·01	−·45	−·40					Mean	+·04	−·04
	48 477	6279·85	−·01	4407·07	·00	+·40	+·14							
	47 460	6468·90	−·01	2675·88	·00	−·04	−·09							
	49 418	6770·96	−·03	7062·47	−·03	+1·59*	+·55*							
	Eros	4166·11	·00	4166·39	·00	...	...							
December 6	49 399	2723·03	−·02	7044·79	−·02	−·03	−·06	2	3172·86	·00	4693·33	·00	+·09	−·26
5277	47 434	3181·93	−·03	1550·19	−·03	+·20	+·36	3	3201·08	−·03	1558·43	−·03	−·28†	+·30†
	48 453	3233·27	·00	4889·88	·00	−·36	+·24	5	3538·17	−·01	2882·13	−·01	−·03	−·01
	48 454	3538·18	·00	3792·42	·00	+·17	+·08	7	4175·49	−·01	2466·00	−·01	−·19	+·10
	48 455	3538·16	−·01	2882·15	−·01	−·13	−·17	8	4284·46	·00	5495·39	−·01	−·10	+·25
	47 442	4039·14	−·02	1554·29	−·02	+·16	−·12	14	5629·70	−·01	4484·90	−·01	+·10	+·14
	48 463	4635·20	·00	3720·24	·00	−·03	+·12	17	5953·57	−·01	3762·06	−·01	+·08	−·05
	47 450	5130·02	−·01	1571·09	−·01	+·08	+·18							
	48 470	5265·16	−·01	5687·66	−·01	−·31	−·44					Mean	−·01	+·03
	48 477	6288·74	−·02	4404·76	−·01	+·10	+·01							
	47 460	6476·21	−·02	2673·65	−·01	+·15	−·22							
	Eros	4179·16	·00	4075·80	·00	...	...							
December 6	49 399	2722·03	−·01	7042·02	−·02	−·08	+·09	2	3173·54	·00	4690·61	·00	+·03	+·31
5278	47 434	3184·71	−·04	1548·54	−·04	+·31	+·12	3	3203·77	−·03	1556·84	−·04	−·09†	·00†
	48 453	3233·91	·00	4887·71	·00	−·52	+·27	5	3539·94	−·01	2880·32	−·01	+·10	·00
	48 454	3539·33	·00	3790·62	·00	+·28	·00	7	4177·52	−·01	2464·79	−·01	−·02	−·07
	48 455	3539·96	−·01	2880·33	−·01	−·02	−·16	8	4284·38	−·01	5494·20	−·01	−·02	−·13
	47 442	4042·11	−·02	1552·91	−·03	+·04	−·12	14	5630·42	−·01	4484·24	−·01	+·05	+·13
	48 463	4636·48	·00	3718·87	·00	−·05	+·27	17	5954·88	−·01	3761·58	−·01	−·05	·00
	47 450	5132·87	−·01	1570·41	−·02	+·03	+·13							
	48 470	5265·01	−·02	5686·53	−·02	−·34	−·30					Mean	+·02	+·04
	48 477	6289·17	−·02	4404·62	−·01	+·37	−·14							
	47 460	6478·35	−·02	2673·56	−·01	−·04	−·17							
	Eros	4181·45	·00	4053·25	·00	...	...							
December 7	47 434	3090·06	·00	2975·94	·00	+·28	+·13	1	2621·67	·00	3517·61	·00	+·04	+·11
5279	48 453	3144·71	·00	6316·17	·00	−·59	+·08	2	3083·94	·00	6119·27	·00	+·09	−·14
	48 455	3448·12	·00	4307·69	·00	−·04	−·08	3	3109·86	·00	2984·03	·00	+·10	+·23
	48 454	3448·74	·00	5218·18	·00	+·24	+·02	7	4085·24	·00	3891·27	·00	+·06	+·31
	47 442	3948·56	·00	2979·48	·00	+·08	+·10	14	5541·53	·00	5910·89	·00	+·07	−·19
	48 463	4546·08	·00	5145·68	·00	+·02	+·30	17	5865·07	·00	5187·48	·00	−·03	−·04
	47 450	5039·93	·00	2996·30	·00	−·22	+·21							
	48 470	5177·85	·00	7133·82	·00	−·52	−·57					Mean	+·06	+·05
	48 477	6200·42	·00	5830·50	·00	+·36	−·21							
	47 460	6387·12	·00	4098·60	·00	−·03	+·02							
	47 463	6603·17	·00	2632·71	·00	+·46	+·05							
	Eros	4193·17	·00	4561·86	·00	...	...							

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
December 7	47 434	3069·08	·00	2907·25	·00	+·40	+·15	1	2595·36	·00	3445·03	·00	+·05	+·01
5280	48 453	3094·81	·00	6247·69	·00	−·63	+·15	2	3035·73	·00	6050·20	·00	+·03	+·02
	48 454	3408·04	·00	5152·66	·00	+·25	−·16	3	3088·01	·00	2915·76	·00	+·10	−·03
	48 455	3415·06	·00	4241·97	·00	·00	−·11	7	4055·73	·00	3831·27	·00	+·02	−·03
	47 442	3926·80	·00	2918·20	·00	+·02	−·08	14	5494·98	·00	5862·65	·00	−·05	−·13
	48 463	4505·73	·00	5089·20	·00	+·23	+·24	17	5824·42	·00	5142·01	·00	+·03	+·03
	47 450	5017·76	·00	2943·78	·00	−·09	+·49							
	48 470	5120·82	·00	7062·60	·00	−·29	−·66					Mean	+·03	−·02
	48 477	6154·52	·00	5787·91	·00	+·24	−·22							
	47 460	6355·93	·00	4057·55	·00	−·25	+·12							
	47 463	6584·40	·00	2593·72	·00	+·17	+·10							
	Eros	4158·96	·00	4472·86	·00	...	...							
December 7	47 434	3054·08	−·01	2885·35	−·01	+·44	+·11	1	2584·69	−·01	3426·53	−·01	−·04	+·29
5283	48 453	3105·06	−·01	6225·24	−·01	−·37	+·03	2	3045·14	−·01	6028·03	·00	−·38	+·11
	48 454	3410·12	·00	5127·58	·00	+·22	·00	3	3073·21	−·01	2893·63	−·01	−·01	+·02
	48 455	3410·34	·00	4217·20	·00	−·15	−·21	7	4047·58	·00	3801·42	·00	·00	−·09
	47 442	3911·71	·00	2889·41	·00	−·01	−·05	14	5501·95	−·02	5820·95	−·01	−·05	−·07
	48 463	4507·14	·00	5055·56	·00	+·13	+·24	17	5825·88	−·01	5097·82	−·01	−·03	+·05
	47 450	5002·58	·00	2906·67	·00	−·08	+·14							
	48 470	5137·20	−·02	7023·58	−·02	−·44	−·45					Mean	−·09	+·05
	48 477	6160·63	−·02	5741·02	−·02	+·36	−·22							
	47 460	6348·75	−·01	4009·08	−·01	−·08	+·34							
	47 463	6566·30	−·02	2543·85	−·01	+·06	+·09							
	Eros	4171·96	·00	4126·14	·00	...	...							
December 9	47 429	2404·47	·00	3695·97	·00	−·44	+·33	1	2137·87	+·01	6112·42	−·01	·00	−·22
5285	46 373	2539·39	·00	2508·10	·00	−·21	+·08	47° 429	2404·47	·00	3695·97	·00	−·09	+·05
	47 434	2606·37	+·01	5570·10	·00	+·31	−·23	3	2625·30	+·01	5578·34	·00	+·09	−·28
	48 455	2965·27	+·01	6901·37	−·01	·00	−·32	6	3354·62	·00	3074·03	·00	+·02	+·03
	47 442	3463·79	·00	5572·61	·00	+·24	−·39	47° 442	3463·79	·00	5572·61	·00	+·15	−·21
	47 450	4554·94	·00	5587·51	·00	+·12	+·21	47° 450	4554·94	·00	5587·51	·00	+·14	+·02
	47 460	5904·23	+·01	6687·71	·00	−·24	+·35	10	4584·27	·00	3822·12	·00	+·10	−·05
	46 397	5929·42	+·01	1654·39	−·01	+·05	−·13							
	47 462	6050·73	·00	4348·26	·00	−·11	+·12					Mean	+·06	−·09
	47 463	6117·99	·00	5221·96	·00	+·30	+·02							
	Eros	4104·14	·00	4567·35	·00	...	...							
December 9	47 429	2417·91	−·01	3732·62	·00	−·24	+·30	1	2151·75	−·01	6149·02	·00	−·07	−·19
5286	46 373	2552·99	−·01	2544·75	−·01	−·24	+·04	47° 429	2417·91	−·01	3732·62	·00	+·11	+·02
	47 434	2620·00	−·01	5606·56	·00	+·42	−·17	3	2639·07	−·01	5614·76	·00	+·06	−·19
	48 455	2979·22	−·01	6937·75	·00	−·14	−·32	6	3368·27	·00	3110·44	·00	−·07	·00
	47 442	3477·58	·00	5608·79	·00	+·15	−·30	47° 442	3477·58	·00	5608·79	·00	+·06	−·12
	47 450	4568·71	·00	5623·44	·00	−·03	+·25	47° 450	4568·71	·00	5623·44	·00	−·01	+·06
	47 460	5917·69	−·02	6723·25	−·01	−·09	+·36	10	4598·03	·00	3857·96	·00	−·13	+·13
	46 397	5942·75	−·01	1690·45	·00	+·03	−·50							
	47 462	6064·19	−·01	4383·68	·00	−·11	+·28					Mean	−·01	−·04
	47 463	6131·59	−·01	5257·46	−·01	+·20	+·06							
	Eros	4172·77	·00	4192·67	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
December 10	46 370	1220·44	·00	3295·47	·00	−·55	+·23	4	1903·77	·00	5281·04	·00	...	...
5287	47 429	1551·01	·00	6494·18	·00	−·34*	+·38*	6	2498·55	·00	5867·87	·00	+·03	−·04
	46 373	1680·68	·00	5305·84	·00	−·10	−·10	10	3731·82	·00	6610·26	·00	+·03	−·07
	45 379	3976·85	·00	1545·86	·00	+·46	−·27	16	4546·77	·00	4605·94	·00	...	...
	46 389	4572·25	·00	2871·74	·00	+·46	+·33							
	46 393	4869·57	·00	3673·07	·00	−·45	−·24					Mean	(+·03)	−·06)
	46 397	5066·91	·00	4436·44	·00	+·16	−·18							
	47 462	5200·69	·00	7129·61	·00	+·10	+·20							
	46 404	5632·23	·00	3082·97	·00	−·15	−·10							
	45 398	6368·67	·00	1215·55	·00	+·39*	−·22*							
	Eros	3577·59	·00	5818·41	·00	...	...							
December 13	45 376	2788·26	·00	2504·44	·00	−·16	+·05	12	3162·26	·00	2816·15	·00	+·09	+·11
5288	45 379	3146·74	·00	4482·09	·00	+·66	−·01	15	3577·83	·00	5357·92	·00	−·01	+·10
	44 326	3173·59	·00	1131·01	·00	+·05	−·06	18	3886·19	·00	2747·55	·00	−·06	+·33
	45 383	3580·30	·00	1971·92	·00	+·57	+·04	19	3965·81	·00	1327·88	·00	+·23†	+·04†
	46 389	3748·39	·00	5805·55	·00	+·30	+·26	20	4332·14	·00	5703·81	·00	+·16	+·02
	46 393	4049·49	·00	6605·42	·00	−·80	−·11	22	5383·97	·00	4402·23	·00	−·10	+·10
	46 397	4250·12	·00	7368·05	·00	−·03	−·10	24	5622·81	·00	3874·69	·00	+·12	·00
	46 404	4809·40	·00	6012·20	·00	−·41	−·33	31	6612·82	·00	2952·78	·00	+·13†	+·14†
	45 392	4821·18	·00	4249·31	·00	+·04	+·16							
	45 394	4944·38	·00	2442·82	·00	−·11	+·16					Mean	+·03	+·11
	44 337	5533·91	·00	1390·06	·00	−·02	−·08							
	45 398	5537·39	·00	4141·29	·00	−·06	−·04							
	45 416	7421·53	·00	4117·06	·00	+·03	+·04							
	Eros	4069·30	·00	4520·95	·00	...	...							
December 13	45 376	2793·01	·00	2505·70	·00	−·22	+·08	12	3167·00	·00	2817·66	·00	−·06	+·02
5289	45 379	3151·00	·00	4483·50	·00	+·33	·00	15	3581·42	·00	5359·50	·00	+·02	+·10
	44 326	3178·93	·00	1132·59	·00	−·06	−·22	18	3890·96	·00	2749·62	·00	−·22	−·05
	45 383	3585·30	·00	1973·59	·00	+·47	−·05	19	3971·19	·00	1329·58	·00	·00†	+·06†
	46 389	3751·71	·00	5807·11	·00	+·41	+·34	20	4335·80	·00	5705·71	·00	·00	−·02
	46 393	4052·37	·00	6607·13	·00	−·54	−·07	22	5387·70	·00	4404·55	·00	+·16	+·02
	46 397	4252·88	·00	7369·90	·00	+·08	−·11	24	5626·86	·00	3876·97	·00	+·28	+·05
	46 404	4812·90	·00	6014·11	·00	−·53	−·21	31	6617·38	·00	2955·60	·00	+·14†	+·03†
	45 392	4825·15	·00	4251·29	·00	+·13	+·23							
	45 394	4949·08	·00	2444·85	·00	−·07	+·22					Mean	+·03	+·02
	44 337	5538·96	·00	1392·51	·00	+·09	−·22							
	45 398	5541·50	·00	4143·56	·00	−·08	−·01							
	45 416	7425·75	·00	4120·10	·00	−·06	+·01							
	Eros	4079·92	·00	4501·50	·00	...	...							
December 13	45 376	2792·58	·00	2507·30	·00	−·15	+·09	12	3166·64	·00	2819·36	·00	+·03	−·19
5290	45 379	3151·13	·00	4484·91	·00	+·47	+·08	15	3582·06	·00	5360·99	·00	−·07	−·05
	44 326	3178·16	·00	1134·01	·00	−·11	−·15	18	3890·67	·00	2750·91	·00	−·22	−·10
	45 383	3584·78	·00	1974·96	·00	+·45	−·07	19	3970·52	·00	1330·89	·00	−·06†	−·04†
	46 389	3752·35	·00	5808·43	·00	+·45	+·31	20	4336·42	·00	5706·80	·00	+·03	·00
	46 393	4053·43	·00	6608·39	·00	−·66	−·14	22	5388·04	·00	4405·36	·00	+·07	−·02

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
December 13	46 397	4254·10	·00	7371·00	·00	+·05	−·09	24	5627·13	·00	3877·58	·00	+·07	+·12
5290—*contd.*	46 404	4813·62	·00	6015·02	·00	−·49	−·18	31	6617·22	·00	2956·09	·00	+·07†	−·11†
	45 392	4825·52	·00	4252·20	·00	−·06	+·25							
	45 394	4948·67	·00	2445·80	·00	−·05	+·16						Mean	+·02	−·04
	44 337	5538·19	·00	1393·32	·00	+·14	−·33							
	45 398	5541·63	·00	4144·25	·00	−·05	·00							
	45 416	7425·79	·00	4120·14	·00	+·05	+·04							
	Eros	4087·47	·00	4478·92	·00	...	...							
December 13	45 376	2797·42	−·02	2525·89	−·01	−·21	−·17	12	3172·30	−·01	2836·25	−·01	+·13	−·15
5294	45 379	3162·66	·00	4501·84	·00	+·30	−·07	15	3596·15	·00	5376·20	·00	+·05	−·13
	44 326	3178·03	−·02	1151·27	−·02	+·13	−·34	18	3895·53	·00	2765·23	·00	+·29	−·11
	45 383	3587·34	−·01	1990·54	−·01	+·74	−·15	19	3970·76	−·01	1345·09	−·02	+·26†	−·06†
	46 389	3768·16	·00	5822·78	·00	+·34	+·41	20	4351·77	·00	5719·07	·00	−·12	+·06
	46 393	4071·90	−·01	6621·71	−·01	−·82	−·21	22	5398·64	·00	4413·77	·00	+·05	+·20
	46 397	4275·09	−·02	7383·23	−·02	−·12	+·13	24	5635·66	−·01	3885·39	·00	+·31	+·16
	46 404	4829·73	−·01	6025·55	−·01	−·47	−·15	31	6622·40	−·02	2960·30	−·01	+·32†	+·03†
	45 392	4835·80	·00	4262·92	·00	−·12	+·25							
	45 394	4952·74	·00	2456·36	·00	−·01	+·09						Mean	+·12	+·01
	44 337	5538·33	−·01	1401·57	−·01	+·43	−·13							
	45 398	5551·40	−·01	4152·29	·00	−·14	+·09							
	45 416	7435·02	−·04	4121·24	−·02	·00	+·19							
	Eros	4198·20	·00	4172·84	·00	...	...							
December 13	45 376	2800·07	−·03	2529·73	−·03	−·15	+·03	12	3174·89	−·02	2839·59	−·02	+·29	+·19
5297	45 379	3166·21	·00	4505·14	·00	+·15	−·05	19	3973·00	−·03	1348·65	−·04	+·04†	−·27†
	44 326	3180·13	−·05	1154·91	−·05	+·10	+·07	20	4355·34	−·01	5721·30	−·01	−·04	−·08
	45 383	3590·03	−·03	1993·84	−·03	+·38	+·08	22	5401·82	−·01	4415·79	−·01	−·16	−·30
	46 389	3771·83	−·01	5825·47	−·01	+·47	+·25	24	5638·86	−·01	3886·95	·00	−·19	+·05
	46 393	4075·85	−·02	6623·71	−·02	−·72	−·10	31	6625·07	−·02	2961·41	−·01	−·18†	−·24†
	46 397	4279·09	−·03	7385·29	−·05	+·19	−·17							
	46 404	4833·28	−·02	6027·36	−·02	−·36	−·33						Mean	−·03	−·04
	45 392	4838·76	·00	4265·05	·00	−·09	+·13							
	45 394	4954·99	−·01	2458·68	−·01	+·01	+·08							
	44 337	5540·30	−·02	1403·55	−·02	+·21	−·03							
	45 398	5554·19	−·01	4153·84	−·01	−·11	−·01							
	45 416	7437·55	−·06	4121·30	−·04	−·07	+·08							
	Eros	4232·97	·00	4085·95	·00	...	...							
December 15	45 376	1506·50	+·01	5421·60	−·01	−·04	−·24	12	1882·57	+·01	5730·88	−·01	−·02†	+·10†
5299	44 326	1883·95	+·01	4046·12	·00	+·16	−·40	18	2606·10	+·01	5658·13	·00	−·13	+·24
	45 383	2295·67	+·01	4884·35	·00	+·49	−·12	19	2677·61	·00	4238·12	·00	+·03	−·04
	44 329	2311·73	+·01	1632·66	·00	−·31	+·08	24	4349·45	·00	6775·16	·00	−·09†	−·07†
	45 392	3550·01	+·01	7154·41	−·01	−·22	+·20	25	4504·24	·00	2555·00	·00	−·07	+·31
	45 394	3662·15	·00	5347·17	·00	+·09	+·14	31	5334·10	·00	5847·67	·00	−·29	−·10
	44 335	4077·42	+·01	1241·75	−·01	+·35	+·09	33	5600·20	·00	4980·01	·00	−·09	−·11
	44 337	4245·55	·00	4290·95	·00	+·03	+·11	34	5662·60	·00	3215·09	·00	−·28	+·07
	45 398	4265·63	+·01	7042·21	−·01	−·36	−·03							
	44 347	5822·66	+·01	1984·79	−·01	−·23	+·03						Mean	−·14	+·06
	44 352	6474·72	+·01	4001·51	·00	−·28	−·02							
	45 422	6805·46	+·01	5678·68	·00	+·34	+·12							
	Eros	3975·64	·00	4599·23	·00	...	...							

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† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
December 15	45 376	1510·56	·00	5419·04	·00	−·12	+·03	12	1887·28	·00	5728·02	·00	−·36†	+·22†
5300	44 326	1886·63	·00	4043·31	·00	−·15	−·36	18	2610·45	·00	5654·71	·00	−·17	+·02
	45 383	2299·27	·00	4881·09	·00	+·27	−·12	19	2680·54	·00	4234·34	·00	−·28	−·01
	44 329	2311·32	·00	1629·45	·00	−·39	−·03	24	4355·11	·00	6769·26	·00	−·05†	+·02†
	45 392	3556·06	·00	7149·63	·00	−·13	+·19	25	4504·91	·00	2549·08	·00	−·05	+·20
	45 394	3666·29	·00	5342·25	·00	−·06	+·09	31	5338·57	·00	5840·39	·00	−·12	+·14
	44 335	4076·49	·00	1236·34	·00	+·39	+·01	33	5603·66	·00	4972·57	·00	+·07	−·04
	44 337	4248·33	·00	4285·28	·00	−·01	+·10	34	5663·83	·00	3207·62	·00	·00	+·07
	45 398	4271·49	·00	7036·44	·00	−·20	+·05							
	44 347	5822·64	·00	1977·29	·00	−·15	−·14					Mean	−·09	+·06
	44 352	6476·89	·00	3993·10	·00	+·04	−·08							
	45 422	6809·85	·00	5669·64	·00	+·45	+·30							
	Eros	3989·13	·00	4569·44	·00	...	...							
December 15	45 376	1524·72	−·02	5468·23	·00	−·14	−·21	12	1900·71	−·01	5777·60	·00	−·02†	−·15†
5304	44 326	1902·02	−·02	4092·64	·00	−·06	−·36	18	2624·01	−·01	5704·72	·00	−·01	−·18
	45 383	2313·77	−·01	4930·70	·00	+·34	−·12	19	2695·49	−·01	4284·16	·00	−·06	+·12
	44 329	2328·81	−·02	1679·20	−·02	+·01	+·04	24	4367·67	−·01	6820·55	−·01	−·28†	−·09†
	45 392	3568·29	−·01	7200·28	−·01	−·30	+·04	25	4521·43	·00	2600·73	·00	+·05	+·09
	45 394	3680·14	·00	5392·93	·00	−·03	+·11	31	5351·73	−·01	5892·45	−·01	−·15	+·10
	44 335	4094·28	−·01	1287·82	−·01	+·63	−·21	33	5617·75	−·01	5024·64	·00	−·04	+·17
	44 337	4263·31	·00	4336·38	·00	−·11	+·22	34	5679·67	−·01	3259·81	·00	−·06	+·32
	45 398	4283·81	−·01	7087·65	−·01	−·45	−·08							
	44 347	5839·59	−·01	2029·80	·00	−·09	−·01					Mean	−·05	+·10
	44 352	6491·99	−·01	4045·86	·00	−·20	+·22							
	45 422	6822·93	−·03	5722·78	−·01	+·45	+·38							
	Eros	4164·48	·00	4216·37	·00	...	...							
December 15	45 376	1520·07	−·02	5465·83	−·01	−·27	−·06	12	1895·88	−·02	5775·05	−·01	−·07†	+·05†
5306	44 326	1897·30	−·02	4090·45	−·01	+·02	−·27	18	2618·90	−·01	5702·04	·00	+·13	+·04
	45 383	2308·97	−·01	4928·32	−·01	+·32	−·04	19	2690·86	−·01	4281·93	·00	−·22	+·07
	44 329	2324·66	−·05	1677·26	−·05	−·22	+·16	24	4362·08	−·02	6817·54	−·02	−·08†	−·04†
	45 392	3562·91	−·02	7197·22	−·02	−·25	+·22	25	4516·71	−·01	2598·46	−·01	−·06	+·01
	45 394	3675·21	·00	5390·43	·00	−·18	−·01	31	5346·21	−·02	5889·54	−·02	−·03	+·01
	44 335	4089·88	−·02	1285·62	−·03	+·45	−·09	33	5612·39	−·01	5021·84	−·01	−·01	+·06
	44 337	4258·34	·00	4333·97	·00	−·18	+·06	34	5674·60	−·01	3257·35	·00	−·09	+·12
	45 398	4278·25	−·02	7084·69	−·03	−·31	−·11							
	44 347	5834·75	−·01	2027·49	−·01	−·19	−·20					Mean	−·05	+·05
	44 352	6486·38	−·02	4043·21	−·01	+·09	−·06							
	45 422	6817·10	−·05	5719·52	−·04	+·67	+·41							
	Eros	4199·26	·00	4121·27	·00	...	...							
December 15	45 376	1533·17	−·03	5502·35	−·01	−·17	−·36	12	1910·64	−·02	5809·38	−·01	−·03†	−·17†
5307	44 326	1903·52	−·03	4124·81	−·02	−·34	−·28	18	2633·10	−·01	5732·39	−·01	+·27	−·16
	44 329	2317 64	−·07	1709·35	−·07	−·13	(+·43)	19	2697·44	−·01	4311·88	−·01	+·02	+·11
	45 383	2319·33	−·01	4960·18	−·01	+·23	+·07	24	4382·15	−·03	6838·11	−·03	−·08†	−·17†
	45 392	3585·07	−·02	7222·16	−·03	−·26	+·05	25	4514·41	−·01	2618·69	−·01	−·03	−·02
	45 394	3687·93	·00	5414·81	·00	−·33	+·02	31	5361·13	−·02	5904·74	−·03	+·09	−·01

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The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

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Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
December 15	44 335	4080·61	−·03	1308·25	−·04	+·53	+·02	33	5622·70	−·02	5035·75	−·01	+·11	−·02
5307—*contd.*	44 337	4265·26	·00	4355·19	·00	−·16	+·22	34	5675·68	−·01	3271·24	·00	−·07	·00
	45 398	4299·62	−·03	7105·58	−·04	−·19	−·14							
	44 347	5829·32	−·01	2040·65	−·01	−·20	−·29					Mean	+·07	−·02
	44 352	6491·48	−·03	4052·43	−·02	+·14	−·07							
	45 422	6830·94	−·06	5726·77	−·05	+·83	+·31							
	Eros	4219·39	·00	4111·02	·00	...	...							
December 16	44 326	1165·45	+·01	5545·72	−·01	−·13	−·42	19	1959·47	+·01	5734·98	−·01	+·08	−·01
5308	45 383	1579·86	+·02	6382·49	−·01	+·31	+·01	44 335	3349·07	·00	2734·07	·00	+·11	+·06
	44 329	1584·86	+·01	3131·06	·00	−·22	−·17	25	3780·35	·00	4046·08	·00	+·13	−·11
	45 394	2948·01	+·01	6840·79	−·01	−·16	+·12	33	4884·62	·00	6466·83	·00	+·06	−·03
	44 335	3349·07	·00	2734·07	·00	+·56	−·01	34	4940·76	·00	4701·89	·00	+·07	−·08
	44 337	3527·78	·00	5782·38	·00	−·03	+·16	42	6458·03	+·01	3444·24	·00	−·10	+·02
	43 343	4163·64	+·01	1178·32	−·01	−·19	+·42							
	44 346	5070·13	·00	2611·03	·00	+·15	+·13					Mean	+·06	−·03
	44 347	5096·85	·00	3471·13	·00	−·18	−·13							
	44 352	5755·78	·00	5485·57	·00	−·15	−·27							
	45 422	6092·33	+·01	7161·36	·00	+·46	+·22							
	44 354	6617·58	+·01	4579·78	·00	−·36	−·10							
	Eros	3973·45	·00	4594·57	·00	...	...							
December 17	44 329	782·18	+·02	4634·47	−·01	−·31*	−·15*	25	2981·69	·00	5540·21	·00	−·09	−·24
5309	44 335	2544·80	·00	4230·17	·00	+·48	−·18	29	3639·59	·00	3073·38	·00	+·10	·00
	44 337	2736·65	+·01	7277·52	−·01	−·27	+·35	34	4144·70	·00	6191·07	·00	+·08	−·20
	44 341	2832·07	+·01	6324·46	−·01	−·08	+·07	35	4571·90	·00	6027·36	·00	−·03	−·03
	43 337	2899·22	+·01	1802·52	·00	+·11	+·06	41	5416·29	·00	3384·23	·00	−·08	+·11
	43 341	3228·04	+·01	1404·97	·00	+·30	−·07	42	5656·46	·00	4926·86	·00	−·04	+·03
	43 343	3352·45	·00	2671·24	·00	−·01	+·15							
	44 346	4264·90	·00	4099·82	·00	+·46	−·05					Mean	−·01	−·06
	44 347	4295·39	·00	4959·59	·00	+·07	−·14							
	44 352	4963·27	+·01	6971·11	·00	−·18	−·12							
	44 354	5820·88	+·01	6061·52	·00	−·14	+·10							
	43 364	7824·02	+·02	3661·74	−·01	(−·46*)	+·01*							
	Eros	3947·61	·00	4602·92	·00	...	...							
December 17	44 329	786·17	+·01	4630·58	·00	−·35*	−·09*	25	2984·86	·00	5538·22	·00	−·07	−·10
5310	44 335	2549·27	·00	4227·79	·00	+·36	−·07	29	3645·04	·00	3072·14	·00	+·13	−·06
	44 337	2738·10	+·01	7275·18	−·01	−·18	+·62	34	4147·05	·00	6190·19	·00	+·35	−·13
	44 341	2834·50	·00	6322·31	·00	−·08	+·24	35	4574·63	·00	6026·86	·00	+·02	+·04
	43 337	2905·88	·00	1800·79	·00	+·04	−·19	41	5421·39	·00	3384·69	·00	+·05	−·06
	43 341	3235·00	·00	1403·32	·00	+·31	−·11	42	5660·31	·00	4927·54	·00	−·07	−·13
	43 343	3358·23	·00	2669·74	·00	+·01	+·09							
	44 346	4269·48	·00	4099·08	·00	+·39	−·05					Mean	+·07	−·07
	44 347	4299·13	·00	4959·03	·00	+·04	−·28							
	44 352	4965·20	·00	6971·00	·00	−·21	−·10							
	44 354	5823·86	·00	6062·33	·00	−·39	−·04							
	43 364	7828·53	+·01	3664·19	−·01	+·01*	−·01*							
	Eros	3966·79	·00	4571·68	·00	...	...							

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O. x.	Residuals. C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.		″	″	″	″	″	″		″	″	″	″	″	″
December 17	44 329	809·98	·00	4666·84	·00	+·11*	−·04*	25	3010·98	·00	5569·83	·00	+·17	−·14
5313	44 335	2572·38	·00	4260·22	·00	+·71	+·01	29	3666·03	·00	3101·93	·00	+·26	+·29
	44 337	2767·67	·00	7307·78	·00	+·22	+·13	34	4175·19	·00	6219·27	·00	−·01	−·14
	43 337	2924·41	·00	1832·25	·00	−·19	+·07	35	4602·08	·00	6055·04	·00	+·01	·00
	43 341	3252·65	·00	1434·20	·00	+·11	+·01	41	5443·28	·00	3410·69	·00	−·01	+·15
	44 346	4292·84	·00	4127·71	·00	+·26	+·10	42	5685·18	·00	4953·10	·00	+·19	+·09
	44 347	4324·48	·00	4987·60	·00	−·26	−·13							
	44 352	4994·69	·00	6998·56	·00	−·34	−·37					Mean	+·10	+·04
	44 354	5851·55	·00	6087·63	·00	−·62	+·09							
	44 364	7850·96	·00	3685·14	·00	−·03*	+·13*							
	Eros	4042·74	·00	4494·08	·00	...	...							
December 19	43 337	1072·11	+·01	4840·74	·00	−·27	−·37	29	1823·36	+·01	6104·82	−·01	−·09†	−·04†
5314	43 341	1397·26	+·01	4440·13	·00	+·22	−·27	36	2898·15	·00	4832·69	·00	−·07	−·11
	43 343	1532·52	+·01	5704·77	−·01	−·06	+·49	39	3127·16	·00	3808·02	·00	+·25	−·19
	44 346	2457·87	+·01	7125·45	−·01	−·06	+·37	41	3602·62	·00	6400·03	·00	+·01†	+·19†
	42 352	3277·83	·00	3011·00	·00	·00	+·12	45	4277·54	·00	5578·32	·00	+·24	+·24
	42 354	3400·64	·00	781·81	·00	+·33*	−·62*	46	4891·71	·00	3268·30	·00	−·03	−·11
	42 356	4084·84	·00	3245·76	·00	+·59	−·04	47	5166·44	·00	5115·72	·00	−·07	−·14
	42 360	4610·55	·00	1576·18	·00	−·17	−·01	48	5723·04	·00	3877·12	·00	−·03	+·02
	42 361	4700·46	·00	3045·32	·00	−·18	+·20							
	43 364	6012·40	·00	6656·28	·00	−·25	+·20					Mean	+·05	−·05
	42 370	6048·20	·00	3265·94	·00	−·20	−·11							
	Eros	3910·62	·00	4574·23	·00	...	...							
December 19	43 337	1080·94	+·01	4839·26	·00	−·04	−·03	29	1831·32	+·01	6104·19	−·01	+·09†	+·02†
5315	43 341	1406·77	+·01	4439·05	·00	+·06	−·11	36	2907·17	·00	4832·81	·00	−·05	−·07
	43 343	1541·32	+·01	5703·84	·00	(−·39)	(+·59)	39	3137·23	·00	3808·31	·00	−·06	−·14
	44 346	2465·08	+·01	7125·31	−·01	+·24	+·33	41	3610·24	·00	6400·73	·00	+·34†	+·16†
	42 352	3288·30	·00	3011·39	·00	−·10	+·11	45	4286·04	·00	5579·62	·00	+·28	+·07
	42 354	3412·81	·00	782·15	−·01	+·09*	−·47*	46	4901·95	·00	3269·80	·00	−·13	−·03
	42 356	4095·05	·00	3246·71	·00	+·61	−·04	47	5175·11	·00	5117·33	·00	+·12	+·01
	42 360	4621·98	·00	1577·68	·00	−·21	−·18	48	5732·62	·00	3879·41	·00	+·13	−·11
	42 361	4710·67	·00	3046·77	·00	−·03	+·15							
	43 364	6019·91	·00	6658·94	·00	+·10	−·17					Mean	+·05	−·05
	42 370	6058·55	·00	3268·31	·00	−·32	−·14							
	Eros	3930·83	·00	4556·09	·00	...	...							
December 19	43 337	1107·47	·00	4892·18	·00	+·06	−·04	29	1857·42	·00	6157·39	·00	−·09†	+·11†
5318	43 341	1433·39	·00	4492·03	·00	+·29	−·01	36	2933·69	·00	4886·47	·00	+·09	+·14
	43 343	1567·38	·00	5757·48	·00	−·31	+·13	39	3164·54	·00	3862·03	·00	−·12	+·14
	44 346	2490·45	·00	7179·04	·00	+·20	+·26	41	3636·29	·00	6455·17	·00	+·08†	−·03†
	42 352	3315·94	·00	3065·45	·00	−·04	+·16	45	4312·83	·00	5634·26	·00	−·25	+·04
	42 354	3441·76	·00	836·35	·00	+·13*	−·50*	46	4929·24	·00	3324·52	·00	+·18	+·19
	42 356	4122·91	·00	3301·14	·00	+·33	+·08	47	5201·82	·00	5172·32	·00	−·04	+·11
	42 360	4650·56	·00	1632·58	·00	−·23	−·26	48	5759·97	·00	3934·55	·00	+·06	+·14
	42 361	4738·50	·00	3101·72	·00	−·14	+·06							
	43 364	6045·74	·00	6714·37	·00	−·05	−·02					Mean	−·01	+·13
	42 370	6086·13	·00	3323·68	·00	−·29	+·09							
	Eros	4007·41	·00	4523·39	·00	...	...							

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographie 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
December 19	43 337	1120·12	·00	4926·14	·00	+·08	−·07	29	1877·95	·00	6186·77	·00	−·10†	−·17†
5319	43 341	1443·34	·00	4523·98	·00	+·51	−·05	36	2946·33	·00	4909·07	·00	+·02	+·10
	43 343	1585·17	·00	5788·57	·00	−·06	+·05	39	3170·49	·00	3883·18	·00	+·11	+·14
	44 346	2517·22	·00	7204·60	·00	+·28	−·09	41	3658·72	·00	6473·51	·00	−·04†	−·26†
	42 352	3317·16	·00	3085·68	·00	−·04	+·17	45	4329·85	·00	5648·53	·00	−·11	−·28
	42 354	3429·20	·00	855·79	·00	+·01*	−·39*	46	4932·21	·00	3334 82	·00	−·02	+·09
	42 356	4125·67	·00	3316·09	·00	+·22	+·33	47	5215·95	·00	5180·87	·00	+·10	−·02
	42 360	4642·92	·00	1644·37	·00	−·36	−·06	48	5766·63	·00	3939·65	·00	−·06	+·05
	42 361	4739·97	·00	3113·04	·00	−·24	+·13							
	43 364	6069·40	·00	6717·77	·00	+·11	−·30					Mean	+·01	+·01
	42 370	6089·08	·00	3326·51	·00	−·53	+·25							
	Eros	4029·31	·00	4518·36	·00	...	...							
December 19	43 337	1095·46	−·02	4877·17	−·01	·00	−·05	29	1847·40	−·01	6140·92	−·01	−·39†	+·17†
5322	43 341	1420·68	−·02	4476·39	−·01	+·29	+·09	36	2921·48	·00	4868·40	·00	−·06	+·07
	43 343	1556·26	−·02	5741·56	−·01	−·09	+·16	39	3150·62	·00	3843·72	·00	−·08	−·01
	44 346	2481·50	−·01	7161·43	−·01	+·13	+·30	41	3626·04	−·01	6435·74	−·01	+·09†	−·06†
	42 352	3300·80	−·01	3046·80	−·01	−·01	+·18	45	4301·10	·00	5613·64	·00	−·06	+·12
	42 354	3423·23	−·02	817·76	−·03	+·32*	−·57*	46	4914·39	·00	3303·47	·00	+·05	−·16
	42 356	4108·06	·00	3281·14	·00	+·27	+·05	47	5189·47	−·01	5150·34	−·01	−·05	+·08
	42 360	4633·24	−·01	1611·68	−·01	−·33	−·14	48	5745·72	−·01	3912·09	·00	+·07	−·27
	42 361	4723·19	·00	3080·78	·00	−·14	−·05							
	43 364	6035·34	−·03	6690·75	−·02	·00	+·03					Mean	−·02	−·03
	42 370	6071·08	−·01	3300·43	·00	−·48	−·03							
	Eros	4167·15	·00	4196·19	·00	...	...							
December 19	43 337	1096·61	−·04	4944·12	−·02	·00	−·24	29	1857·62	−·02	6201·74	−·01	+·09†	−·28†
5324	43 341	1418·54	−·04	4540·69	−·02	+·41	+·03	36	2921·96	−·01	4920·63	·00	+·07	−·14
	43 343	1563·91	−·03	5804·63	−·01	−·03	−·10	39	3143·24	−·01	3894·09	−·01	−·06	+·06
	44 346	2499·66	−·02	7216·64	−·03	+·41	+·04	41	3638·77	−·01	6481·91	−·02	−·10†	−·33†
	42 352	3287·38	−·01	3096·09	−·01	−·13	+·31	45	4307·14	−·01	5654·59	−·01	−·09	−·17
	42 354	3392·38	−·05	866·39	−·06	+·38*	−·17*	46	4902·53	·00	3339·62	·00	−·06	+·01
	42 356	4096·33	·00	3323·88	·00	+·06	+·12	47	5191·69	−·01	5184·06	−·01	−·07	−·05
	42 360	4608·34	−·02	1650·49	−·02	−·39	+·07	48	5738·48	−·01	3941·08	−·01	−·20	+·17
	42 361	4709·54	·00	3118·54	·00	−·14	+·08							
	43 364	6049·33	−·06	6717·41	−·05	−·10	−·32					Mean	−·07	−·02
	42 370	6058·71	−·01	3327·11	−·01	−·42	+·23							
	Eros	4216·99	·00	4144·59	·00	...	...							
December 20	42 351	2192·64	−·08	1834·22	−·08	+·45	−·03							
5326	42 352	2308·97	−·02	4625·39	−·01	−·30	+·24							
	42 354	2402·14	−·06	2395·36	−·05	+·33*	+·01*							
	42 356	3118·60	·00	4848·56	·00	+·35	+·23							
	42 360	3621·68	−·01	3172·88	−·01	−·04	·00							
	42 361	3730·51	·00	4639·90	·00	+·33	+·17							
	42 370	5081·32	−·01	4841·40	−·01	−·65	−·06							
	42 373	5825·80	−·01	2590·38	−·01	−·64	−·22							
	42 375	6160·44	−·01	3063·09	−·01	+·23	−·25							
	43 373	6989·02	−·06	4954·27	−·05	−·04	−·12							
	Eros	4251·61	·00	4108·32	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Compariaon Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tablea VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
December 21	42 360	1346·03	−·02	4841·44	−·01	−·25	+·32	50	2664·95	−·01	3447·62	−·01	−·05	+·06
5327	42 370	2807·62	−·01	6509·92	−·01	−·18	−·07	52	2949·33	−·01	6061·73	·00	−·04	−·09
	41 342	3378·64	−·02	1063·32	−·02	−·10	+·20	56	4044·68	·00	5130·99	·00	+·09	−·04
	42 373	3549·92	·00	4257·48	·00	−·60	−·12	57	4087·62	·00	3185·93	·00	+·07	+·08
	41 347	3760·19	−·01	1888·15	−·01	+·09	−·01	58	4766·17	·00	4098·56	·00	−·09	−·01
	42 375	3885·48	·00	4730·06	·00	+·02	−·14							
	41 352	4545·63	·00	2917·78	·00	+·15	−·06					Mean	·00	·00
	43 373	4716·48	−·01	6621·23	−·01	−·09	−·02							
	42 388	5944·52	−·02	5876·44	−·02	+·30	+·05							
	42 390	6170·98	−·01	3136·55	·00	+·13	+·04							
	41 364	7384·48	−·03	2317·20	−·01	+·58*	−·19*							
	Eros	2967·70	·00	4350·33	·00	...	...							
December 21	42 360	1348·89	−·03	4841·76	−·01	−·24	+·09	50	2667·21	−·01	3447·26	−·01	+·02	−·01
5328	42 361	1460·46	−·02	6309·07	−·01	(−·31*)	(+·45*)	52	2952·41	−·01	6060·92	−·01	+·08	+·01
	42 370	2811·11	−·01	6509·35	−·01	−·32	−·16	56	4047·76	·00	5129·78	·00	−·17	+·02
	41 342	3380·13	−·03	1062·69	−·03	−·12	+·18	57	4089·96	·00	3184·91	·00	−·10	+·02
	42 373	3552·52	·00	4256·54	·00	−·66	−·06	58	4768·41	·00	4097·07	·00	+·11	+·08
	41 347	3761·87	−·01	1887·12	−·02	+·12	+·17							
	42 375	3888·31	·00	4728·97	·00	−·13	−·11					Mean	−·01	+·02
	41 352	4547·63	·00	2916·60	·00	+·18	−·15							
	43 373	4719·64	−·02	6619·59	−·02	+·02	+·09							
	42 388	5947·64	−·02	5874·41	−·02	+·13	+·01							
	42 390	6172·82	−·01	3134·47	·00	+·29	+·08							
	41 364	7385·66	−·03	2315·06	−·01	+1·05*	−·61*							
	Eros	2992·19	−·01	4316·64	·00	...	...							
December 21	42 360	1347·51	−·03	4844·52	−·02	−·34	+·27	50	2666·33	−·02	3450·82	−·02	+·02	−·06
5329	42 361	1458·03	−·03	6311·66	−·02	(−·13*)	(+·64*)	52	2950·25	−·01	6064·13	−·01	−·03	+·07
	42 370	2808·63	−·01	6512·46	−·01	−·32	−·14	56	4045·60	·00	5133·47	·00	+·09	+·01
	41 342	3380·25	−·04	1066·85	−·05	+·04	+·02	57	4088·92	·00	3188·97	·00	+·05	−·09
	42 373	3551·05	·00	4260·25	·00	−·58	−·14	58	4767·09	·00	4101·21	·00	−·01	−·07
	41 347	3761·60	−·02	1891·22	−·03	+·22	+·06							
	42 375	3886·62	·00	4732·79	·00	−·11	−·27					Mean	+·02	−·03
	41 352	4546·77	00	2920·53	−·01	+·25	·00							
	43 373	4716·88	−·02	6623·41	−·03	+·05	−·08							
	42 388	5945·29	−·04	5878·40	−·03	+·01	+·12							
	42 390	6171·85	−·01	3139·04	−·01	+·19	+·03							
	41 364	7385·20	−·03	2319·93	−·02	+·75*	−·52*							
	Eros	3022·11	−·01	4273·74	·00	...	...							
December 24	41 342	973·36	−·01	5535·51	·00	−·21	−·12							
5330	41 347	1363·45	−·01	6356·24	·00	+·04	−·09							
	41 352	2159·57	−·01	7378·10	−·01	+·33*	−·28*							
	41 353	2345·75	·00	4788·52	·00	−·19	+·16							
	42 390	3787·78	−·01	7579·97	−·01	+·10	−·03							
	40 384	3949·25	·00	2860·97	·00	+·36	+·02							
	41 362	4694·79	·00	4260·77	·00	−·26	+·21							
	40 390	4762·87	·00	2975·64	·00	−·12	+·27							

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x	y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
December 24	41 364	4992·91	−·01	6747·89	−·01	+·21	−·17							
5330—*contd.*	40 400	5889·64	−·01	842·49	−·01	+·03*	−·37*							
	40 401	6003·70	·00	3551·22	·00	+·21	+·27							
	41 374	7231·09	−·01	4473·46	−·01	−·45	+·12							
	Eros	4056·28	·00	4335·01	·00	...	...							
December 26	39 421	1774·02	−·01	2721·80	−·01	+·56	−·05	65	2924·05	·00	5036·31	·00	...	...
5331	40 390	2079·72	−·01	6097·86	·00	+·39	−·05	66	3095·36	·00	3259·45	·00	...	...
	40 394	2376·77	−·01	3376·34	·00	−·57	+·08	68	3576·17	·00	2910·03	·00	...	...
	40 400	3182·54	·00	3951·67	·00	+·20	−·06	69	3793·33	·00	5587·15	·00	...	...
	40 401	3327·31	·00	6659·03	·00	+·50	+·21	73	5562·96	·00	3722·07	·00	−·05	+·11
	39 434	3468·33	·00	3281·97	·00	−·38	−·19	76	5954·16	·00	4656·11	·00	...	...
	41 377	5029·64	−·01	7117·11	−·01	−·27	−·28							
	40 406	5086·74	·00	3495·33	·00	+·18	+·23					Mean	(−·05)	(+·11)
	40 412	5848·65	·00	4053·80	·00	−·13	+·05							
	39 447	5873·70	·00	2702·29	·00	+·19	+·05							
	39 448	6723·39	−·01	2807·59	−·01	+·02	+·01							
	40 415	6731·95	−·01	5638·28	−·01	−·44	+·04							
	Eros	4092·95	·00	4354·63	·00	...	...							
December 28	39 434	464·92	−·01	6400·54	·00	−·05*	·00*	73	2565·77	·00	6815·16	·00	+·05†	−·14†
5333	40 406	2086·14	−·01	6594·47	·00	(+·67)	(−·15)	75	2783·05	·00	4092·59	·00	−·16	+·11
	40 412	2855·42	·00	7143·37	−·01	−·08	−·11	78	3455·46	·00	5388·25	·00	−·04	−·05
	39 447	2863·76	·00	5791·29	·00	+·28	+·11	79	3831·90	·00	3231·94	·00	−·04	+·13
	39 448	3714·99	·00	5886·02	·00	−·24	+·16	82	4544·84	·00	2440·92	·00	−·16	+·05
	39 450	4315·90	·00	3735·89	·00	−·22	−·14	83	4648·68	·00	1555·83	·00	−·15†	+·06†
	38 392	4525·38	·00	2509·09	·00	−·28	+·10	84	5156·33	·00	5857·07	·00	−·08	−·04
	39 454	5194·71	·00	6265·76	·00	−·29	+·02	85	5250·48	·00	4299·25	·00	−·09	+·07
	39 457	6589·52	·00	4078·98	·00	+·37	+·19							
	38 402	7287·09	−·01	1851·80	·00	−·09*	−·30*					Mean	−·10	+·05
	39 464	7970·58	−·01	3035·39	·00	−·11*	+·15*							
	Eros	3989·18	·00	4421·31	·00	...	...							
December 28	39 434	463·53	−·01	6403·28	−·01	−·55*	+·45*	73	2563·93	·00	6817·68	·00	+·01†	−·03†
5334	40 406	2084·71	·00	6596·93	·00	+·24	+·10	75	2780·44	·00	4095·25	·00	−·22	+·05
	40 412	2853·52	·00	7145·85	·00	+·10	−·11	78	3452·89	·00	5390·40	·00	+·22	+·18
	39 447	2861·73	·00	5793·83	·00	+·20	+·04	79	3829·12	·00	3234·25	·00	−·19	+·12
	39 448	3712·69	·00	5888·38	·00	−·03	+·02	82	4541·59	·00	2443·04	·00	−·10	+·02
	39 450	4313·20	·00	3737·91	·00	−·27	−·10	83	4645·39	·00	1557·86	·00	−·30†	+·09†
	38 392	4522·44	·00	2511·25	·00	−·43	−·05	84	5153·89	·00	5859·02	·00	+·16	−·13
	39 454	5192·49	·00	6267·75	·00	−·07	−·21	85	5247·69	·00	4301·17	·00	+·04	+·01
	39 457	6586·69	·00	4080·41	·00	+·54	+·15							
	38 402	7283·61	−·01	1853·03	·00	+·05*	−·34*					Mean	−·02	+·04
	39 464	7967·26	−·01	3036·51	·00	+·20*	+·01*							
	Eros	4016·05	·00	4391·17	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1900.	°	″	″	″	″	″	″			″	″	″	″	″
December 28	39 434	468·80	−·04	6412·48	−·02	−·70*	+·37*	73	2568·56	−·01	6826·12	−·01	−·05†	−·07†
5335	40 406	2089·44	−·01	6605·64	−·01	+·22	−·02	75	2784·83	−·01	4104·20	·00	+·20	−·11
	40 412	2858·13	−·01	7153·89	−·02	−·05	+·09	78	3457·54	·00	5398·96	·00	+·09	−·02
	39 447	2866·28	−·01	5802·31	−·01	+·26	+·05	79	3833·52	·00	3243·08	·00	+·06	−·11
	39 448	3716·92	·00	5896·44	−·01	+·13	+·15	82	4545·97	−·01	2451·60	−·01	+·10	−·01
	39 450	4317·59	·00	3746·49	·00	−·17	−·31	83	4649·33	−·01	1566·72	−·02	+·40†	−·12†
	38 392	4526·88	·00	2519·88	−·01	−·30	−·15	84	5158·07	−·02	5866·58	−·02	+·03	+·07
	39 454	5196·50	−·02	6275·30	−·02	−·09	−·09							
	39 457	6590·75	−·02	4088·06	−·01	+·35	+·10					Mean	+·10	−·04
	38 402	7287·52	−·03	1860·96	−·01	+·11*	−·50*							
	39 464	7970·85	−·05	3043·59	−·02	+·27*	+·28*							
	Eros	4219·07	·00	4184·99	·00	...	...							
December 28	39 434	456·87	−·05	6408·38	−·03	−·33*	+·22*	73	2556·39	−·02	6822·56	−·02	+·01†	+·11†
5336	40 406	2077·59	−·02	6602·05	−·02	+·19	+·01	75	2774·59	−·01	4101·17	−·01	+·20	+·01
	40 412	2845·90	−·02	7150·71	−·03	−·15	−·01	78	3446·69	·00	5396·27	·00	−·27	−·11
	39 447	2854·88	−·01	5799·18	−·01	+·25	+·09	79	3823·95	−·01	3240·72	−·01	−·13	−·04
	39 448	3705·37	−·01	5893·68	−·01	+·12	+·19	82	4536·73	−·01	2449·86	−·01	+·04	−·15
	39 450	4307·32	·00	3744·21	·00	−·05	−·18	84	5146·45	−·02	5864·48	−·03	−·07	+·09
	38 392	4517·39	−·01	2518·06	−·01	−·14	−·21							
	39 454	5184·58	−·03	6273·21	−·04	−·17	−·11					Mean	−·05	−·04
	39 457	6580·13	−·03	4086·87	−·02	+·35	+·13							
	38 402	7278·43	−·03	1860·27	−·02	+·03*	−·35*							
	39 464	7961·21	−·06	3043·29	−·03	−·15*	+·18*							
	Eros	4250·82	·00	4138·25	·00	...	...							
December 29	39 447	1773·91	·00	7596·77	−·01	+·34*	+·01*	75	1681·06	·00	5898·56	·00	−·01†	−·14†
5337	39 448	2625·94	·00	7685·16	−·01	−·19*	+·31*	79	2723·91	·00	5030·42	·00	+·10	−·03
	37 452	3051·84	−·01	597·19	−·01	+·08	+·17	82	3431·19	·00	4234·35	·00	+·03	−·07
	39 450	3211·52	·00	5530·74	·00	−·01	−·23	83	3528·86	·00	3348·82	·00	−·06	−·21
	38 392	3412·25	·00	4302·76	·00	−·02	−·21	85	4150·34	·00	6087·54	·00	−·23	+·04
	37 465	4700·77	·00	405·72	−·01	−·24	−·28	89	5789·05	·00	3160·43	·00	+·08	−·07
	37 468	5033·04	·00	776·83	−·01	+·08	−·31	91	6180·86	·00	4002·77	·00	+·04	−·03
	39 457	5487·73	·00	5857·67	·00	+·35	+·17							
	38 402	6169·21	·00	3625·63	·00	−·15	−·15					Mean	−·01	−·06
	39 464	6860·99	·00	4804·06	·00	−·06	+·42							
	38 408	7343·99	·00	1710·85	·00	−·13	−·03							
	39 468	7381·37	−·01	7833·87	−·02	−·07*	+·13*							
	Eros	4422·28	·00	4698·62	·00	...	...							
December 29	39 447	946·76	·00	7783·13	−·01	+·28*	−·05*	79	1880·17	·00	5210·50	·00	+·19	−·04
5338	39 448	1799·19	·00	7865·85	−·01	−·01*	+·39*	82	2582·35	·00	4409·62	·00	+·07	+·16
	37 452	2179·75	−·01	775·13	−·01	−·06	+·32	83	2674·21	·00	3523·32	·00	+·10	+·16
	39 450	2370·92	·00	5707·82	·00	+·16	−·37	85	3313·00	·00	6258·48	·00	+·27	−·11
	38 392	2563·92	·00	4478·04	·00	−·04	+·14	89	4933·40	·00	3320·58	·00	−·06	+·07
	37 465	3827·20	·00	573·30	−·01	−·17	−·31	91	5330·55	·00	4160·43	·00	−·05	+·03
	37 468	4162·05	−·01	942·00	−·01	−·08	−·08							
	39 457	4649·13	·00	6020·00	·00	+·56	−·06					Mean	+·09	+·05
	38 402	5316·28	·00	3783·31	·00	−·07	+·01							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O. x.	Residuals. C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.	°	″	″	″	″	″	″		″	″	″	″	″	″
December 29	39 464	6015·83	·00	4957·54	·00	−·21	+·21							
5338—*contd.*	38 408	6478·64	·00	1861·33	·00	−·15	−·02							
	39 468	6555·68	−·01	7983·85	−·01	−·18*	−·22*							
	Eros	3601·84	·00	4840·62	·00	...	...							
1901.														
January 2	37 486	1330·33	−·03	3966·01	−·02	−·78	−·22	97	2861·28	−·01	4372·78	·00	...	...
5339	36 426	2882·40	−·01	3389·02	−·01	·00	−·17	100	3533·35	·00	5148·43	·00	...	...
	38 423	2955·56	−·01	6998·48	−·02	+·08	−·14	101	5773·20	−·01	4801·59	−·01	...	...
	36 427	3446·82	−·02	2130·58	−·02	−·01	+·21							
	36 435	4406·16	−·01	2197·40	−·01	+·10	+·03							
	37 505	5207·47	−·01	5938·66	−·01	·00	−·06							
	36 440	5224·80	·00	3095·10	·00	+·26	+·15							
	37 506	5347·97	−·03	6774·28	−·03	+·15	+·10							
	37 512	6308·15	−·03	5863·68	−·03	+·18	+·08							
January 4	36 435	576·81	+·01	5258·29	−·01	+·02*	−·24*	102	2946·35	·00	2763·70	·00	−·01	−·03
5341	36 440	1407·12	+·01	6146·07	−·01	+·05	+·06	36 450	3239·29	·00	4451·78	·00	−·06	−·15
	36 446	2817·29	·00	3092·41	·00	+·27	−·06	103	3735·72	·00	5673·46	·00	+·01	+·13
	36 450	3239·29	·00	4451·78	·00	+·11	−·22	36 458	4752·46	·00	4166·26	·00	+·03	−·03
	37 514	3576·18	+·01	8049·81	−·01	−·18*	+·49*	104	4921·21	·00	2805·25	·00	+·25	−·09
	36 453	3736·46	·00	5662·59	·00	+·11	−·35	105	5660·40	·00	5266·44	·00	+·09	−·08
	37 516	3815·82	·00	6920·29	−·01	+·11	+·10							
	37 518	4227·22	·00	7840·18	−·01	−·09*	+·06*					Mean	+·05	−·04
	36 458	4752·46	·00	4166·26	·00	−·19	+·07							
	36 464	6495·29	·00	4201·96	·00	−·23	+·11							
	Eros	3631·49	·00	4578·73	·00									
January 4	36 435	581·22	+·01	5257·41	−·01	+·30*	−·47*	102	2951·61	·00	2763·37	·00	+·28	−·07
5342	36 440	1411·40	+·01	6145·34	−·01	+·15	−·04	36 450	3244·10	·00	4551·51	·00	+·11	−·15
	36 446	2822·53	·00	3091·82	·00	+·47	+·12	103	3740·33	·00	5673·53	·00	−·03	−·03
	36 450	3244·10	·00	4451·51	·00	+·28	−·22	36 458	4757·70	·00	4166·52	·00	−·11	−·07
	37 514	3580·20	+·01	8049·63	−·01	−·44*	+·56*	104	4927·09	·00	2805·18	·00	−·06	+·24
	36 453	3740·93	·00	5662·59	·00	+·22	−·44	105	5665·46	·00	5266·90	·00	−·23	−·02
	37 516	3819·85	·00	6920·16	−·01	+·23	+·18							
	37 518	4231·06	·00	7840·13	−·01	−·09*	+·20*					Mean	−·01	−·02
	36 458	4757·70	·00	4166·52	·00	−·33	+·03							
	36 464	6500·97	·00	4202·77	·00	−·81	+·08							
	Eros	3673·75	·00	4547·48	·00									
January 4	36 435	587·71	+·01	5258·90	−·01	+·53*	−·33*	102	2957·88	·00	2764·19	·00	+·23	+·10
5343	36 440	1418·50	+·01	6146·67	−·01	−·01	+·04	36 450	3250·74	·00	4452·31	·00	+·08	−·03
	36 446	2829·05	·00	3092·80	·00	+·17	+·18	103	3747·18	·00	5674·39	·00	+·03	−·10
	36 450	3250·74	·00	4452·31	·00	+·18	−·08	36 458	4764·16	·00	4166·91	·00	−·01	+·05
	37 514	3587·37	+·01	8050·84	−·01	−·19*	+·20*	104	4933·37	·00	2805·61	·00	−·12	+·29
	36 453	3747·91	·00	5663·48	·00	+·08	−·52	105	5672·21	·00	5267·25	·00	−·15	−·09
	37 516	3827·06	·00	6921·17	−·01	+·17	−·05							
												Mean	+·01	+·04

* Not used in forming the finally adopted values of *a.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O. x.	Residuals. C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals. x.	Residuals. y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
January 4	37 518	4238·43	·00	7840·74	−·01	−·08*	+·26*							
5343-*contd.*	36 458	4764·16	·00	4166·91	·00	−·30	+·17							
	36 464	6507·27	·00	4202·81	·00	−·59	+·12							
	Eros	3718·24	·00	4516·50	·00	...	...							
January 5	36 446	849·89	·00	4692·22	·00	−·56	−·07	102	976·05	·00	4362·54	·00	−·40†	−·23†
5344	36 450	1282·04	·00	6048·12	·00	−·30	+·02	36° 458	2793·03	·00	5750·86	·00	−·15	−·19
	36 453	1788·74	·00	7255·04	−·01	−·31*	+·06*	104	2951·09	·00	4388·51	·00	+·12†	−·23†
	36 458	2793·03	·00	5750·86	·00	−·42	+·01	105	3709·61	·00	6843·62	·00	−·08	+·05
	36 464	4535·69	·00	5772·75	·00	−·04	+·05	106	4342·73	·00	2711·38	·00	+·46	−·28
	36 470	6159·41	−·01	7549·00	−·01	+·21	+·42	107	4451·56	·00	4691·07	·00	+·18	−·14
	36 473	6453·03	·00	5905·05	·00	+·28	−·32	36° 464	4535·69	·00	5772·75	·00	+·41	−·12
	36 478	7574·39	−·01	5982·62	−·01	+·11	+·07	109	5618·63	·00	3241·43	·00	+·32	−·17
	35 470	7750·16	·00	1850·04	−·01	+·47*	−·60*	110	5894·48	·00	4694·51	·00	+·13	−·14
	36 482	7993·17	−·01	5607·05	−·01	+·56*	+·35*							
												Mean	+·18	−·14
	Eros	3835·58	·00	4444·40	·00	...	...							
January 5	36 446	853·28	−·01	4696·20	·00	−·07	+·05	102	979·64	−·01	4366·48	·00	−·14†	−·05†
5345	36 450	1285·39	−·01	6052·44	·00	+·28	−·23	36° 458	2796·77	·00	5754·80	·00	−·02	−·08
	36 453	1792·46	−·01	7259·57	−·01	−·09*	−·42*	104	2955·00	·00	4392·20	·00	+·04†	+·13†
	36 458	2796·77	·00	5754·80	·00	−·26	+·08	105	3713·28	·00	6847·56	·00	+·13	+·12
	36 464	4539·96	·00	5776·61	·00	−·44	+·13	106	4347·00	·00	2714·83	·00	−·02	+·26
	36 470	6163·27	−·01	7553·21	−·01	+·23	+·08	107	4455·53	·00	4694·76	·00	+·04	+·15
	36 473	6457·14	−·01	5908·86	−·01	+·03	−·26	36° 464	4539·96	·00	5776·61	·00	−·02	·00
	36 478	7578·63	−·01	5986·43	−·01	−·27	+·08	109	5622·68	·00	3244·83	·00	+·05	+·37
	35 470	7754·27	−·01	1853·18	−·01	+·14*	+·07*	110	5898·49	·00	4698·01	·00	−·07	+·29
	36 482	7997·11	−·01	5610·77	−·01	+·47*	+·44*							
												Mean	+·01	+·16
	Eros	3874·80	·00	4418·62	·00	...	...							
January 5	36 446	848·50	−·03	4700·11	−·02	−·20	·00	102	974·73	−·03	4370·43	−·02	−·07†	−·10†
5346	36 450	1280·21	−·02	6055·77	−·01	−·01	+·09	36° 458	2790·97	−·01	5758·34	·00	+·07	·00
	36 453	1786·49	−·02	7262·91	−·02	−·07*	−·30*	104	2949·66	−·01	4396·54	·00	+·08†	−·42†
	36 458	2790·97	−·01	5758·34	·00	−·17	+·18	105	3707·22	−·01	6851·06	−·02	−·07	+·02
	36 464	4533·57	−·01	5780·16	−·01	−·16	+·12	106	4341·71	·00	2719·10	·00	+·19	−·03
	36 470	6156·10	−·06	7556·31	−·06	+·36	+·17	107	4449·66	·00	4698·61	·00	+·16	−·02
	36 473	6450·47	−·03	5912·31	−·03	+·10	−·30	36° 464	4533·57	−·01	5780·16	−·01	+·26	−·03
	36 478	7571·88	−·06	5990·01	−·05	−·40	−·16	109	5616·92	−·01	3248·93	·00	+·27	+·11
	35 470	7748·60	−·03	1857·22	−·02	+·21*	−·01*	110	5892·16	−·01	4701·75	−·01	+·19	+·15
	36 482	7990·41	−·07	5614·35	−·05	+·31*	+·24*							
												Mean	+·15	+·03
	Eros	4126·75	·00	4209·11	·00	...	...							
January 5	36 446	845·31	−·05	4697·50	−·03	+·26	+·18	102	971·86	−·05	4367·77	−·03	+·08†	+·12†
5347	36 450	1276·97	−·03	6052·64	−·02	+·29	+·48	36° 458	2787·74	−·01	5755·29	−·01	+·16	+·01
	36 453	1783·41	−·02	7259·51	−·03	−·15*	+·05*	104	2946·74	−·01	4393·37	·00	·00†	−·09†
	36 458	2787·74	−·01	5755·29	−·01	−·06	+·23	105	3703·73	−·02	6847·52	−·03	+·01	+·16
	36 464	4530·32	−·01	5776·73	−·02	−·29	+·20	106	4338·87	−·01	2716·16	−·01	+·04	+·06

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
January 5	36 470	6152·76	−·10	7552·49	−·10	−·12	+·04	107	4446·81	·00	4695·47	·00	−·24	−·07
5347—*contd.*	36 473	6447·10	−·05	5908·83	−·05	−·18	−·57	36° 464	4530·32	−·01	5776·73	−·02	+·11	+·01
	36 478	7567·93	−·10	5986·10	−·08	−·28	−·22	109	5614·06	−·01	3245·98	·00	−·12	−·14
	35 470	7745·63	−·04	1854·44	−·03	−·18*	−·59*	110	5888·91	−·02	4698·56	−·02	−·01	−·14
	36 482	7986·21	−·11	5610·37	−·08	+·68*	+·21*							
												Mean	−·01	−·02
	Eros	4177·91	·00	4162·24	·00	...	...							
January 5	36 446	854·73	−·05	4693·15	−·04	−·30	+·29	102	981·34	−·06	4363·63	−·04	−·41†	+·03†
5348	36 450	1285·86	−·03	6048·37	−·02	−·07	+·46	36° 458	2796·50	−·01	5751·06	−·01	−·02	+·08
	36 458	2796·50	−·01	5751·06	−·01	−·31	+·34	104	2955·84	−·01	4389·33	−·01	−·23†	−·09†
	36 464	4538·80	−·01	5772·85	−·02	−·36	+·15	105	3711·81	−·02	6843·64	−·03	+·22	−·11
	36 470	6160·41	−·11	7548·55	−·12	+·14	+·07	106	4348·23	−·01	2712·74	−·01	−·18	−·28
	36 473	6455·00	−·07	5904·91	−·06	+·17	−·41	107	4455·28	·00	4691·55	·00	·00	−·06
	36 478	7576·00	−·11	5982·52	−·10	−·18	−·31	36° 464	4538·80	−·01	5772·85	−·02	+·11	−·08
	35 470	7754·35	−·05	1851·26	−·03	+·17*	−·72*	109	5623·11	−·01	3242·52	·00	−·20	−·35
	36 482	7994·33	−·11	5606·89	−·10	+·78*	+·11*	110	5897·60	−·02	4694·93	−·02	−·09	−·28
												Mean	−·02	−·15
	Eros	4220·18	·00	4131·15	·00	...	...							
January 8	35 470	1516·53	+·01	6471·09	−·01	−·04	−·01	118	3705·36	·00	4363·88	·00	−·07	+·27
5349	34 432	1520·09	·00	3120·86	·00	−·35	+·06	119	3716·70	·00	4722·01	·00	−·07	−·31
	34 435	2041·45	·00	2438·62	·00	−·24	−·16	121	4253·37	·00	2683·11	·00	−·19	−·05
	34 437	2533·04	·00	5177·35	·00	−·49	+·07	122	4341·71	·00	2569·62	·00	+·04	−·11
	35 477	3476·33	·00	6319·52	·00	+·15	+·06	125	4603·19	·00	4854·46	·00	−·17	+·31
	34 442	3771·57	·00	4034·16	·00	+·03	−·18	124	4605·15	·00	5683·54	·00	+·08	−·09
	35 480	4079·20	·00	5364·47	·00	+·54	−·16	126	4606·47	·00	1269·96	−·01	−·30†	−·10†
	35 490	5440·52	·00	6988·24	·00	·00	−·01	128	5023·43	·00	1842·97	−·01	−·13†	−·12†
	34 448	5706·61	·00	2717·81	·00	+·09	+·15							
	34 449	5741·00	·00	4404·71	·00	+·13	+·22					Mean	−·06	·00
	34 457	6756·80	·00	3982·14	·00	+·21	−·03							
	Eros	3645·75	·00	4547·55	·00	...	...							
January 8	35 470	1514·50	−·02	6491·50	−·02	−·17	−·19	118	3715·52	·00	4396·77	·00	−·24	+·03
5350	34 432	1538·26	−·05	3141·68	−·02	−·27	+·29	119	3724·39	·00	4754·22	·00	+·05	+·11
	34 435	2063·54	−·04	2462·49	−·03	−·09	+·03	121	4273·19	−·01	2719·25	−·01	+·06	−·14
	34 437	2538·59	−·01	5203·42	·00	−·65	+·07	122	4362·39	−·01	2606·15	−·01	+·09	−·07
	35 477	3474·57	−·01	6350·56	−·01	+·04	−·06	124	4606·84	−·01	5720·70	−·01	+·05	−·01
	34 442	3783·70	·00	4067·22	·00	−·13	−·15	126	4634·44	−·02	1308·22	−·03	+·28†	−·05†
	35 490	5433·85	−·05	7029·75	−·05	+·10	−·07	128	5047·73	−·01	1883·23	−·01	+·51†	+·06†
	35 494	5722·78	−·03	5733·43	−·03	+·65	−·01							
	34 448	5725·93	−·01	2761·78	−·01	+·14	+·12					Mean	·00	−·02
	34 449	5749·98	−·01	4448·62	−·01	+·24	+·04							
	34 457	6768·25	−·03	4031·51	−·02	+·10	−·05							
	Eros	4178·20	·00	4180·74	·00	...	...							
January 8	35 470	1513·49	−·02	6502·65	−·02	·00	−·16	119	3723·19	·00	4765·17	·00	−·05	−·20
5351	34 432	1536·74	−·06	3153·19	−·04	−·09	+·29	121	4271·75	−·01	2730·00	−·01	−·14	−·24
	34 435	2061·90	−·05	2473·78	−·05	+·06	+·14	122	4361·31	−·01	2616·83	−·01	−·50	−·12
	34 437	2537·59	−·01	5214·44	−·01	−·77	+·03	124	4605·96	−·01	5731·18	−·01	−·30	−·25

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals.	
						x.	y.						x.	y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
January 8	35 477	3473·46	−·01	6361·21	−·02	+·12	−·15	125	4608·72	·00	4902·61	·00	−·32	−·09
5351—*contd.*	34 442	3782·50	·00	4077·94	·00	−·33	−·19	128	5046·25	−·01	1894·04	−·02	+·15†	−·28†
	35 490	5432·81	−·06	7039·65	−·07	+·03	−·13							
	35 494	5721·46	−·03	5743·10	−·03	+·62	+·19					Mean	−·26	−·18
	34 448	5724·33	−·01	2772·04	−·01	−·04	+·03							
	34 449	5748·49	−·02	4458·53	−·02	+·20	+·13							
	34 457	6766·53	−·03	4041·39	−·03	+·14	−·23							
	Eros	4211·19	·00	4165·71	·00	...	...							
January 8	35 470	1521·09	−·03	6506·98	−·02	−·22	−·11	118	3720·00	·00	4410·31	·00	−·19	−·07
5352	34 432	1542·26	−·08	3158·14	−·07	−·30	+·20	119	3729·11	·00	4767·96	·00	+·12	−·31
	34 435	2066·85	−·08	2478·39	−·07	−·05	+·05	121	4276·73	−·01	2732·17	−·02	−·36	+·11
	34 437	2543·95	−·01	5218·14	−·01	−·64	·00	122	4365·53	−·01	2619·33	−·02	−·03	−·16
	35 477	3480·47	−·02	6363·75	−·02	+·21	−·06	124	4612·34	−·02	5732·83	−·02	−·08	−·13
	34 442	3787·99	·00	4080·71	·00	−·17	−·21	125	4614·33	−·01	4904·27	−·01	+·15	+·16
	35 490	5440·13	−·08	7040·49	−·09	+·04	−·12	128	5050·42	−·02	1895·79	−·02	+·15†	−·05†
	35 494	5727·92	−·05	5744·02	−·05	+·65	+·06							
	34 448	5728·97	−·01	2773·20	−·01	−·03	+·11					Mean	−·07	−·07
	34 449	5754·25	−·02	4459·51	−·02	+·14	+·10							
	34 457	6771·66	−·04	4041·32	−·03	+·34	−·03							
	Eros	4251·36	·00	4142·21	·00	...	...							
January 9	34 442	1629·63	+·01	5579·71	−·01	·00	−·32	118	1563·78	+·01	5909·96	−·01	+·04†	−·18†
5353	35 480	1939·35	+·01	6909·67	−·01	+·32	−·16	119	1575·70	+·01	6267·38	−·01	−·05†	−·03†
	33 447	3480·20	·00	2199·60	·00	+·19	·00	121	2109·62	·00	4228·05	·00	−·14	−·31
	34 448	3563·03	·00	4260·39	·00	−·01	+·20	122	2198·04	·00	4114·18	·00	−·15	−·10
	35 494	3582·46	·00	7232·97	−·01	+·30	−·08	126	2460·69	·00	2814·53	·00	−·18	−·40
	34 449	3599·74	·00	5947·71	·00	+·15	−·16	125	2462·59	+·01	6399·15	−·01	−·20†	+·01†
	34 454	4295·11	·00	3353·30	·00	−·31	+·26	124	2465·78	+·01	7227·81	−·01	−·04†	+·16†
	34 457	4615·07	·00	5523·46	·00	+·04	−·24	128	2878·74	·00	3386·34	·00	−·33	+·16
	33 454	4877·91	·00	2867·38	·00	−·24	+·17	34° 449	3599·74	·00	5947·71	·00	+·03	−·21
	34 462	5894·68	·00	5069·56	·00	−·23	+·13	34° 457	4615·07	·00	5523·46	·00	−·01	−·05
	34 469	7015·40	+·01	3419·39	−·01	+·04	+·24	133	4966·54	·00	2745·62	·00	+·08	+·14
	34 471	7056·75	+·01	3552·80	−·01	−·26	−·04	135	5952·69	·00	4011·64	·00	−·18	+·02
	Eros	3618·84	·00	4571·75	·00	...	...					Mean	−·11	−·09
January 9	34 442	1629·00	·00	5640·69	·00	+·09	−·27	118	1564·60	·00	5971·28	·00	+·31†	−·15†
5354	35 480	1945·46	·00	6969·11	−·01	+·40	−·18	119	1578·46	·00	6328·68	−·01	+·08†	−·03†
	33 447	3462·29	·00	2251·28	·00	+·44	−·07	121	2101·62	·00	4286·28	·00	+·43	+·05
	34 448	3555·74	·00	4311·56	·00	+·05	+·25	122	2189·70	·00	4172·25	·00	+·18	−·04
	34 449	3601·10	·00	5998·44	·00	+·08	+·01	126	2445·64	·00	2870·91	·00	+·28	+·04
	33 454	4283·24	·00	3400·69	·00	−·29	+·26	125	2465·62	·00	6456·00	−·01	+·31†	−·10†
	34 457	4614·23	·00	5569·19	·00	−·01	−·28	124	2473·38	·00	7284·57	−·01	+·09†	+·10†
	33 454	4863·66	·00	2912·08	·00	−·29	−·13	128	2866·47	·00	3441·17	·00	+·24	·00
	34 462	5891·51	·00	5108·62	·00	−·26	+·21	34° 449	3601·10	·00	5998·44	·00	−·09	−·04
	34 469	7003·76	·00	3452·92	·00	+·11	+·10	34° 457	4614·23	·00	5569·19	·00	−·11	−·09
	34 471	7045·89	·00	3585·87	·00	−·29	+·09	133	4951·53	·00	2789·80	·00	+·11	−·09
								135	5943·87	·00	4050·51	·00	+·04	+·22
	Eros	3813·21	·00	4473·22	·00	...	...					Mean	+·14	+·01

* Not used in forming the finally adopted values of a. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1901.	°	"	"	"	"	"	"		"	"	"	"	"	"
January 9 5355	34 442	1642·35	·00	5680·89	·00	+·13	−·30	118	1577·11	·00	6011·06	·00	+·19†	+·08†
	35 480	1954·85	·00	7010·25	−·01	+·40	−·19	119	1589·75	·00	6368·69	−·01	+·11†	−·01†
	33 447	3485·99	·00	2296·93	·00	+·31	−·09	121	2119·27	·00	4327·64	·00	+·24	+·28
	34 448	3573·27	·00	4357·54	·00	−·09	+·12	122	2207·68	·00	4213·76	·00	+·01	+·29
	34 449	3613·33	·00	6044·42	·00	+·18	+·11	126	2467·50	·00	2913·31	·00	+·13	+·24
	34 454	4303·50	·00	3448·75	·00	−·42	+·30	125	2476·47	·00	6498·72	·00	+·41†	−·13†
	34 457	4628·02	·00	5618·25	·00	−·17	−·22	124	2481·64	·00	7327·52	−·01	+·29†	−·12†
	33 454	4885·09	·00	2961·88	·00	−·11	−·09	128	2886·81	·00	3484·86	·00	−·09	+·17
	34 462	5906·43	·00	5161·42	·00	−·15	+·35	34° 449	3613·33	·00	6044·42	·00	+·01	+·06
	34 469	7023·66	·00	3509·28	·00	+·22	−·01	34° 457	4628·02	·00	5618·25	·00	−·27	−·03
	34 471	7065·49	·00	3642·31	·00	−·28	+·03	133	4973·74	·00	2839·81	·00	−·11	−·01
								135	5961·99	·00	4103·64	·00	+·12	−·05
	Eros	3854·16	·00	4501·93	·00	...	...							
												Mean	+·01	+·12
January 9 5356	34 442	1633·50	−·02	5619·99	−·02	−·08	−·23	119	1578·50	−·02	6307·35	−·02	−·02†	+·11†
	35 480	1941·08	−·02	6949·77	−·02	+·36	−·16	121	2114·88	−·02	4268·59	−·02	+·16	+·27
	33 447	3488·16	−·03	2242·32	−·03	+·17	−·11	122	2203·25	−·02	4154·99	−·02	+·33	+·29
	34 448	3568·17	·00	4302·28	·00	−·20	+·27	125	2464·85	−·01	6439·86	−·02	−·17†	−·12†
	35 494	3583·05	−·03	7273·68	−·05	+·36	+·17	124	2466·93	−·02	7267·94	−·03	−·09†	+·34†
	34 449	3602·44	−·01	5988·89	−·01	−·04	+·07	126	2468·18	−·04	2855·68	−·04	−·22	+·25
	34 454	4301·05	·00	3395·91	·00	−·29	+·35	128	2885·41	−·02	3428·31	−·02	−·53	+·04
	34 457	4617·93	−·01	5565·60	−·01	−·11	−·24	34° 449	3602·44	−·01	5988·89	−·01	−·16	+·02
	33 454	4884·36	·00	2910·89	−·01	−·25	−·14	34° 457	4617·93	−·01	5565·60	−·01	−·16	−·05
	34 462	5897·83	−·03	5112·43	−·03	−·50	+·32	133	4973·29	·00	2789·08	−·01	−·09	−·02
	34 469	7019·85	−·03	3464·06	−·02	+·40	−·07	135	5956·87	−·02	4055·30	−·01	+·01	−·19
	34 471	7060·90	−·04	3597·20	−·03	+·18	−·18							
												Mean	−·02	+·08
	Eros	4239·33	·00	4157·01	·00	...	...							
January 13 5359	32 483	841·20	−·04	5356·26	−·02	−·41	+·28	147	3036·18	−·01	4729·17	·00	...	...
	32 484	861·45	−·08	2903·27	−·07	+·06	+·21	149	4002·25	·00	5219·39	·00	...	...
	33 481	876·02	−·03	6990·30	−·01	+·26*	+·14*	153	5057·30	·00	3991·78	·00	−·32	+·02
	33 493	2926·24	−·01	6330·09	−·01	+·09	·00	155	5758·74	−·01	2228·95	−·01	+·03	+·16
	32 490	3004·43	−·02	3215·53	−·02	−·47	−·27	159	6252·85	−·01	3711·69	−·01	+·03	+·12
	33 494	3504·07	−·04	7795·34	−·05	−·23	−·06	160	6291·07	−·01	1949·68	−·01	−·04	−·17
	32 498	4849·80	−·01	2688·42	−·01	+·15	−·10	167	7107·60	−·03	2487·08	−·02	+·08	−·08
	33 512	6644·43	−·06	5885·40	−·06	−·04	+·04	173	7457·09	−·05	4003·53	−·03	+·28	−·04
	32 507	7837·60	−·06	4244·49	−·05	+·60*	−·14*							
	32 508	7849·94	−·05	3052·37	−·03	−·16	−·07					Mean	+·01	·00
	Eros	4177·01	:00	4190·48	·00	...	...							
January 14 5365	32 490	582·96	−·05	4764·94	−·03	+·48*	−·18*	148	1550·09	−·02	5331·33	−·01	+·35†	−·11†
	32 498	2425·44	−·01	4224·96	−·01	+·61	−·03	153	2641·86	−·01	5527·17	·00	+·34	−·13
	31 477	3365·06	−·04	1494·07	−·04	−·13	+·61	155	3331·37	−·01	3759·25	·00	+·19	+·23
	33 512	4243·10	−·03	7410·27	−·04	+·05	−·55	159	3835·96	·00	5238·85	·00	+·16	−·20
	32 507	5425·28	−·02	5760·29	−·02	−·16	−·14	160	3861·68	·00	3475·94	·00	+·14	+·33
	32 508	5428·58	−·01	4567·83	−·01	−·40	+·32	167	4682·19	·00	4007·97	·00	−·04	+·07
	31 483	5544·06	−·01	1932·21	−·01	−·35	+·16	173	5042·75	−·01	5522·08	−·01	−·17	−·13
	31 490	6488·09	−·02	1443·12	−·02	−·43	−·33	175	5612·24	−·01	1552·79	−·02	−·32†	+·11†
	31 493	6896·56	−·02	2853·80	−·01	+·14	+·25	178	5997·94	−·01	1447·02	−·02	+·03†	+·14†
	32 517	7657·49	−·05	4227·31	−·03	+·16	−·13	180	6259·49	−·01	3546·89	−·01	·00†	+·11†
								189	7612·04	−·03	2793·67	−·02	−·03†	+·02†
	Eros	4135·29	·00	4207·76	·00	...	...	190	7802·57	−·05	3226·24	−·03	+·35†	+·21†
												Mean	+·10	+·03

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y						x.	y.
1901.	°	″	″	″	″	″	″			″	″	″	″	″
January 14 5366	32 490	582·97	−·06	4767·51	−·04	−·21*	+·02*	148	1549·72	−·03	5333·70	−·02	−·13†	+·04†
	32 498	2424·58	−·02	4227·46	−·01	+·61	−·10	153	2641·31	−·01	5529·26	−·01	−·06	+·06
	31 477	3363·90	−·04	1496·74	−·05	+·02	+·44	159	3834·97	·00	5240·82	·00	+·09	−·10
	33 512	4242·02	−·04	7411·56	−·05	+·17	−·11	160	3860·85	·00	3478·30	·00	−·12	+·19
	32 507	5424·10	−·03	5761·79	−·03	−·09	·00	167	4681·12	·00	4009·91	·00	−·13	+·13
	32 508	5427·36	−·01	4569·69	−·01	−·30	+·24	173	5041·56	−·01	5523·66	−·02	−·13	+·06
	31 483	5542·62	−·01	1934·29	−·02	−·09	+·08	175	5610·73	−·02	1554·81	−·02	−·11†	+·14†
	31 490	6487·14	−·02	1444·87	−·02	−·76	−·22	178	5996·72	−·02	1449·06	−·02	−·08†	+·08†
	31 493	6895·05	−·03	2855·75	−·02	+·55	−·06	180	6258·30	−·02	3548·83	−·01	−·12†	−·11†
	32 517	7656·17	−·07	4228·74	−·05	+·15	−·24	189	7610·48	−·04	2795·10	−·03	+·08†	+·10†
	Eros	4176·38	·00	4182·44	·00	...	...					Mean	−·07	+·07
January 14 5367	32 490	586·20	−·07	4767·22	−·05	−·22*	−·04*	148	1552·88	−·03	5333·14	−·02	−·28†	+·08†
	32 498	2427·88	−·02	4227·06	−·02	+·40	−·15	153	2644·32	−·01	5528·58	−·01	−·21	+·05
	31 477	3367·31	−·06	1496·67	−·07	+·07	+·39	155	3333·50	−·01	3761·24	−·01	+·09	+·06
	33 512	4244·50	−·05	7410·30	−·07	+·02	−·01	159	3837·71	·00	5239·97	·00	+·11	−·03
	32 507	5426·59	−·04	5760·64	−·04	−·11	+·12	160	3863·97	−·01	3477·84	−·01	−·19	+·16
	32 508	5429·95	−·01	4568·84	−·01	−·22	+·23	167	4684·07	·00	4009·22	·00	−·22	+·15
	31 483	5545·78	−·01	1933·86	−·02	−·14	+·08	173	5044·31	−·02	5522·80	−·02	−·32	−·04
	31 490	6489·96	−·02	1444·61	−·03	−·50	−·42	175	5613·82	−·02	1554·56	−·03	−·02†	+·01†
	31 493	6897·86	−·03	2854·99	−·02	+·33	−·03	178	5999·72	−·02	1448·92	−·03	+·06†	−·19†
	32 517	7658·43	−·09	4227·68	−·07	+·35	−·18	180	6260·88	−·02	3547·90	−·02	+·06†	+·04†
								189	7612·89	−·05	2794·48	−·03	+·39†	−·08†
	Eros	4219·87	·00	4154·73	·00	...	...					Mean	−·12	+·06
January 15 5368	31 477	899·49	+·01	3017·90	−·01	−·24	−·08	155	882·56	+·01	5283·65	−·01	−·07†	−·17†
	32 508	2986·10	·00	6077·91	−·01	−·06	+·15	159	1398·24	+·01	6759·82	−·01	−·06†	+·01†
	32 507	2992·10	+·01	7270·08	−·01	−·26	+·40	160	1410·87	+·01	4996·70	−·01	+·03†	−·12†
	31 483	3081·67	·00	3440·97	·00	+·30	+·01	167	2235·37	·00	5523·06	·00	+·13	−·12
	31 490	4022·41	·00	2945·14	·00	·00	−·06	173	2607·34	+·01	7034·74	−·01	−·04†	+·13†
	31 493	4441·92	·00	4353·55	·00	+·13	+·10	175	3147·01	·00	3061·16	·00	+·28	−·09
	32 517	5213·21	·00	5722·00	·00	+·17	−·28	178	3532·65	·00	2952·47	·00	−·04	+·30
	31 497	6314·41	+·01	1782·37	−·01	−·01	+·01	180	3809·73	·00	5051·11	·00	+·13	−·08
	32 522	6452·38	·00	6373·48	−·01	−·27	−·19	189	5156·93	·00	4288·35	·00	−·06	+·12
	31 500	6841·75	·00	4283·74	·00	+·28	−·02	190	5351·10	·00	4719·97	·00	−·06	−·02
	Eros	3536·26	·00	4576·92	·00	...	...					Mean	+·06	+·02
January 15 5369	31 477	905·78	·00	3017·87	−·01	−·13	+·14	155	888·99	+·01	5283·79	−·01	−·14†	−·09†
	32 508	2992·47	·00	6077·98	−·01	−·06	+·28	159	1404·91	+·01	6759·83	−·01	−·37†	+·22†
	32 507	2998·53	·00	7270·44	−·01	−·32	+·25	160	1417·27	·00	4996·88	·00	·00†	−·09†
	31 483	3088·19	·00	3441·18	·00	+·19	−·02	167	2241·81	·00	5523·09	·00	+·06	+·06
	31 490	4029·00	·00	2945·46	·00	−·17	−·23	173	2613·66	+·01	7035·20	−·01	·00†	−·10†
	31 493	4448·53	·00	4353·88	·00	−·07	−·06	175	3153·52	·00	3061·38	·00	+·18	−·14
	32 517	5219·53	·00	5722·07	·00	+·25	−·17	178	3539·08	·00	2952·83	·00	−·07	+·10
	31 497	6320·55	+·01	1782·50	−·01	+·31	·00	180	3816·15	·00	5051·41	·00	+·10	−·19
	32 522	6458·74	·00	6373·55	−·01	−·22	−·10	189	5163·41	·00	4288·54	·00	−·13	+·10
	31 500	6848·29	·00	4283·96	·00	+·18	−·09	190	5357·67	·00	4720·20	·00	−·22	−·07
	Eros	3580·28	·00	4552·98	·00	...	...					Mean	−·01	−·02

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
January 15 5371	31 477	931·71	−·08	3062·45	−·06	+·17	+·39	155	915·27	−·04	5328·07	−·02	−·05†	−·20†
	32 508	3018·50	−·01	6120·55	−·01	−·42	+·05	159	1430·83	−·02	6803·42	−·02	−·05†	−·05†
	32 507	3024·07	−·02	7312·21	−·03	−·14	+·45	160	1443·23	−·03	5040·90	−·02	+·19†	−·27†
	31 483	3113·86	−·01	3484·17	−·01	+·01	+·03	167	2267·75	−·01	5566·22	−·01	+·01	−·01
	31 490	4054·42	−·01	2988·12	−·01	−·45	−·40	173	2639·46	−·02	7077·54	−·03	+·03†	−·13†
	31 493	4473·57	·00	4395·58	·00	−·05	−·03	175	3178·99	−·01	3104·40	−·01	+·15	−·04
	32 517	5244·59	−·03	5762·89	−·03	+·05	−·25	178	3564·41	−·01	2995·84	−·01	−·08	−·05
	31 497	6344·92	−·01	1823·77	−·01	+·21	−·17	189	5188·07	−·01	4329·92	−·01	+·02	−·06
	32 522	6482·85	−·07	6413·16	−·07	+·12	−·10	190	5382·32	−·01	4761·18	−·01	−·11	−·12
	31 500	6872·13	−·04	4323·76	−·03	+·54	+·04							
												Mean	·00	−·06
	Eros	4185·85	·00	4215·15	·00	...	...							
January 15 5372	31 477	935·69	−·09	3050·39	−·07	−·08	+·10	155	917·41	−·05	5315·81	−·03	+·22†	−·51†
	32 508	3020·11	−·01	6108·96	−·01	−·25	−·13	159	1432·55	−·03	6790·71	−·02	−·25†	+·18†
	32 507	3024·80	−·02	7300·24	−·04	+·22	+·55	160	1446·20	−·03	5028·71	−·02	−·24†	−·40†
	31 483	3117·01	−·01	3472·91	−·01	+·17	−·19	167	2269·87	−·01	5554·35	−·01	+·06	−·17
	31 490	4058·41	·00	2977·25	−·01	−·92	−·60	173	2640·46	−·02	7065·18	−·03	+·30†	+·23†
	31 493	4475·64	−·01	4384·31	−·01	+·55	+·22	175	3182·78	−·01	3092·89	−·01	−·11	+·03
	32 517	5246·51	−·03	5751·83	−·03	−·06	−·02	178	3567·67	−·01	2984·58	−·01	+·20	−·07
	31 497	6349·07	−·02	1813·66	−·02	+·07	−·09	180	3844·06	·00	5081·66	·00	−·18	+·23
	32 522	6484·54	−·08	6402·56	−·08	−·23	+·13	189	5191·05	−·01	4319·36	−·01	−·31	−·23
	31 500	6874·71	−·05	4313·78	−·03	+·49	·00							
												Mean	−·07	−·04
	Eros	4220·78	·00	4182·93	·00									
January 17 5379	31 497	1300·44	−·03	4889·48	−·02	−·38	+·07	192	3711·77	−·01	5991·05	−·01	...	...
	31 500	1869·42	−·02	7380·91	−·02	+·10*	−·04*	193	4915·95	·00	2740·67	−·01	...	...
	30 464	3050·93	−·02	2718·98	−·02	−·63	−·06	194	5225·69	·00	3858·14	·00	...	...
	30 465	3207·32	·00	4654·49	·00	−·36	−·03	195	6480·77	−·02	4117·09	−·01	...	...
	30 466	3703·70	−·02	2134·42	−·02	−·15	−·15							
	30 469	4845·05	·00	4430·87	·00	−·14	+·12							
	31 511	4942·20	−·02	6233·99	−·03	+·29	−·21							
	30 474	6326·12	−·02	1164·90	−·02	+·42*	−·41*							
	30 477	6589·77	−·02	3038·16	−·01	−·22	+·30							
	29 508	6746·05	−·02	1036·56	−·02	+·35*	−·46*							
	31 524	7305·23	−·07	6033·32	−·07	+·67*	+·39*							
	Eros	4146·69	·00	4229·92	·00									
January 23 5387	28 507	1065·83	−·02	5369·84	−·01	−·10	−·12	196	2297·91	−·01	4710·01	·00	...	...
	28 511	3782·19	·00	3669·25	·00	+·05	−·02	197	3320·97	·00	5596·71	·00	...	...
	27 488	3783·45	−·01	2683·55	−·01	−·39	−·01							
	28 514	4877·32	·00	3513·03	·00	+·35	+·02							
	28 516	6356·40	−·02	4736·56	−·01	−·09	+·11							
	28 517	6621·01	−·01	3945·47	−·01	+·15	·00							
January 24 5390	27 488	491·63	−·08	4401·82	−·06	−·53*	+·08*	198	2311·13	−·01	5230·81	−·01	...	...
	28 511	505·08	−·06	5387·60	−·04	+·23*	−·24*	199	2980·44	−·01	3803·11	−·01	...	...
	28 514	1597·73	−·03	5214·00	−·02	+·49	−·15	200	3415·59	−·01	3461·37	−·01	...	...

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O. x.	Residuals. C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
January 24	27 492	2514·08	−·10	991·43	−·11	+·13	+·18	201	4719·62	−·01	5439·49	−·01	...	...
5390—*contd.*	28 516	3095·29	−·01	6413·72	−·02	−·18	−·13	202	4729·15	·00	3915·61	·00	...	...
	28 517	3347·54	·00	5619·01	−·01	+·16	−·52							
	27 500	4565·82	−·03	1222·21	−·05	−·14	+·38							
	27 501	5187·26	−·02	1508·41	−·03	−·09	−·09							
	26 550	5642·05	−·04	484·40	−·06	−·07*	−·09*							
	28 526	6625·97	−·05	4997·33	−·04	−·16	+·24							
	28 532	8023·12	−·11	5237·90	−·10	+·21*	+·33*							
	Eros	3689·36	·00	4369·29	·00									
January 29	26 572	945·76	−·05	4978·63	−·03	−·08	−·24	203	2913·23	−·01	4732·73	·00	...	...
5393	26 574	1250·14	−·02	5852·45	−·02	−·70	−·01	204	3877·99	·00	5373·12	−·01	...	...
	26 579	1890·54	−·02	7629·28	−·04	+·17*	+·46*	205	5777·47	−·01	3980·27	−·01	...	...
	25 580	2722·93	−·03	2784·40	−·03	−·22	+·13							
	25 584	4605·07	·00	3259·48	·00	−·19	−·02							
	26 590	4613·99	−·05	7203·26	−·06	−·22	+·15							
	26 596	5181·59	−·03	6001·31	−·03	−·48	−·04							
	26 601	7008·57	−·05	4890·53	−·05	+·26	+·21							
	25 593	7563·05	−·03	1686·12	−·03	−·23*	+·02*							
	25 598	7975·77	−·06	3293·51	−·04	+·77*	−·27*							
	25 597	7989·94	−·05	2014·20	−·03	+·38*	−·15*							
	25 599	8052·20	−·08	4213·98	−·06	+·48*	−·23*							
February 1	24 568	2466·69	·00	5045·63	·00	+·08	−·04	206	4169·34	·00	5998·33	−·01	...	...
5394	24 571	2745·18	·00	3613·89	·00	−·11	−·46	207	4761·07	·00	2916·38	·00	...	...
	25 620	3207·00	·00	6540·48	−·01	+·21	−·30	208	5188·48	·00	5143·60	·00	...	...
	23 561	3778·89	·00	1432·67	−·01	−·18	+·05	209	5794·19	·00	4031·80	·00	...	...
	25 624	4521·23	·00	5762·23	·00	−·32	+·31							
	24 578	4681·75	·00	1850·14	−·01	−·13	−·04							
	24 583	5440·88	·00	4261·03	·00	−·08	+·10							
	24 587	6078·16	·00	4283·79	·00	+·07	+·24							
	24 589	6657·85	·00	2667·56	−·01	−·02	+·07							
	25 637	6808·94	−·01	5619·62	−·01	+·51*	+·09*							
	Eros	3670·13	·00	4457·65	·00									
February 3	23 584	2372·10	−·03	2906·82	−·03	+·10	+·05	210	3121·57	−·01	4364·47	·00	...	...
5397	24 595	2464·42	−·02	7042·63	−·03	+·41	−·52	211	3260·90	−·01	5918·40	−·01	...	...
	23 586	3003·46	−·03	2441·62	−·03	+·23	+·44	212	5178·32	−·02	5551·09	−·02	...	...
	23 589	3682·91	−·03	1599·41	−·05	+·06	·00	213	5305·55	−·01	4360·76	−·01	...	...
	24 598	4151·91	−·05	7674·32	−·07	−·02	−·21	214	5317·59	−·01	2547·83	−·01	...	...
	24 599	4353·47	·00	4719·32	·00	−·40	−·13							
	23 594	5099·66	·00	3352·27	·00	−·39	−·03							
	23 600	5691·18	−·02	1717·64	−·02	−·46	−·12							
	24 602	5811·30	−·09	7436·64	−·10	+·52*	+·41*							
	24 605	6368·10	−·05	5568·52	−·05	−·07	+·11							
	Eros	4137·09	·00	4258·23	·00	...	...							
February 3	23 584	2363·64	−·05	2875·10	−·05	+·10	+·22	210	3101·63	−·01	4338·67	·00	...	...
5398	24 595	2424·15	−·02	7011·05	−·03	+·15	−·25	211	3229·51	−·01	5893·30	−·01	...	...
	23 589	3684·54	−·05	1578·13	−·07	−·02	−·26	212	5149·02	−·03	5540·64	−·03	...	...

* Not used in forming the finally adopted values of *c.* and *f.* (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars. No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O. x.	Residuals C—O. y.	Comparison Stars. No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
February 3	24 598	4106·49	−·06	7655·28	−·09	−·18	+·17	213	5285·61	−·01	4351·74	−·01	...	...
5398–*contd.*	24 599	4330·69	·00	4702·58	·00	−·32	−·22	214	5311·10	−·01	2538·66	−·01	...	...
	23 594	5087·39	·00	3341·11	·00	−·29	+·07							
	23 600	5691·10	−·02	1711·24	−·03	+·06	−·16							
	24 602	5767·21	−·12	7430·55	−·13	+·71*	+·37*							
	24 605	6338·61	−·06	5566·86	−·06	−·07	+·03							
	Eros	4157·00	·00	4220·98	·00	...	...							
February 5	22 613	485·71	−·09	3775·67	−·07	+·38*	−·10*	215	3465·78	·00	4580·66	·00	...	...
5404	22 617(1)	1157·53	−·07	3064·68	−·07	−·43	+·13	216	3823·13	·00	3825·31	·00	...	...
	22 617(2)	1163·70	−·07	3059·99	−·07	−·27	+·16							
	23 606	3496·75	−·03	7393·69	−·05	−·15	+·40							
	23 609	3959·17	−·02	6331·14	−·03	−·31	−·13							
	23 613	4705·41	−·01	5225·08	−·01	−·05	−·25							
	22 629	4845·43	·00	2962·63	·00	+·12	−·03							
	23 617	5843·14	−·02	4230·36	−·01	+·01	+·13							
	23 624	7666·39	−·11	5525·50	−·09	+·34*	+·30*							
	22 637(1)	7737·89	−·05	2740·02	−·03	+·25*	−·31*							
	22 637(2)	7738·89	−·05	2745·43	−·03	+·06*	−·32*							
February 6	23 611	1278·85	·00	5582·03	−·01	+·11	+·03	217	2480·57	·00	3157·98	·00	...	...
5407	23 613	1636·64	·00	6617·87	−·01	+·25*	+·05*	218	3893·15	·00	3501·52	·00	...	...
	22 629	1740·09	·00	4352·70	·00	+·02	+·12	219	4226·12	·00	5173·92	·00	...	...
	23 617	2758·65	·00	5605·37	·00	+·11	+·08	220	5123·45	·00	4793·26	·00	...	...
	23 624	4603·77	·00	6872·32	−·01	+·04	+·07	221	5867·99	·00	3138·52	·00	...	...
	22 637(1)	4629·41	·00	4085·02	·00	+·01	−·05							
	22 637(2)	4630·28	·00	4090·65	·00	+·01	−·29							
	23 632	5777·03	−·01	7268·58	−·02	−·30	+·02							
	23 642	7544·43	−·01	5812·39	−·01	−·29*	−·15*							
	23 645	7840·25	−·01	5618·88	−·01	+·40*	−·09*							
	22 649	7930·09	·00	1629·24	−·02	−·36*	+·16*							
	Eros	3683·42	·00	4361·45	·00	...	...							
February 11	21 635	1555·78	·00	4910·81	−·01	+·60	−·01	222	2745·83	·00	5066·08	·00	−·36	−·12
5408	20 751	1709·21	·00	3480·69	−·01	−·25	+·15	223	2777·42	·00	3928·63	·00	−·09	+·14
	21 639	2103·04	·00	5491·74	−·01	+·28	+·01	224	4439·83	·00	3259·39	·00	−·39	−·04
	21 641	2279·35	·00	6200·86	−·01	−·49	+·06	225	5806·49	·00	3126·79	·00	−·05	+·01
	20 754	3603·27	·00	4046·43	·00	−·05	−·15	226	5824·56	·00	3721·38	·00	−·73	−·01
	21 644	4015·88	·00	5252·61	·00	+·12	+·05	227	6420·43	·00	2498·38	−·01	−·75	−·05
	20 756	4723·60	·00	3531·93	·00	+·31	·00	228	7452·67	·00	3580·60	−·01	−·62†	+·01†
	21 647	5440·05	·00	5804·02	·00	−·52	+·27	229	7536·30	+·01	1964·64	−·02	−·10†	−·21†
	20 760	5999·72	·00	2969·57	−·01	+·17	−·21							
	20 761	6065·29	·00	2411·87	−·01	−·20	−·13					Mean	−·40	−·01
	Eros	3866·37	·00	4281·21	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
February 11	21 635	1560·33	·00	4916·66	−·01	+·14	−·02	222	2749·36	·00	5072·90	·00	+·07	−·04
5409	20 751	1714·91	·00	3486·52	−·01	−·52	+·30	223	2782·40	·00	3935·73	·00	−·06	−·02
	21 639	2106·66	·00	5497·98	−·01	+·23	+·09	224	4445·08	·00	3267·79	·00	−·01	−·03
	21 641	2282·14	·00	6207·17	−·01	−·36	+·26	225	5812·15	·00	3136·57	·00	+·04	−·14
	20 754	3607·86	·00	4054·07	·00	+·25	−·13	226	5828·90	·00	3731·17	·00	+·12	−·17
	21 644	4019·71	·00	5260·68	·00	+·08	+·02	227	6425·95	·00	2508·69	−·01	+·06	−·18
	20 756	4728·99	·00	3540·65	·00	+·30	−·05	229	7542·79	·00	1976·09	−·02	+·23†	−·47†
	21 647	5443·23	·00	5813·58	·00	−·42	+·03							
	20 760	6005·32	·00	2979·49	·00	+·45	−·33					Mean	+·04	−·10
	20 761	6071·61	·00	2421·75	−·01	−·12	−·16							
	Eros	3942·64	·00	4256·16	·00									
February 11	21 635	1579·89	−·02	5057·48	−·01	+·68	−·22	222	2770·84	·00	5199·06	·00	−·07	+·04
5412	20 751	1718·36	−·03	3625·73	−·03	−·21	+·45	223	2790·66	−·01	4062·02	−·01	+·08	+·02
	21 639	2132·99	−·01	5632·08	−·01	+·35	−·22	224	4445·24	·00	3374·40	·00	−·11	·00
	21 641	2316·47	−·01	6338·91	−·01	−·26	−·10	225	5810·10	−·01	3226·66	−·01	+·05	+·04
	20 754	3617·63	·00	4170·50	·00	−·13	−·21	226	5833·73	−·01	3820·82	−·01	+·01	·00
	21 644	4042·60	·00	5371·58	−·01	+·10	+·01	227	6416·74	−·01	2591·56	−·01	−·16	+·10
	20 756	4732·14	·00	3643·60	·00	+·20	+·10	228	7460·02	−·04	3661·77	−·03	−·23†	+·21†
	21 647	5471·96	−·01	5907·08	−·03	−·59	+·09	229	7526·81	−·03	2045·68	−·02	+·21†	−·11†
	20 760	6001·84	−·01	3067·18	−·01	+·03	−·01							
	20 761	6061·37	−·01	2508·93	−·01	−·15	+·11					Mean	−·03	+·03
	Eros	4451·64	·00	4132·39	·00	...	...							
February 11	21 635	1574·58	−·03	4984·02	−·02	+·36	−·08	222	2763·35	−·01	5139·46	−·01	+·10	+·09
5413	20 751	1730·10	−·05	3554·50	−·05	−·47	+·25	223	2796·52	−·02	4002·89	−·01	+·29	+·05
	21 639	2120·54	−·01	5564·69	−·01	+·21	+·16	224	4459·36	·00	3334·79	·00	−·21	−·22
	21 641	2295·49	−·01	6273·66	−·02	−·35	+·10	225	5825·21	−·01	3202·98	−·01	+·50	−·29
	20 754	3621·97	·00	4120·84	·00	+·17	−·09	226	5841·79	−·01	3797·09	−·01	+·40	−·11
	21 644	4032·84	−·01	5326·69	−·01	+·06	+·03	227	6439·18	−·02	2575·28	−·01	+·43	−·38
	20 756	4742·90	·00	3607·27	·00	+·18	−·11	228	7469·37	−·06	3657·27	−·04	+·49†	−·26†
	21 647	5455·45	−·05	5878·45	−·05	−·52	+·28	229	7555·53	−·04	2042·40	−·03	+·87†	−·74†
	20 760	6018·97	−·01	3045·57	−·01	+·34	−·15							
	20 761	6085·33	−·01	2488·45	−·01	−·01	−·36					Mean	+·25	−·15
	Eros	4533·85	·00	4057·08	·00	...	...							
February 12	20 756	1587·39	·00	4968·87	−·01	+·48	+·17	224	1301·87	·00	4697·81	−·01	+·11†	·00†
5414	21 647	2315·70	+·01	7237·67	−·02	−·79	+·40	225	2668·49	·00	4558·42	·00	−·09	+·05
	20 760	2860·85	·00	4400·23	·00	+·23	−·09	226	2688·89	·00	5152·82	·00	−·11	+·12
	20 761	2923·47	·00	3842·35	·00	·00	−·09	20° 760	2860·85	·00	4400·23	·00	−·03	+·01
	19 731	4286·25	·00	840·07	−·02	+·01	−·04	227	3278·12	·00	3927·01	·00	+·33	+·02
	19 733	5089·98	·00	1902·51	−·01	−·03	−·07	228	4315·54	·00	5004·20	·00	+·53	−·17
	21 657	5773·93	·00	7307·43	−·02	−·38	+·36	229	4391·85	·00	3387·82	·00	+·12	−·04
	19 736	6914·39	+·01	770·42	−·03	+·12*	−·51*	230	6317·82	+·01	1924·10	−·01	+·33†	−·28†
	20 778	8018·57	·00	5435·81	−·01	+·40*	−·09*							
	Eros	3849·41	·00	4332·86	·00	...	...					Mean	+·13	·00

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
February 12	20 756	1640·49	·00	4935·23	−·01	+·05	+·06	224	1354·48	·00	4664·15	−·01	+·17†	+·01†
5415	21 647	2368·77	+·01	7203·66	−·01	−·83	+·52	225	2720·93	·00	4524·59	·00	+·12	−·02
	20 760	2913·57	·00	4366·21	·00	+·08	−·06	226	2741·56	·00	5119·02	·00	−·03	+·02
	20 761	2976·01	·00	3808·30	·00	−·05	−·04	20° 760	2913·57	·00	4366·21	·00	+·13	+·09
	19 731	4338·30	·00	805·91	−·01	−·02	−·11	227	3331·25	·00	3892·97	·00	−·25	+·05
	19 733	5141·92	·00	1867·92	−·01	+·22	+·15	228	4369·11	·00	4969·78	·00	−·31	+·06
	20 772	5460·84	·00	4211·33	·00	+·41	−·20	229	4444·71	·00	3353·58	·00	−·27	−·01
	21 657	5827·01	·00	7273·24	−·01	−·41	+·04	230	6370·34	−·01	1889·37	−·01	+·04†	−·11†
	20 778	8071·13	·00	5401·18	−·01	+·57*	−·39*							
												Mean	−·10	+·03
	Eros	3945·04	·00	4278·83	·00	...	...							
February 12	20 756	1585·56	·00	4940·90	−·01	+·46	+·06	224	1298·58	·00	4671·62	−·01	−·23†	·00†
5416	21 647	2328·07	·00	7204·81	−·02	−·40	+·33	225	2663·87	·00	4523·35	·00	−·06	+·06
	20 760	2855·16	·00	4364·02	·00	+·35	−·20	226	2687·98	·00	5117·70	·00	+·05	+·03
	20 761	2914·32	·00	3805·74	·00	−·03	−·18	20° 760	2855·16	·00	4364·02	·00	+·04	−·07
	19 731	4257·77	·00	794·49	−·02	−·13	+·13	228	4314·23	·00	4958·38	·00	+·05	−·12
	19 733	5068·14	·00	1851·65	−·01	+·01	+·11	229	4379·90	·00	3341·61	·00	−·17	−·03
	21 657	5787·01	−·01	7252·23	−·02	−·42	+·17	230	6296·31	·00	1865·52	−·01	+·08†	−·32†
	19 736	6885·33	·00	707·87	−·03	−·01*	−·44*	232	7612·47	·00	3203·02	−·01	+·40†	−·41†
	20 778	8019·65	−·01	5365·83	−·02	+·17*	+·01*							
												Mean	−·02	−·03
	Eros	3928·12	·00	4250·80	·00	...	...							
February 13	19 731	1111·58	·00	2197·96	−·02	−·18	+·05	229	1231·66	·00	4745·08	−·01	−·23†	+·08†
5420	19 733	1921·03	·00	3255·85	−·01	+·10	+·06	230	3149·47	·00	3270·41	·00	−·09	+·04
	20 772	2252·98	·00	5596·92	−·01	+·12	+·29	232	4464·51	·00	4608·87	·00	+·10	+·01
	19 736	3738·66	·00	2113·68	−·01	+·37	−·18	233	4718·26	·00	3971·89	·00	+·12	−·21
	20 778	4870·02	·00	6772·26	−·01	−·16	−·01							
	19 740	5664·43	·00	2694·41	−·01	−·24	+·18					Mean	+·04	−·05
	19 742	5705·05	·00	2377·91	−·01	−·17	−·09							
	19 744	6445·95	+·01	1946·38	−·01	−·05	·00							
	19 745	6565·16	+·01	989·49	−·03	+·17*	−·20*							
	20 785	7824·30	·00	5298·33	−·01	+·06*	−·09*							
	Eros	3867·70	·00	4289·30	·00	...	...							
February 13	19 731	1111·76	−·02	2248·75	−·02	−·14	+·29	229	1233·13	·00	4795·87	−·01	+·14†	+·15†
5421	19 733	1921·77	−·01	3306·31	−·01	+·26	−·06	230	3150·23	·00	3319·63	·00	−·04	+·18
	20 772	2254·84	·00	5647·08	−·01	+·71	+·17	231	3780·26	·00	4834·22	·00	+·09	+·06
	19 736	3738·79	·00	2162·57	−·01	+·31	−·17	232	4466·38	·00	4657·06	·00	−·11	+·07
	20 778	4873·00	−·01	6820·32	−·02	+·02	−·18	233	4719·49	·00	4019·78	·00	+·13	−·04
	19 740	5665·12	·00	2741·69	−·01	−·50	+·22	234	5683·58	·00	4574·46	·00	+·12	−·34
	19 742	5705·38	·00	2425·07	−·01	−·30	+·06							
	19 744	6445·79	·00	1993·04	−·01	−·01	+·04					Mean	+·04	−·01
	19 745	6564·42	·00	1036·38	−·02	+·14*	+·45*							
	20 785	7826·89	−·02	5343·67	−·02	−·44*	+·08*							
	Eros	4114·94	·00	4227·33	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
February 13 5422	19 731	1110·18	−·02	2247·00	−·02	−·43	+·19	229	1230·56	−·01	4794·05	−·01	−·17†	+·12†
	19 733	1919·67	−·01	3304·41	−·01	+·05	+·28	230	3147·82	·00	3318·56	·00	+·07	+·16
	20 772	2251·95	·00	5645·56	−·01	+·31	+·21	232	4463·57	·00	4656·35	·00	−·16	+·18
	19 736	3736·93	·00	2161·62	−·01	+·32	−·06	233	4716·89	·00	4019·02	·00	+·12	+·21
	20 778	4869·20	−·01	6819·80	−·02	·00	−·16	234	5680·98	·00	4573·94	·00	−·12	+·03
	19 740	5662·76	·00	2741·61	−·01	−·27	+·18							
	19 742	5703·17	·00	2425·24	−·01	−·08	−·21					Mean	−·02	+·15
	19 744	6443·95	·00	1993·34	−·01	·00	−·06							
	19 745	6562·63	·00	1036·60	−·02	+·53*	−·42*							
	20 785	7823·58	−·02	5344·38	−·02	−·38*	+·02*							
	Eros	4154·06	·00	4207·57	·00	...	...							
February 13 5426	19 731	1119·19	−·08	2247·76	−·08	−·46	+·16	229	1238·12	−·03	4794·24	−·02	+·35†	−·04†
	19 733	1927·78	−·03	3304·85	−·03	+·34	+·08	230	3156·00	−·01	3318·65	−·01	−·06	+·03
	20 772	2259·34	−·01	5645·22	−·01	+·45	+·04	231	3784·71	·00	4832·93	·00	+·06	−·13
	19 736	3745·21	−·02	2161·84	−·03	+·31	−·18	232	4470·59	·00	4655·78	·00	+·05	·00
	20 778	4875·70	−·03	6818·34	−·05	−·08	−·19	233	4724·49	·00	4018·64	·00	−·11	−·03
	19 740	5670·33	−·01	2741·11	−·01	−·29	+·14							
	19 742	5710·91	−·01	2424·64	−·01	−·18	−·08					Mean	−·02	−·03
	19 744	6451·57	−·01	1992·69	−·02	−·04	+·08							
	19 745	6570·71	−·02	1036·23	−·03	+·31*	−·34*							
	20 785	7829·66	−·08	5342·34	−·07	−·38*	+·25*							
	Eros	4465·16	·00	4069·87	·00	...	...							
February 13 5427	19 731	1036·43	−·11	2249·79	−·12	−·50	−·22	229	1155·71	−·04	4795·23	−·03	−·27†	+·32†
	19 733	1845·05	−·05	3306·21	−·05	+·09	+·15	230	3073·06	−·01	3319·65	−·02	−·22	+·28
	20 772	2176·25	−·01	5646·01	−·01	+·32	+·38	231	3701·64	·00	4833·74	·00	−·16	+·06
	19 736	3662·25	−·03	2163·23	−·03	+·21	−·15	232	4387·11	·00	4656·67	·00	+·19	+·06
	20 778	4791·92	−·05	6818·65	−·06	+·11	+·16	233	4640·97	·00	4019·67	·00	+·09	−·09
	19 740	5586·89	−·01	2742·13	−·01	−·16	+·13	234	5604·17	−·02	4573·70	−·02	+·14	+·05
	19 742	5627·71	−·01	2425·75	−·01	−·26	−·15							
	19 744	6368·06	−·02	1993·86	−·02	+·15	−·12					Mean	+·01	+·07
	19 745	6487·16	−·03	1037·25	−·04	+·62*	−·27*							
	20 785	7746·06	−·10	5342·94	−·10	−·54*	+·09*							
	Eros	4426·86	·00	4050·42	·00	...	...							
February 14 5428	19 740	2491·33	−·01	4132·58	−·01	−·35	+·25	232	1302·66	−·02	6054·24	−·02	−·42†	+·10†
	19 742	2530·40	−·01	3816·14	−·01	−·54	−·23	233	1552·73	−·02	5415·44	−·01	−·30†	+·16†
	19 744	3268·36	−·01	3380·11	−·01	−·17	−·01	234	2519·28	−·01	5964·42	−·01	−·09	+·27
	19 745	3381·93	−·01	2422·73	−·02	+·22	−·04	235	3770·53	−·01	6142·22	−·01	...	...
	20 785	4665·53	−·02	6722·30	−·03	−·34	+·08	236	4534·79	·00	2571·56	−·01	+·05	−·01
	19 755	7493·92	−·05	5238·25	−·05	+·42*	+·06*	237	5344·83	−·01	5151·55	−·01	+·14	−·23
	19 759	7620·67	−·04	4608·88	−·03	+·75	−·10	239	6882·20	−·03	4476·21	−·02	+·16†	−·20†
	Eros	4385·57	·00	4118·46	·00	...	...					Mean	+·03	+·01

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction. applied.	Residuals.	
						x.	y.						x.	y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
February 15	18 666	1748·98	·00	1011·90	−·02	−·37*	−·26*	236	1351·04	·00	3889·10	−·01	+·01	−·01
5429	19 755	4325·51	·00	6541·86	−·01	−·34	+·27	237	2175·28	+·01	6465·30	−·01	−·22	+·30
	19 759	4448·54	·00	5911·96	−·01	+·32	−·04	238	2526·68	·00	4026·05	·00	−·07	−·08
	18 684	5444·73	+·01	1001·32	−·02	−·07	+·16	239	3709·40	·00	5782·61	−·01	−·26	+·05
	19 774	7739·98	+·01	3212·18	−·01	+·45	−·14							
												Mean	−·14	+·07
	Eros	3877·46	·00	4288·29	·00									
February 15	18 666	1735·46	−·01	1005·56	−·03	+·03*	−·09*	236	1349·71	·00	3884·50	−·01	+·05	·00
5430	19 755	4334·86	·00	6525·06	−·01	−·32	+·24	237	2184·14	·00	6457·68	−·01	+·10	−·07
	19 759	4455·53	·00	5894·70	−·01	+·16	−·11	238	2525·92	·00	4016·65	·00	−·07	−·06
	18 684	5431·58	·00	979·97	−·02	−·13	+·19	239	3715·46	·00	5768·29	−·01	+·06	+·12
	19 774	7735·96	·00	3181·51	−·01	+·27	−·22							
												Mean	+·04	·00
	Eros	3932·06	·00	4248·85	·00	...	...							
February 15	18 666	1732·82	−·01	1002·08	−·03	+·13*	+·07*	236	1355·94	·00	3882·28	−·01	−·13	+·02
5431	19 755	4348·53	·00	6514·04	−·01	−·20	−·07	238	2532·15	·00	4010·70	·00	+·11	+·13
	19 759	4467·48	·00	5883·14	−·01	+·10	−·22	239	3727·03	·00	5758·97	−·01	+·07	+·04
	18 684	5428·86	·00	965·34	−·02	−·14	+·37							
	19 774	7739·83	·00	3159·97	−·01	+·12	−·15					Mean	+·02	+·06
	Eros	4010·02	·00	4207·26	·00	...	...							
February 17	19 774	1368·32	−·01	5981·55	−·01	+·27	−·68	240	5825·67	·00	2399·47	−·01	...	...
5434	18 717	1808·63	−·01	4082·58	−·01	−·20	−·06							
	18 719	1969·29	−·01	3852·33	−·01	−·39	−·19							
	19 777	2232·35	−·01	6582·95	−·01	−·20	−·19							
	18 725	2507·66	·00	5093·01	·00	+·41	−·15							
	18 727	2697·53	−·01	2962·57	−·01	+·21	−·15							
	19 782	3182·64	·00	5957·53	−·01	+·39	·00							
	18 734	4023·71	·00	3805·63	·00	−·16	+·24							
	18 738	5395·04	−·01	5523·00	−·01	+·29*	+·50*							
	18 743	6308·69	−·01	4263·63	−·01	−·58*	+·73*							
	Eros	4270·77	·00	4180·68	·00	...	...							
February 20	17 814	1288·86	·00	5305·47	−·01	−·03	+·12	241	2969·62	·00	3629·83	·00	−·10	−·12
5436	16 671	1561·44	−·01	733·26	−·03	−·53*	−·09*	242	3219·17	·00	5260·55	·00	+·09	−·03
	16 672	2055·07	·00	2244·41	−·01	−·80	+·18	243	4231·30	·00	6006·98	−·01	+·07	+·02
	16 679	4224·12	·00	1091·56	−·02	+·41	−·12	244	5150·19	·00	3591·36	·00	+·20	−·11
	16 685	5972·80	·00	1124·20	−·02	+·46	−·08							
	16 688	7827·59	·00	2203·63	−·02	+·50*	−·03*					Mean	+·07	+·06
	Eros	4125·33	·00	4334·81	·00	...	...							
February 20	17 814	1297·29	−·01	5302·06	−·01	+·01	+·02	241	2977·75	·00	3626·09	·00	+·20	+·01
5438	16 671	1569·90	−·02	729·77	−·05	−·51*	·00*	242	3227·84	·00	5256·77	·00	−·15	+·06
	16 672	2063·57	−·01	2240·98	−·02	−·84	+·12	243	4239·66	·00	6003·20	−·01	+·10	−·02
	16 679	4232·56	−·01	1087·86	−·02	+·37	−·10	244	5158·87	·00	3587·50	·00	−·11	−·08
	16 685	5981·08	·00	1120·27	−·02	+·52	+·01							
	16 688	7835·94	−·01	2199·57	−·02	+·44*	−·03*					Mean	+·01	−·01
	Eros	4289·45	·00	4264·95	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE II.—Measured Co-ordinates and Residuals, Astrographic 13-inch Refractor.

Date and Plate No.	Reference Stars.							Comparison Stars.						
	No. in B.D.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals C—O.		No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals.	
						x.	y.						x.	y.
1901.	°	″	″	″	″	″	″		″	″	″	″	″	″
February 20	17 814	1306·75	−·01	5398·86	−·01	−·08	+·10	241	2978·31	·00	3713·78	·00	−·10	+·10
5441	16 671	1554·76	−·05	825·53	−·06	−·47*	+·13*	242	3236·54	·00	5343·07	·00	+·09	−·03
...	16 672	2056·56	−·02	2333·91	−·03	−·91	+·15	243	4252·72	−·01	6083·69	−·01	−·17	·00
	16 679	4219·12	−·01	1168·97	−·03	+·29	−·15	244	5158·61	·00	3662·92	·00	−·08	+·18
	16 685	5967·51	−·01	1191·90	−·02	+·55	−·26							
	16 688	7827·76	−·02	2260·41	−·02	+·60*	+·06*					Mean	−·07	+·06
	Eros	4462·21	·00	4272·64	·00	...	...							
February 25	16 742	2839·80	−·01	5933·04	−·01	−·10	+·17							
... 5452	15 779	2901·06	−·04	2015·22	−·05	−·22	−·29							
	15 789	5412·71	−·02	5125·08	−·02	+·47	−·30							
	14 881	5919·30	−·02	1302·89	−·03	−·05	+·10							
	15 790	6003·60	−·01	3383·88	−·01	+·08	+·18							
	15 795	6804·90	−·03	4153·81	−·02	−·17	+·16							
	Eros	4435·13	·00	4105·93	·00	...	...							

* Not used in forming the finally adopted values of c. and f. (Table IV.), the star being more than 55′ from the centre of the plate.
† Not used in forming the Mean Correction for Comparison Stars (Table X.), the star being more than 25′ from the centre of the plate.
The number given in column 9 is the reference number assigned to the comparison stars in Tables VIII. and IX.

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
		"	"	"	"	"	"
1900.							
October 1	166	298·13	+·05	3547·23	−·05	−·01	+·07
744	172	612·61	+·02	2310·07	−·01	−·15	−·06
	184	2138·85	+·01	3441·57	−·01	+·10	+·19
	44° 591	2265·34	·00	1344·88	·00	−·09	+·03
	188	2591·01	·00	2905·55	·00	+·16	−·23
	Eros	1485·24	+·01	2212·22	−·01	...	...
October 1	166	1033·16	·00	3343·93	·00	+·16	+·08
745	171	1328·57	·00	1360·47	·00	+·12	−·01
	172	1358·24	·00	2108·47	·00	−·14	+·09
	184	2875·59	·00	3252·08	·00	+·01	+·24
	44° 591	3019·71	·00	1155·55	·00	−·15	−·19
	188	3332·48	·00	2719·17	·00	+·02	−·22
	Eros	2239·47	·00	2233·61	·00	...	...
October 1	166	950·59	·00	3393·94	·00	−·16	+·08
746	171	1243·90	·00	1410·34	·00	−·04	−·21
	172	1274·14	·00	2158·21	·00	−·08	·00
	184	2792·46	·00	3300·24	·00	+·31	+·22
	44° 591	2934·74	·00	1203·39	·00	−·05	−·07
	Eros	2156·21	·00	2344·29	·00	...	...
October 2	166	1047·54	·00	2187·76	·00	−·02	+·15
747	172	1371·42	·00	953·08	·00	+·13	−·20
	177	1972·64	+·01	3358·20	−·01	−·10	+·07
	182	2767·97	·00	3200·86	·00	+·10	−·02
	184	2889·20	·00	2096·37	·00	−·02	+·07
	188	3345·44	+·01	1563·54	−·01	−·10	−·05
	Eros	2296·31	·00	2208·58	·00	...	...
October 3	166	892·19	·00	828·50	·00	+·29	+·09
748	169	996·00	+·01	3174·87	−·01	−·13	+·12
	177	1816·55	·00	1999·61	·00	+·17	+·06
	182	2612·45	·00	1842·57	·00	−·14	+·10
	184	2734·23	+·01	738·18	−·01	+·06	−·23
	191	3625·43	+·01	3615·36	−·01	−·27	−·11
	Eros	2154·64	·00	2193·24	·00	...	...
October 3	166	892·61	·00	706·09	·00	+·11	−·01
749	169	1000·53	+·01	3052·54	·00	−·17	+·17
	177	1819·29	·00	1875·21	·00	−·04	+·13
	182	2614·75	·00	1716·51	·00	−·09	+·08
	184	2734·43	·00	611·66	·00	+·21	−·27
	191	3631·14	+·01	3487·37	·00	−·04	−·10
	Eros	2156·61	·00	2138·10	·00	...	...
October 4	164	743·15	+·01	3054·51	−·01	−·15	+·01
751	169	1077·99	·00	1874·83	·00	−·12	+·06
	177	1890·64	·00	694·01	−·01	−·04	−·13
October 4	182	2685·31	+·01	531·73	−·01	−·10	−·32
751—*contd.*	186	3209·07	·00	3476·27	·00	+·14	+·04
	191	3710·21	+·01	2296·72	−·01	+·26	+·31
	Eros	2215·43	·00	2193·30	·00	...	...
October 4	169	1084·49	·00	1880·73	·00	−·04	+·03
752	177	1906·61	·00	706·28	·00	−·21	−·03
	182	2702·61	+·01	550·24	−·01	−·34	−·18
	186	3202·77	·00	3499·03	·00	+·40	+·05
	191	3713·50	+·01	2323·66	−·01	+·18	+·13
	Eros	2218·64	·00	2224·70	·00	...	...
October 4	164	756·20	·00	2750·46	·00	+·08	−·10
753	169	1098·98	·00	1572·45	·00	−·22	−·07
	177	1919·40	·00	395·98	·00	−·20	−·21
	182	2715·11	·00	237·90	·00	−·04	−·08
	186	3220·31	·00	3186·16	·00	+·19	+·26
	191	3729·12	·00	2009·54	·00	+·29	+·22
	Eros	2220·29	·00	2150·10	·00	...	...
October 5	164	811·46	+·01	1763·56	·00	+·15	−·16
754	169	1153·81	·00	586·27	−·01	−·08	+·10
	183	2751·64	·00	3390·60	·00	+·06	−·18
	186	3274·75	·00	2201·30	·00	+·06	+·21
	191	3783·38	+·04	1025·90	−·04	−·20	+·06
	Eros	2231·98	·00	2163·22	·00	...	...
October 5	164	830·47	+·01	1653·09	·00	−·01	−·14
755	165	1068·50	+·02	3505·28	−·02	−·05	−·01
	169	1172·36	·00	474·91	−·01	−·03	+·17
	183	2771·48	·00	3278·85	·00	+·09	−·13
	191	3802·51	+·02	912·13	−·02	+·06	+·08
	Eros	2245·70	·00	2156·83	·00	...	...
October 7	156	571·67	+·02	3464·87	−·01	+·03	+·08
756	165	1275·81	·00	904·26	·00	−·18	−·13
	170	1458·34	·00	2832·17	·00	−·01	+·11
	183	2979·17	+·01	680·53	−·01	−·02	−·16
	47° 720	3475·22	+·01	3552·99	·00	+·05	+·05
	187	3489·81	+·01	1734·64	·00	+·12	+·04
	Eros	2219·76	·00	2130·96	·00	...	...
October 7	165	1294·08	·00	731·81	·00	−·12	−·02
757	170	1477·52	·00	2660·00	·00	−·11	+·04
	183	2997·66	·00	506·99	·00	+·08	−·18
	47° 720	3494·98	·00	3379·36	·00	+·10	+·11
	187	3508·96	·00	1560·85	·00	+·07	+·03
	Eros	2207·37	·00	2164·95	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.		″	″	″	″	″	″
October 8	156	671·85	+·01	2288·16	−·01	+·19	·00
759	170	1559·35	·00	1657·05	·00	−·11	+·06
	174	1736·82	+·01	3521·87	−·01	+·01	−·20
	179	2494·65	·00	3297·22	−·01	−·09	+·18
	47° 720	3574·89	+·01	2380·97	−·01	+·01	·00
	187	3591·84	+·04	563·11	−·04	−·02	−·01
	Eros	2158·71	·00	2142·87	·00	...	...
October 8	156	672·45	+·01	2288·49	−·01	+·21	−·03
760	170	1559·66	·00	1656·95	·00	+·07	+·12
	174	1737·71	+·01	3521·86	−·01	+·08	−·13
	179	2495·60	·00	3297·19	·00	−·10	−·03
	47° 720	3575·85	+·01	2380·18	·00	−·15	·00
	187	3592·23	+·03	562·06	−·03	−·11	+·06
	Eros	2156·37	·00	2163·43	·00	...	...
October 8	156	712·35	·00	2019·22	·00	+·05	·00
761	170	1599·64	·00	1386·63	·00	−·02	+·23
	174	1778·22	·00	3252·05	·00	−·02	−·16
	179	2536·25	·00	3026·63	·00	−·12	−·05
	47° 720	3616·41	·00	2108·36	·00	+·06	+·07
	187	3632·36	·00	289·93	·00	+·08	−·11
	Eros	2152·84	·00	2144·25	·00	...	...
October 9	156	926·80	·00	1143·53	·00	+·20	+·10
762	157	951·38	+·02	3235·73	−·03	−·04	−·01
	174	1991·18	·00	2378·00	·00	−·10	−·22
	179	2749·10	·00	2154·15	·00	−·20	−·01
	185	3415·05	+·01	3517·97	−·01	+·23	+·06
	47° 720	3829·86	+·03	1238·54	−·03	−·09	+·08
	Eros	2207·26	·00	2232·75	·00	...	...
October 10	157	1171·52	·00	1896·43	·00	+·05	+·22
763	161	1341·18	+·01	2994·54	−·01	−·07	+·06
	174	2212·53	+·01	1039·22	−·01	−·09	−·30
	179	2970·75	+·02	816·81	−·02	−·18	·00
	185	3634·82	+·02	2181·65	−·01	+·30	+·01
	Eros	2178·59	·00	2139·97	·00	...	...
October 10	157	1169·74	·00	1895·34	·00	−·10	−·13
764	161	1339·07	+·01	2993·33	−·01	+·01	+·26
	174	2210·75	+·01	1038·50	−·01	−·10	−·17
	179	2968·75	+·02	815·71	−·02	+·07	−·19
	185	3633·17	+·01	2180·26	−·01	+·10	+·22
	Eros	2172·28	·00	2159·47	·00	...	...
October 13	151	1001·83	·00	3237·36	·00	−·05	−·05
766	152	1204·04	·00	1764·90	·00	+·15	−·11
	158	2229·48	·00	624·87	·00	−·04	+·25
1900.		″	″	″	″	″	″
October 13	162	2564·26	·00	828·80	·00	−·09	+·07
766—*contd.*	163	2605·13	·00	3004·01	·00	+·06	−·04
	176	3721·22	·00	2505·86	·00	−·03	−·10
	Eros	2129·88	·00	2192·98	·00	...	...
October 14	150	1374·11	·00	3214·66	·00	+·18	−·03
770	151	1459·46	·00	2134·13	·00	+·09	−·13
	152	1666·77	·00	662·24	·00	−·15	−·12
	154	2183·63	·00	3098·14	·00	+·04	+·08
	163	3063·63	·00	1905·66	·00	+·01	+·22
	168	3382·21	·00	2867·43	·00	−·15	·00
	Eros	2189·71	·00	2213·93	·00	...	...
October 14	150	1390·36	·00	3211·80	·00	+·03	+·08
771	151	1476·74	·00	2131·46	·00	−·13	−·13
	152	1685·17	·00	659·58	·00	−·08	+·05
	154	2199·85	·00	3096·28	·00	+·02	−·08
	163	3080·80	·00	1904·63	·00	+·19	+·03
	168	3398·51	·00	2866·46	·00	·00	+·05
	Eros	2197·33	·00	2233·44	·00	...	...
October 20	51° 604	750·04	·00	3131·29	·00	−·02	+·15
778	141	1242·62	·00	3032·41	·00	−·04	−·05
	50° 601	1913·61	·00	1517·36	·00	+·27	+·15
	144	2302·64	·00	1264·69	·00	+·07	−·05
	145	2871·92	·00	3248·13	·00	−·16	−·03
	146	2995·70	·00	2061·70	·00	−·14	−·18
	Eros	2184·57	·00	2117·43	·00	...	...
October 21	137	1013·84	·00	2182·38	·00	−·01	−·07
782	138	1345·65	+·01	3484·32	−·01	−·14	−·07
	140	1757·77	·00	1096·77	·00	−·02	+·13
	139	1758·72	·00	680·69	·00	+·05	+·16
	142	2762·43	·00	3196·72	·00	−·06	+·10
	145	3562·47	+·01	2233·99	·00	+·03	−·18
	146	3691·53	+·02	1048·07	−·01	+·05	−·06
	Eros	2331·48	·00	1873·13	·00	...	...
October 21	137	1012·91	·00	2180·67	·00	−·01	−·06
783	138	1345·09	+·01	3482·50	·00	·00	−·03
	140	1756·48	·00	1094·82	·00	−·04	·00
	139	1757·34	·00	678·59	·00	−·03	+·16
	142	2761·89	·00	3194·35	·00	+·01	+·03
	145	3561·68	+·01	2231·07	·00	+·02	−·11
	146	3690·31	+·02	1045·04	−·01	+·03	·00
	Eros	2317·72	·00	1888·91	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
		"	"	"	"	"	"
1900.							
October 26	120	541·26	+·01	2785·67	−·01	+·09	−·04
787	52° 587	559·86	+·01	1301·51	·00	+·05	+·03
	52° 592	1743·17	·00	500·06	·00	·00	−·06
	132	2256·62	·00	3542·61	·00	+·03	−·09
... ...	52° 595	2959·14	+·01	505·48	−·01	−·09	+·14
	52° 597	2993·93	·00	2560·79	·00	−·09	−·01
	53° 546	3597·80	+·01	3585·29	·00	·00	+·06
	Eros	2279·31	·00	1909·98	·00	...	...
October 26	120	544·23	·00	2787·14	·00	−·07	+·02
788	52° 587	562·44	·00	1303·10	·00	+·09	−·09
	52° 592	1745·62	·00	501·32	·00	+·10	+·02
... ...	132	2259·65	·00	3543·77	·00	−·04	−·02
	52° 595	2961·67	+·01	506·45	·00	−·03	+·17
	52° 597	2996·70	·00	2561·83	·00	−·02	·00
	53° 546	3600·79	+·01	3586·40	·00	·00	−·09
	Eros	2268·00	·00	1923·85	·00	...	...
October 26	120	545·82	·00	2783·30	·00	+·04	+·03
789	52° 587	563·32	·00	1299·17	·00	−·01	−·04
	52° 592	1746·02	·00	496·68	·00	+·03	−·10
	132	2261·89	·00	3538·87	·00	−·05	−·02
	52° 595	2962·04	·00	501·09	·00	−·02	+·10
	52° 597	2998·35	·00	2556·37	·00	−·01	+·09
	53° 546	3603·10	·00	3580·58	·00	−·01	−·04
	Eros	2253·44	·00	1933·41	·00	...	...
October 26	120	552·09	·00	2785·38	·00	+·06	−·03
790	52° 587	562·25	·00	1301·03	·00	−·01	−·02
	52° 592	1741·18	·00	492·42	·00	−·01	−·09
	132	2272·11	·00	3532·05	·00	+·03	+·01
	52° 595	2957·41	·00	490·62	·00	−·06	+·03
	52° 597	3003·90	·00	2545·71	·00	−·02	+·07
	53° 546	3613·76	·00	3566·76	·00	+·04	+·05
	Eros	2108·20	·00	2052·93	·00	...	...
October 26	120	565·89	·00	2838·49	·00	−·03	+·11
791	52° 587	577·73	·00	1354·38	·00	+·05	−·10
	52° 592	1757·69	·00	547·07	·00	+·02	−·04
	132	2284·91	·00	3587·22	·00	+·02	+·17
	52° 595	2974·00	·00	546·92	·00	−·11	−·08
	52° 597	3017·89	·00	2602·08	·00	−·01	−·06
	53° 546	3626·49	·00	3623·79	·00	+·05	·00
	Eros	2096·93	·00	2128·78	·00	...	...
October 26	120	602·03	·00	2912·17	·00	+·11	+·02
792	52° 587	608·36	−·01	1427·95	·00	+·12	·00
	52° 592	1785·14	·00	616·03	·00	−·01	+·03
	132	2323·72	·00	3654·17	·00	−·04	−·10
	52° 595	3001·09	·00	611·02	·00	−·04	−·04
	52° 597	3052·93	·00	2665·83	·00	−·17	+·03
	53° 546	3665·14	−·01	3685·11	−·01	·00	+·03
... ...	Eros	1929·96	·00	2349·62	·00	...	...

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
		"	"	"	"	"	"
1900.							
October 26	120	598·15	·00	2901·79	·00	−·01	+·04
793	52° 587	607·99	−·01	1417·61	·00	+·21	+·01
	52° 592	1786·92	·00	608·66	·00	−·06	·00
	132	2317·83	·00	3647·96	·00	−·08	−·05
	52° 595	3002·83	·00	606·58	·00	−·06	−·03
	52° 597	3049·40	·00	2661·68	·00	−·07	−·14
	53° 546	3659·02	−·02	3682·10	−·01	+·10	+·18
	Eros	1914·43	·00	2352·35	·00	...	...
October 27	116	1045·73	·00	2379·95	·00	−·08	−·01
794	120	1570·27	·00	2113·16	·00	+·10	−·02
	127	2097·20	·00	950·93	·00	−·02	+·09
	129	2297·12	·00	3216·75	·00	−·05	+·01
	130	2737·89	·00	1286·08	·00	+·08	+·03
	132	3280·45	·00	2881·94	·00	·00	−·12
	Eros	2400·12	·00	1998·88	·00	...	...
October 27	116	691·79	+·01	2386·84	·00	−·13	+·02
795	120	1215·86	·00	2119·15	·00	+·11	+·03
	127	1740·96	·00	956·17	·00	·00	·00
	129	1944·48	·00	3221·61	·00	−·08	+·03
	130	2382·22	·00	1290·20	·00	+·08	·00
	132	2927·35	·00	2885·16	·00	−·01	−·08
	Eros	2025·13	·00	2020·46	·00	...	...
October 27	116	692·49	·00	2387·72	·00	−·02	−·04
796	120	1216·72	·00	2119·44	·00	−·08	+·11
	127	1740·79	·00	956·04	·00	−·02	−·04
	129	1946·15	·00	3221·31	·00	−·07	+·03
	130	2382·39	·00	1289·50	·00	+·08	−·05
	132	2928·77	·00	2883·88	·00	+·08	·00
	Eros	1871·92	·00	2137·71	·00	...	...
October 27	116	964·92	·00	2423·25	·00	−·24	+·11
797	120	1488·31	·00	2154·11	·00	+·02	·00
	127	2010·15	·00	989·56	·00	−·01	−·03
	129	2220·05	·00	3254·51	·00	−·08	−·02
	130	2652·32	·00	1321·75	·00	+·19	−·03
	132	3201·95	·00	2915·06	·00	+·13	·00
	Eros	2118·11	·00	2189·33	·00	...	...
October 27	116	947·78	·00	2422·16	·00	−·03	+·09
798	120	1471·20	·00	2152·72	·00	−·01	+·02
...	127	1992·51	·00	987·96	·00	−·04	−·02
	129	2203·25	·00	3252·68	·00	−·17	−·06
	130	2634·75	·00	1319·75	·00	+·14	−·02
	132	3184·76	·00	2912·62	·00	+·09	+·01
	Eros	1909·25	·00	2318·92	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.		″	″	″	″	″	″
October 27	116	958·41	·00	2424·39	·00	+·04	+·05
799	120	1481·69	·00	2154·73	·00	+·09	+·13
	127	2002·67	·00	989·73	·00	−·03	+·02
	129	2214·21	·00	3254·31	·00	−·19	−·09
	130	2644·99	·00	1321·27	·00	+·11	−·02
	132	3195·65	−·01	2913·96	·00	·00	−·09
	Eros	1903·69	·00	2331·74	·00	...	...
October 28	114	873·96	−·01	1200·31	·00	+·11	+·07
800	115	1400·53	·00	2990·87	·00	−·01	−·09
	116	1541·78	·00	1057·17	·00	−·06	+·03
	117	1566·16	·00	3045·73	·00	+·02	−·04
	120	2065·89	·00	789·19	·00	−·04	+·15
	129	2794·43	·00	1891·47	·00	·00	−·09
	Eros	1572·16	·00	1633·64	·00	...	...
October 29	112	650·46	+·01	2283·23	·00	+·22	−·11
801	113	1321·73	·00	2340·88	·00	+·01	·00
	114	2129·23	·00	1150·39	·00	−·05	−·05
	115	2631·84	·00	2947·59	·00	·00	+·16
	117	2796·81	·00	3004·97	·00	−·09	−·01
	116	2798·74	+·01	1016·41	·00	−·10	−·01
	Eros	2332·03	·00	1932·18	·00	...	...
October 29	112	650·00	+·01	2274·10	·00	+·07	−·03
802	113	1321·29	·00	2331·98	·00	−·14	−·05
	114	2128·96	·00	1441·63	·00	+·08	−·02
	115	2631·08	·00	2939·08	·00	−·04	+·13
	117	2795·97	·00	2996·52	·00	−·06	−·03
	116	2798·48	·00	1007·87	·00	+·09	·00
	Eros	2317·24	·00	1933·46	·00	...	...
October 29	112	649·17	+·01	2282·98	·00	+·04	+·06
803	113	1320·57	·00	2338·05	·00	−·03	−·01
	114	2123·43	·00	1144·23	·00	+·01	·00
	115	2633·05	·00	2939·63	·00	−·01	+·11
	116	2792·38	·00	1007·68	·00	+·05	−·05
	117	2798·19	·00	2996·43	·00	+·06	−·11
	Eros	2300·79	·00	1945·35	·00	...	...
November 6	53° 453	351·54	+·01	1519·07	·00	+·10	−·05
804	95	1186·12	·00	1013·08	·00	+·24	−·04
	53° 459	1261·82	·00	550·38	·00	−·11	+·02
	54° 470	1327·21	+·01	3987·36	·00	−·13	−·02
	96	1885·39	·00	2944·70	·00	+·16	+·10
	53° 470	2126·33	·00	1345·92	·00	−·08	−·04
	54° 483	2737·38	·00	3357·82	·00	+·05	+·01
	53° 486	3747·02	+·01	1306·85	−·01	−·03	−·06
	54° 497	3822·80	+·01	3297·99	·00	−·25	+·05
	Eros	2356·08	·00	2036·74	·00	...	...

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.		″	″	″	″	″	″
November 8	92	878·62	·00	2798·78	·00	+·12	+·07
806	93	949·53	·00	3434·87	·00	−·07	−·10
	94	1799·18	·00	3846·63	·00	+·08	+·03
	95	2853·72	·00	1859·43	·00	+·04	−·03
	96	3537·17	·00	3796·68	·00	−·02	+·17
	98	3725·03	·00	2487·62	·00	−·13	−·16
	Eros	1546·55	·00	3142·97	·00	...	...
November 8	92	877·53	·00	2804·36	·00	+·11	+·13
807	93	949·23	·00	3440·36	·00	−·07	−·04
	94	1799·53	·00	3851·11	·00	−·09	+·05
	95	2851·37	·00	1862·59	·00	+·17	−·01
	96	3537·21	·00	3799·10	·00	−·06	+·10
	98	3723·48	·00	2489·79	·00	−·05	−·23
	Eros	1527·52	·00	3147·91	·00	...	...
November 10	81	891·59	−·01	2832·28	·00	−·01	+·04
811	86	1760·63	·00	1008·89	·00	−·13	−·02
	87	2043·17	·00	2991·18	·00	−·14	−·01
	90	2924·67	·00	781·07	·00	+·07	·00
	92	3534·47	−·01	1810·63	−·01	+·13	+·08
	93	3594·29	−·01	2447·70	−·01	+·09	−·11
	Eros	1854·64	·00	2090·15	·00	...	...
November 10	81	887·54	·00	2826·81	·00	−·02	−·03
812	86	1757·45	·00	1003·89	·00	−·04	−·04
	87	2038·90	·00	2986·09	·00	−·06	+·02
	90	2921·84	·00	776·52	·00	−·12	+·04
	92	3530·92	−·01	1806·21	−·01	+·09	+·20
	93	3590·29	−·01	2443·43	−·01	+·16	−·17
	Eros	1832·93	·00	2082·24	·00	...	...
November 13	67	1079·52	·00	2574·04	·00	+·13	−·03
817	70	1548·34	·00	1873·50	·00	+·05	+·04
	71	2224·91	·00	920·18	·00	+·08	+·01
	72	2431·89	·00	2968·86	·00	−·05	−·02
	74	2783·95	·00	1594·72	·00	−·25	+·01
	77	3056·17	·00	2964·83	·00	+·02	−·04
	Eros	2360·23	·00	2136 61	·00	...	...
November 13	67	1081·43	·00	2573 07	·00	+·18	+·04
818	70	1550·08	·00	1872 53	·00	+·07	−·05
	71	2226·51	·00	918·94	·00	+·01	−·05
	72	2433·91	·00	2967·46	·00	−·04	+·07
	74	2785·62	·00	1593·28	·00	−·08	−·01
	77	3058·43	·00	2963·27	·00	−·12	+·01
	Eros	2346·11	·00	2132·57	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.	Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.		″	″	″	″	″	″	1900.		″	″	″	″	″	″
November 13	67	1078·06	·00	2636·38	·00	+·20	·00	November 27	9	870·53	·00	981·27	·00	+·17	+·29
819	70	1541·20	·00	1932·03	·00	+·19	+·03	845	11	1421·89	·00	3634·95	·00	+·14	−·23
	71	2210·35	·00	973·11	·00	+·03	+·02		13	1656·29	·00	1097·68	·00	+·21	+·22
	72	2433·53	·00	3019·88	·00	−·13	−·06		21	2784·88	·00	3322·02	·00	−·21	−·25
	74	2774·67	·00	1642·81	·00	−·21	+·09		26	3847·97	+·01	1798·42	·00	−·18	+·07
	77	3057·74	−·01	3010·61	−·01	−·06	−·08		27	3870·56	+·01	2742·69	−·01	−·18	−·08
	Eros	1887·57	·00	2075·29	·00	...	...		Eros	2232·22	·00	2337·93	·00	...	...
November 13	67	1076·02	·00	2633·08	·00	+·18	+·08	November 27	9	872·30	·00	980·01	·00	+·02	+·08
820	70	1539·82	·00	1929·26	·00	+·09	−·04	846	11	1422·85	·00	3633·48	·00	+·07	−·05
	71	2209·66	·00	970·98	·00	+·03	−·14		13	1658·01	·00	1096·56	·00	+·11	+·05
	72	2431·04	·00	3017·33	·00	−·08	+·06		21	2785·97	·00	3320·88	·00	−·19	−·12
	74	2773·32	·00	1640·92	·00	−·15	−·03		26	3849·53	·00	1797·64	·00	−·09	+·05
	77	3055·20	−·01	3008·41	−·01	−·08	+·09		27	3871·72	·00	2741·85	·00	+·07	−·03
	Eros	1843·53	·00	2058·34	·00	...	...		Eros	2131·53	·00	2161·43	·00	...	...
November 14	62	1209·71	·00	2620·51	·00	−·07	−·02	November 27	9	864·84	·00	956·86	·00	+·08	+·14
821	63	1210·87	·00	1380·46	·00	−·03	−·02	847	11	1429·31	·00	3607·59	·00	+·06	−·11
	64	1358·56	·00	839·29	·00	−·07	−·04		13	1651·26	·00	1069·48	·00	+·06	·00
	67	2127·18	·00	2911·36	·00	+·03	·00		21	2790·64	·00	3287·96	·00	−·07	−·14
	70	2597·96	·00	2211·99	·00	·00	+·07		26	3846·38	·00	1759·22	·00	−·12	+·05
	71	3277·22	·00	1260·44	·00	+·14	−·01		27	3873·51	·00	2703·25	·00	−·01	+·05
	Eros	2077·06	·00	2107·75	·00	...	...		Eros	2111·35	·00	2097·80	·00	...	...
November 15	60	982·66	·00	2865·22	·00	−·11	+·09	December 6	2	1057·55	·00	2671·66	·00	+·15	+·07
822	61	1385·38	·00	2888·00	·00	−·02	−·04	848	5	1417·13	·00	872·85	·00	+·28	−·02
	63	2260·64	·00	1688·62	·00	+·17	−·10		7	2049·71	·00	458·96	·00	−·25	−·11
	64	2414·73	·00	1149·12	·00	−·04	·00		8	2162·80	·00	3467·33	·00	−·08	+·08
	67	3159·20	·00	3229·98	·00	+·06	+·03		14	3497·17	−·01	2461·93	·00	−·01	+·03
	70	3638·08	·00	2536·25	·00	−·07	−·01		17	3817·67	−·01	1743·52	·00	−·09	−·03
	Eros	2417·55	·00	2162·54	·00	...	...		Eros	2051·94	·00	2135·86	·00	...	...
November 15	60	956·17	·00	2876·03	·00	−·04	−·02	December 6	2	1051·14	·00	2667·34	·00	+·09	+·10
823	61	1359·06	·00	2898·43	·00	−·10	+·09	849	5	1419·39	−·01	870·42	−·01	+·07	·00
	63	2233·82	·00	1698·79	·00	+·18	−·06		7	2053·37	−·01	459·40	−·01	+·03	−·09
	64	2387·68	·00	1159·24	·00	+·01	+·04		8	2152·34	−·01	3467·80	−·01	−·05	−·13
	67	3133·01	·00	3239·89	·00	+·03	+·01		14	3491·34	−·01	2468·38	·00	−·02	+·12
	70	3611·61	·00	2546·03	·00	−·06	−·08		17	3815·22	−·01	1751·54	−·01	−·12	+·03
	Eros	2373·14	·00	2167·37	·00	...	...		Eros	2052·61	·00	2050·94	·00	...	...
November 27	9	868·27	·00	982·72	·00	+·01	+·04	December 6	2	1056·59	·00	2667·34	·00	+·26	+·10
844	11	1427·65	·00	3634·42	·00	+·02	−·14	850	5	1423·47	·00	870·45	·00	−·02	−·07
	13	1654·28	·00	1096·54	·00	+·10	+·19		7	2056·95	−·01	458·65	−·01	+·01	−·06
	21	2789·42	·00	3317·33	·00	−·06	−·14		8	2158·56	−·01	3466·16	−·01	−·07	+·08
	26	3847·79	+·01	1790·64	·00	+·05	+·06		14	3496·63	−·02	2465·54	−·01	−·12	·00
	27	3873·44	+·01	2734·80	·00	−·13	+·02		17	3819·72	−·02	1748·41	−·01	−·08	−·02
	Eros	2242·55	·00	2349·97	·00	...	...		Eros	2061·38	·00	2000·87	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.		″	″	′	″	″	″
December 7 851	1	500·19	·00	1193·21	·00	−·06	−·07
	2	944·11	·00	3778·75	·00	+·13	+·08
	3	987·89	·00	666·21	·00	+·05	+·05
	47° 450	2903·94	·00	689·09	·00	+·05	+·21
	14	3385·67	·00	3586·24	·00	−·13	−·22
	17	3710·90	·00	2869·77	·00	−·06	−·04
	Eros	2055·74	·00	2194·21	·00	...	...
December 7 852	1	492·77	·00	1399·21	·00	+·04	−·03
	2	944·10	·00	3983·66	·00	+·17	−·05
	3	979·01	·00	870·86	·00	+·14	+·06
	47° 450	2895·32	·00	888·38	·00	−·05	+·17
	14	3385·20	·00	3783·94	·00	−·17	−·05
	17	3708·46	·00	3066·78	·00	−·15	−·10
	Eros	2052·41	·00	2365·85	·00	...	...
December 7 853	1	497·52	−·02	1288·11	−·02	−·01	−·04
	2	950·10	−·01	3871·37	−·01	+·09	·00
	3	983·38	−·02	759·36	−·02	+·03	+·04
	47° 450	2898·87	·00	774·70	·00	·00	+·18
	14	3389·97	−·03	3669·04	−·03	+·06	−·08
	17	3712·96	−·02	2951·68	−·02	−·15	−·09
	Eros	2077·80	·00	1929·91	·00	...	...
December 7 854	1	508·18	−·03	1289·80	−·03	−·05	−·08
	2	960·08	−·01	3872·31	−·01	+·01	+·14
	3	994·00	−·02	761·23	−·02	+·10	−·08
	47° 450	2909·41	·00	776·37	−·01	−·02	+·14
	14	3399·73	−·03	3670·02	−·03	+·01	−·08
	17	3722·74	−·03	2952·71	−·03	−·05	−·02
	Eros	2093·81	·00	1887·99	·00	...	...
December 10 855	46° 373	166·82	·00	1800·72	·00	+·07	+·23
	4	388·71	·00	1779·51	·00	−·03	−·15
	6	971·41	·00	2369·83	·00	+·10	−·13
	10	2186·19	·00	3122·82	·00	−·04	·00
	16	3021·33	·00	1143·75	·00	−·04	−·05
	46° 397	3539·89	·00	981·96	·00	+·01	+·23
	47° 462	3637·60	·00	3657·87	·00	−·05	−·16
	Eros	2023·59	·00	2441·23	·00	...	...
December 10 856	46° 373	155·26	·00	1819·99	·00	+·09	+·12
	4	377·07	·00	1797·18	·00	−·06	+·05
	6	963·22	·00	2384·28	·00	+·09	−·08
	10	2182·40	·00	3130·31	·00	−·04	−·03
	16	3006·17	·00	1146·35	·00	−·12	−·06
	46° 397	3523·67	·00	981·72	·00	+·04	+·03
	47° 462	3636·94	·00	3656·80	·00	−·03	−·04
	Eros	2020·39	·00	2424·68	·00	...	...
1900.		″	″	″	″	″	″
December 13 858	12	1079·32	·00	717·64	·00	+·10	+·05
	15	1477·75	·00	3243·81	·00	−·06	·00
	18	1798·41	·00	653·89	·00	+·02	−·02
	20	2224·91	·00	3591·30	·00	−·03	+·15
	22	3276·33	·00	2305·09	·00	−·06	−·04
	24	3516·55	·00	1782·63	·00	+·04	−·14
	Eros	1965·04	·00	2432·80	·00	...	...
December 13 859	12	1077·24	·00	717·73	·00	+·18	+·07
	15	1479·09	·00	3243·35	·00	−·08	+·04
	18	1796·21	·00	653·06	·00	+·14	−·02
	20	2226·74	·00	3590·01	·00	−·08	+·07
	22	3276·45	·00	2302·48	·00	−·07	−·18
	24	3516·09	·00	1779·43	·00	−·08	−·01
	Eros	1972·15	·00	2409·54	·00	...	...
December 13 860	12	1075·74	·00	714·66	·00	+·17	−·01
	15	1474·89	·00	3240·58	·00	−·08	+·11
	18	1794·85	·00	650·66	·00	+·06	−·02
	20	2222·15	·00	3588·08	·00	−·05	+·05
	22	3273·29	·00	2301·60	·00	−·11	−·13
	24	3513·38	·00	1778·86	·00	−·01	·00
	Eros	1975·69	·00	2385·48	·00	...	...
December 13 861	12	1080·49	−·01	704·17	−·01	−·12	−·11
	15	1486·19	·00	3228·10	·00	+·16	+·08
	18	1798·90	−·01	637·78	−·01	+·05	−·16
	20	2234·47	−·01	3572·88	−·01	−·09	+·13
	22	3281·51	−·01	2283·00	·00	−·04	+·05
	24	3520·05	−·01	1759·74	−·01	+·04	−·02
	Eros	2113·29	·00	1974·86	·00	...	...
December 15 863	18	511·48	+·01	3335·00	·00	+·23	−·03
	19	600·84	·00	1925·93	·00	+·35	−·13
	25	2436·35	·00	278·52	·00	−·10	+·20
	31	3217·64	·00	3558·11	·00	−·23	−·08
	33	3493·11	·00	2700·10	·00	−·12	−·07
	34	3577·65	·00	948·67	·00	−·16	+·11
	Eros	1893·92	·00	2281·38	·00	...	...
December 15 864	18	517·19	·00	3370·37	·00	+·16	+·05
	19	595·04	·00	1960·72	·00	+·19	−·24
	25	2416·89	·00	298·01	·00	−·08	+·29
	31	3225·13	·00	3571·15	·00	−·10	·00
	33	3493·66	·00	2711·03	·00	−·10	−·16
	34	3563·77	·00	958·78	·00	−·10	+·09
	Eros	1900·66	·00	2281·92	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1900.		″	″	″	″	″	″
December 15 865	18	518·21	·00	3369·90	·00	+·19	+·03
	19	596·64	·00	1960·22	·00	+·18	−·20
	25	2419·07	·00	298·28	·00	−·01	+·18
	31	3226·15	·00	3571·70	·00	−·11	−·03
	33	3495·03	·00	2711·62	·00	−·15	−·14
	34	3565·78	·00	959·33	·00	−·12	+·17
	Eros	1912·75	·00	2255·77	·00	...	...
December 15 866	18	554·51	−·01	3542·29	·00	−·03	−·20
	19	627·05	−·01	2131·92	·00	+·14	+·01
	25	2442·51	·00	462·57	·00	−·04	+·12
	31	3262·54	−·01	3732·29	−·01	+·08	+·07
	33	3527·97	−·01	2871·06	·00	−·02	+·01
	34	3591·76	−·01	1118·88	·00	−·14	−·01
	Eros	2079·79	·00	2080·73	·00	...	...
December 15 867	18	553·76	−·01	3552·76	−·01	+·03	−·06
	19	628·00	−·01	2142·89	−·01	+·09	+·01
	25	2444·91	−·01	475·25	−·01	−·05	·00
	31	3261·10	−·02	3744·64	−·02	−·01	−·02
	33	3527·37	−·02	2883·74	−·01	−·01	+·07
	34	3593·07	−·01	1132·05	·00	−·07	·00
	Eros	2136·89	·00	1962·66	·00	...	...
December 15 868	18	553·92	·00	3550·50	·00	−·02	−·19
	19	626·77	·00	2140·69	·00	+·10	−·12
	25	2442·14	−·01	470·90	−·01	−·16	+·20
	31	3261·12	·00	3739·21	·00	+·09	+·08
	33	3526·52	·00	2878·19	·00	+·14	−·02
	34	3590·78	·00	1126·50	·00	−·12	+·06
	Eros	2146·49	·00	1934·36	·00	...	...
December 17 869	44° 335	521·52	·00	2035·71	·00	−·15	−·08
	25	954·32	·00	3336·71	·00	+·16	−·07
	29	1609·28	·00	887·69	·00	−·02	+·07
	35	2533·25	·00	3821·41	·00	+·01	+·06
	41	3373·00	·00	1197·46	·00	+·05	+·08
	42	3610·80	·00	2729·41	·00	−·06	−·04
	Eros	1919·99	·00	2395·07	·00	...	...
December 17 870	44° 335	500·78	·00	2111·27	·00	−·03	−·08
	25	931·30	·00	3413·14	·00	+·20	−·16
	29	1590·82	·00	965·20	·00	−·09	+·08
	35	2509·48	·00	3900·48	·00	−·07	+·18
	41	3354·02	·00	1278·17	·00	−·03	+·06
	42	3588·89	·00	2810·53	·00	·00	−·05
	Eros	1910·78	·00	2449·26	·00	...	...
December 17 871	44° 335	532·94	·00	2042·23	·00	−·03	−·13
	25	964·77	·00	3343·56	·00	+·28	−·13
	29	1621·69	·00	894·84	·00	−·02	+·13
	35	2543·61	·00	3829·25	·00	−·11	+·16
	41	3385·37	·00	1206·05	·00	−·09	+·02
	42	3621·84	·00	2738·12	·00	−·02	−·03
	Eros	1952·90	·00	2359·09	·00	...	...
December 19 872	36	824·21	·00	2748·39	·00	−·11	−·07
	39	1056·67	·00	1732·04	·00	−·09	−·14
	45	2190·44	·00	3495·23	·00	+·09	+·32
	46	2810·90	·00	1204·54	·00	−·10	−·11
	47	3074·83	·00	3039·97	·00	+·11	+·17
	48	3633·34	·00	1813·03	·00	+·08	−·15
	Eros	1811·85	·00	2529·06	·00	...	...
December 19 873	36	821 14	·00	2751·29	·00	−·07	−·09
	39	1053·66	·00	1734·90	·00	−·04	−·09
	45	2187·35	·00	3498·30	·00	+·09	+·25
	46	2807·92	·00	1207·58	·00	·00	−·12
	47	3071·88	·00	3043·06	·00	+·03	+·04
	48	3630·47	·00	1816·09	·00	+·02	·00
	Eros	1820·95	·00	2511·31	·00	...	...
December 19 874	36	819·35	·00	2749·42	·00	+·01	−·10
	39	1052·89	·00	1733·22	·00	+·03	−·07
	45	2184·98	·00	3497·82	·00	+·01	+·14
	46	2807·76	·00	1207·44	·00	−·02	+·04
	47	3069·95	·00	3043·34	·00	−·03	+·03
	48	3629·67	·00	1816·91	·00	+·03	−·03
	Eros	1832·25	·00	2488·47	·00	...	...
December 19 875	36	864·78	·00	2650·97	·00	+·03	−·04
	39	1089·97	·00	1632·97	·00	+·01	−·05
	45	2236·23	·00	3387·88	·00	+·09	+·02
	47	3117·43	−·01	2925·85	·00	−·08	−·01
	48	3667·00	−·01	1694·69	·00	−·03	+·09
	Eros	2105·55	·00	1970·64	·00	...	...
December 19 876	36	862·94	·00	2652·75	·00	−·01	+·02
	39	1087·98	−·01	1634·76	·00	−·05	−·02
	45	2234·42	·00	3389·23	·00	+·02	+·11
	46	2837·97	·00	1093·76	·00	+·01	+·02
	47	3115·39	−·01	2927·06	−·01	+·05	−·02
	48	3664·77	−·01	1695·94	·00	+·01	−·09
	Eros	2127·49	·00	1931·58	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
		″	″	″	″	″	″
1900.							
December 19	36	863·13	−·01	2649·82	−·01	−·09	+·01
877	39	1092·13	−·01	1632·97	−·01	+·03	−·07
	45	2231·45	−·01	3390·45	−·01	−·01	+·13
	46	2843·75	·00	1097·81	·00	+·12	+·01
	47	3114·08	−·02	2931·33	−·02	−·11	−·08
	48	3668·06	−·01	1702·39	−·01	+·07	+·01
	Eros	2186·49	·00	1841·09	·00	...	...
December 21	42° 360	458·70	+·01	2548·45	·00	−·05	+·03
878	50	1782·64	·00	1178·34	·00	−·30	−·17
	52	2038·25	·00	3776·77	·00	·00	−·03
	56	3135·43	·00	2864·16	·00	+·05	·00
	57	3197·71	+·01	933·15	−·01	+·12	+·14
	58	3862·13	·00	1846·57	·00	+·16	+·03
	Eros	1776·61	·00	2531·96	·00	...	..
December 21	42° 360	457·00	·00	2544·50	·00	−·13	+·05
879	50	1777·84	·00	1171·58	·00	−·05	−·06
	52	2039·03	·00	3769·70	·00	−·07	−·10
	56	3134·29	·00	2854·71	·00	+·09	+·06
	57	3192·74	·00	923·72	·00	+·08	+·02
	58	3859·09	·00	1835·71	·00	+·05	·00
	Eros	1787·13	·00	2506·64	·00	...	...
December 21	42° 360	482·23	−·01	2464·95	·00	−·27	−·05
880	50	1799·88	·00	1089·02	·00	+·05	−·10
	52	2066·47	·00	3686·24	·00	−·06	+·02
	56	3159·55	·00	2768·99	·00	+·25	−·06
	57	3214·27	·00	837·76	·00	+·03	+·14
	58	3882·35	−·01	1748·24	·00	+·02	+·03
	Eros	2071·93	·00	2021·72	·00	...	...
December 21	42° 360	489·04	−·01	2463·82	·00	−·07	+·04
881	50	1807·12	·00	1088·16	·00	+·08	−·07
	52	2072·98	·00	3685·33	·00	−·01	−·02
	56	3166·44	−·01	2768·20	·00	+·09	−·03
	57	3221·54	·00	837·09	·00	−·04	+·18
	58	3889·35	−·01	1747·78	·00	−·04	−·12
	Eros	2112·54	·00	1970·47	·00	...	...
December 21	42 °360	488·17	−·01	2465·55	−·01	−·01	−·06
882	50	1806·49	−·01	1089·90	−·01	+·07	−·01
	52	2071·79	−·01	3686·68	−·02	−·06	+·12
	56	3165·33	−·01	2769·86	−·01	+·06	−·08
	57	3220·84	·00	839·03	−·01	−·07	+·05
	58	3888·33	−·01	1749·40	−·01	−·01	−·02
	Eros	2144·40	·00	1924·28	·00	...	...

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
		″	″	″	″	″	″
1900.							
December 26	65	823·43	·00	2860·72	·00	+·03	+·04
883	66	996·96	·00	1096·83	·00	−·34	−·13
	68	1474·59	·00	750·73	·00	+·08	−·13
	69	1685·56	·00	3409·40	·00	+·10	−·07
	73	3446·16	·00	1560·67	·00	−·11	+·08
	76	3832·71	·00	2488·65	·00	+·23	+·19
	Eros	1813·36	·00	2389·63	·00	...	...
December 26	65	828·18	·00	2871·05	·00	−·01	+·01
884	66	998·44	·00	1106·79	·00	−·31	−·10
	68	1475·43	·00	759·79	·00	+·13	−·06
	69	1691·32	·00	3418·07	·00	+·06	−·02
	73	3448·40	·00	1566·19	·00	·00	+·04
	76	3836·82	·00	2493·50	·00	+·14	+·13
	Eros	1840·77	·00	2370·53	·00	...	...
December 28	75	673·34	·00	1980·09	·00	+·02	−·01
885	78	1334·16	·00	3270·14	·00	−·07	−·05
	79	1719·58	·00	1131·20	·00	−·04	+·05
	82	2431·47	·00	349·44	·00	+·11	+·17
	84	3020·29	·00	3744·98	·00	+·01	−·14
	85	3122·20	·00	2198·65	·00	·00	·00
	Eros	1900·05	·00	2279·42	·00	...	...
December 28	75	705·45	−·01	1885·97	·00	+·05	−·06
886	78	1373·03	·00	3172·06	·00	+·08	−·13
	79	1746·89	·00	1031·02	·00	−·05	+·17
	82	2454·48	−·01	245·35	−·01	−·01	+·23
	84	3061·51	−·01	3637·08	−·01	·00	−·17
	85	3155·09	·00	2090·45	·00	−·09	−·07
	Eros	2109·46	·00	1987·73	·00	...	...
December 29	82	834·17	·00	1846·97	·00	+·06	+·01
887	83	933·71	·00	967·78	·00	+·01	+·04
	85	1542·67	·00	3689·40	·00	−·09	−·04
	39° 457	2871·30	·00	3465·11	·00	+·04	+·01
	89	3178·67	·00	787·65	·00	−·02	·00
	91	3565·19	·00	1625·31	·00	−·01	−·04
	Eros	1828·76	·00	2298·41	·00	...	...
1901.							
January 2	97	791·56	−·01	2213·76	−·01	+·05	+·17
889	36° 426	815·14	−·01	1237·09	−·01	+·04	+·01
	100	1456·84	·00	2985·85	·00	−·05	−·03
	37° 505	3116·74	−·02	3774·83	−·02	−·02	−·05
	36° 440	3141·54	·00	951·63	·00	+·19	−·06
	101	3681·74	−·02	2647·24	−·01	−·15	+·01
	Eros	2105·24	·00	2036·92	·00		

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
		″	″	″	″	″	″
1901.							
January 2	97	776·95	−·01	2207·26	−·01	−·23	−·08
890	36° 426	800·09	−·02	1230·32	−·01	+·18	+·10
	100	1441·78	·00	2978·83	·00	+·09	+·02
	37° 505	3101·55	−·03	3767·29	−·03	+·14	+·11
	36° 440	3126·54	·00	944·59	·00	+·10	−·14
	101	3666·73	−·02	2639·84	−·02	−·25	+·02
	Eros	2123·56	·00	2001·04	·00	...	...
January 4	102	632·81	·00	801·31	·00	−·11	+·06
891	36° 450	921·95	·00	2477·61	·00	+·32	+·06
	103	1414·50	·00	3691·37	·00	−·13	+·04
	36° 458	2425·46	·00	2195·51	·00	−·38	−·11
	104	2593·59	·00	844·09	·00	+·27	−·06
	105	3325·82	·00	3288·46	·00	+·04	+·01
	Eros	1358·54	·00	2564·98	·00	...	...
January 4	102	860·79	·00	657·31	·00	+·03	+·13
892	36° 450	1149·19	·00	2334·02	·00	−·12	−·06
	103	1640·34	·00	3548·08	·00	−·14	+·09
	36° 458	2652·19	·00	2053·01	·00	−·08	−·13
	104	2821·78	·00	701·66	·00	+·18	−·04
	105	8551·86	·00	3146·63	·00	+·13	+·02
	Eros	1622·59	·00	2390·48	·00	...	...
January 5	36° 458	697·80	·00	3611·29	·00	−·26	−·01
894	104	857·32	·00	2258·72	·00	+·09	+·06
	106	2242·73	·00	596·05	·00	+·03	+·09
	107	2346·52	·00	2562·21	·00	+·18	+·02
	36° 464	2428·36	·00	3636·45	·00	·00	+·02
	109	3508·44	·00	1125·19	·00	+·01	−·14
	110	3779·39	·00	2568·51	·00	−·04	−·07
	Eros	1764·73	·00	2291·60	·00	...	...
January 5	36° 458	691·88	·00	3612·36	·00	−·09	−·05
895	104	851·63	·00	2259·78	·00	+·13	+·04
	106	2237·13	·00	597·11	·00	+·14	+·17
	107	2340·95	·00	2563·29	·00	+·08	+·08
	36° 464	2422·68	·00	3637·65	·00	−·09	−·04
	109	3502·98	·00	1126·28	·00	−·10	−·01
	110	3773·72	·00	2569·86	·00	−·07	−·17
	Eros	1792·12	·00	2265·55	·00	...	...
January 5	36° 458	699·20	−·01	3610·56	−·01	−·27	+·12
896	104	858·89	·00	2258·23	·00	−·08	+·09
	106	2243·86	·00	595·54	−·01	+·09	−·07
	107	2347·47	·00	2561·31	·00	+·32	−·04
	36° 464	2429·45	−·01	3635·34	−·01	−·07	+·02
	109	3509·37	−·01	1123·98	·00	−·02	−·06
	110	3780·10	−·01	2567·13	−·01	+·03	−·06
	Eros	2018·80	·00	2082·03	·00	...	...
1901.							
January 5	36° 458	674·31	−·01	3615·52	−·01	−·06	+·09
897	104	834·19	−·01	2263·56	−·01	+·04	−·02
	106	2219·10	−·01	600·57	−·01	+·14	+·04
	107	2322·81	·00	2565·89	·00	+·03	−·05
	36° 464	2404·26	−·01	3639·55	−·02	+·04	+·05
	109	3484·34	−·01	1128·57	·00	−·05	−·14
	110	3755·00	−·02	2571·03	−·02	−·13	+·06
	Eros	2095·59	·00	2004·72	·00	...	...
January 5	36° 458	714·87	−·01	3614·75	−·01	−·21	+·11
898	104	874·67	−·01	2263·03	−·01	+·20	+·08
	106	2260·00	−·01	600·17	−·02	−·05	+·10
	107	2363·13	·00	2565·13	·00	+·07	−·14
	36° 464	2444·47	−·02	3638·56	−·03	−·02	−·09
	109	3524·76	−·01	1127·78	−·01	−·04	−·10
	110	3794·94	−·03	2569·91	−·03	+·05	+·01
	Eros	2177·85	·00	1970·77	·00	...	...
January 9	126	387·06	·00	717·98	·00	−·11	+·04
899	128	800·81	·00	1287·16	·00	+·02	+·01
	34° 449	1512·12	·00	3831·56	·00	+·12	−·06
	34° 457	2521·25	·00	3412·48	·00	−·12	−·15
	133	2875·31	·00	654·78	·00	+·17	+·11
	135	3852·07	·00	1913·67	·00	−·09	+·08
	Eros	1585·02	·00	2427·96	·00	...	...
January 9	126	400·73	·00	732·12	·00	−·18	+·12
900	128	814·83	·00	1301·42	·00	+·02	−·35
	34° 449	1528·14	·00	3844·75	·00	+·10	+·12
	34° 457	2536·86	·00	3424·88	·00	−·06	·00
	133	2888·93	·00	667·14	·00	+·03	·00
	135	3866·43	·00	1925·15	·00	+·08	+·10
	Eros	1634·49	·00	2415·93	·00	...	...
January 9	126	422·53	·00	779·22	·00	+·06	+·23
901	128	838·06	·00	1347·61	·00	−·17	−·12
	34° 449	1555·61	·00	3890·09	·00	+·06	−·02
	34° 457	2563·64	·00	3468·51	·00	−·11	−·17
	133	2910·84	·00	709·94	·00	+·15	+·06
	Eros	1682·19	·00	2444·10	·00	...	...
January 14	153	552·00	·00	3378·22	·00	−·20	−·08
904	155	1241·52	·00	1624·94	·00	+·04	+·11
	159	1738·40	·00	3096·11	·00	+·05	−·19
	160	1769·04	·00	1345·57	·00	−·04	+·08
	167	2582·22	·00	1876·48	·00	+·02	+·19
	173	2935·83	·00	3381·68	·00	+·08	−·13
	Eros	1434·86	·00	2473·31	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1901.		″	″	″	″	″	″
January 14 905	153	552·32	·00	3378·48	·00	−·09	+·05
	155	1241·08	·00	1625·03	·00	+·03	+·04
	159	1738·72	·00	3095·82	·00	+·02	−·11
	160	1768·48	·00	1345·41	·00	−·01	−·02
	167	2581·94	·00	1875·93	·00	+·03	+·10
	173	2936·34	·00	3380·79	·00	+·02	−·07
	Eros	1464·70	·00	2453·78	·00	...	...
January 14 906	153	557·79	−·01	3385·89	−·01	−·08	+·03
	155	1243·95	·00	1631·57	·00	−·05	+·05
	159	1743·20	·00	3100·64	·00	+·10	−·16
	160	1770·65	·00	1350·84	·00	−·03	−·01
	167	2584·50	·00	1879·34	·00	−·04	+·02
	173	2940·64	−·02	3382·54	−·02	+·10	+·06
	Eros	2107·13	·00	2034·19	·00	...	...
January 14 907	153	551·16	−·01	3388·64	−·01	·00	−·04
	155	1238·80	−·01	1634·98	−·01	−·05	+·02
	159	1736·85	·00	3104·02	−·01	−·01	−·16
	160	1765·68	−·01	1354·48	−·01	−·03	+·09
	167	2579·00	·00	1883·31	·00	−·06	+·13
	173	2933·78	−·03	3386·60	−·03	+·13	−·02
	Eros	2139·33	·00	2013·17	·00	...	...
January 15 908	167	165·21	·00	3435·15	·00	+·17	−·27
	175	1085·31	·00	995·85	·00	+·13	+·03
	178	1468·76	·00	890·43	·00	−·10	+·23
	180	1731·37	·00	2975·70	·00	−·01	+·05
	189	3073·61	·00	2226·69	·00	−·20	−·01
	190	3263·62	·00	2656·31	·00	−·01	−·02
	Eros	1489·72	·00	2486·18	·00	...	...
January 15 909	167	169·10	·00	3435·69	·00	+·26	−·32
	175	1082·74	·00	993·88	·00	+·01	−·04
	178	1465·82	·00	887·36	·00	−·11	+·21
	180	1734·12	·00	2971·96	·00	+·02	+·01
	189	3074·31	·00	2219·14	·00	−·19	+·07
	190	3265·46	·00	2648·32	·00	+·04	+·07
	Eros	1521·91	·00	2463·24	·00	...	...
January 15 910	167	167·54	·00	3435·38	·00	+·37	−·33
	175	1087·18	·00	995·72	·00	+·10	+·05
	178	1470·51	·00	890·20	·00	−·04	+·23
	180	1733·82	·00	2975·43	·00	−·01	+·02
	189	3075·86	·00	2225·83	·00	−·25	+·12
	190	3266·16	·00	2655·56	·00	−·20	−·08
	Eros	1553·29	·00	2446·40	·00	...	...
1901.		″	″	″	″	″	″
January 15 912	167	209·46	−·01	3350·06	−·01	+·35	−·20
	175	1115·47	−·02	905·64	−·02	+·07	−·08
	178	1498·13	−·01	797·66	−·01	−·07	+·28
	180	1772·70	·00	2881·09	·00	+·06	−·14
	189	3110·36	·00	2123·40	·00	−·27	+·17
	190	3302·84	−·01	2551·91	−·01	−·11	−·02
	Eros	2072·24	·00	2036·71	·00	...	...
January 15 913	167	203·03	−·01	3342·85	−·01	+·37	−·20
	175	1104·05	−·02	896·62	−·01	+·04	+·02
	180	1765·41	·00	2870·48	·00	−·09	+·04
	189	3101·40	·00	2110·24	·00	−·33	+·14
	Eros	2097·20	·00	2003·54	·00	...	...
January 15 914	167	207·93	−·01	3344·31	−·01	+·40	−·36
	175	1104·28	−·02	896·11	−·02	+·22	+·19
	178	1486·48	−·02	786·74	−·02	−·03	+·35
	180	1769·27	·00	2868·81	·00	−·06	−·24
	189	3103·70	·00	2105·76	·00	−·32	−·05
	190	3297·86	−·01	2533·06	−·01	−·21	+·09
	Eros	2131·62	·00	1979·84	·00	...	...
January 17 915	30° 464	942·73	−·02	587·44	−·02	−·13	−·09
	30° 465	1091·18	·00	2509·98	·00	−·01	−·04
	192	1587·51	−·01	3838·98	−·01	+·05	+·07
	30° 469	2718·37	·00	2293·82	·00	+·02	+·14
	193	2794·51	·00	615·72	·00	+·07	−·10
	Eros	1978·63	·00	2121·22	·00	...	...
January 18 917	193	252·82	·00	2145·87	·00	+·03	−·16
	194	561·94	·00	3255·43	·00	−·17	+·10
	30° 474	1652·11	·00	579·86	·00	−·01	·00
	195	1808·79	·00	3512·02	·00	−·15	+·04
	30° 477	1915·23	·00	2440·40	·00	+·30	+·29
	29° 508	2069·15	·00	452·62	·00	−·30	−·29
	30° 479	3370·34	·00	1960·85	·00	+·41	+·01
	Eros	1473·12	·00	2464·98	·00	...	...
January 18 918	193	245·78	·00	2152·44	·00	·00	−·01
	194	554·04	·00	3262·36	·00	−·12	+·10
	30° 474	1646·07	·00	587·59	·00	+·06	−·05
	195	1800·78	·00	3519·86	·00	−·17	−·02
	30° 477	1908·11	·00	2448·35	·00	+·13	+·20
	29° 508	2063·23	·00	460·53	·00	−·27	−·23
	30° 479	3363·36	·00	1969·69	·00	+·44	+·02
	Eros	1513·53	·00	2443·42	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1901.		″	″	″	″	″	″
January 18	193	249·76	·00	2154·03	·00	+·17	−·09
919	194	560·56	·00	3263·41	·00	−·16	−·07
	30° 474	1647·05	·00	586·09	·00	−·04	+·02
	195	1807·67	·00	3518·16	·00	−·04	−·05
	30° 477	1913·12	·00	2446·36	·00	−·10	+·23
	29° 508	2063·88	·00	458·11	·00	−·29	−·11
	30° 479	3367·06	·00	1964·65	·00	+·53	+·06
	Eros	1581·74	·00	2403·46	·00	...	...
January 18	193	258·30	−·01	2148·74	−·01	−·19	−·19
920	194	572·60	·00	3256·35	·00	−·08	+·14
	30° 474	1649·10	−·01	575·34	−·01	+·04	−·07
	195	1820·18	·00	3505·90	−·01	+·22	+·17
	30° 477	1922·26	·00	2434·24	·00	−·41	+·08
	29° 508	2065·32	−·01	445·71	−·01	−·17	−·25
	30° 479	3373·59	−·01	1946·40	·00	+·72	+·14
	Eros	2006·63	·00	2133·20	·00	...	...
January 22	29° 534	444·42	·00	3913·35	·00	−·06	−·01
921	28° 507	1758·87	·00	1782·45	·00	+·29	−·04
	196	2990·83	·00	1143·56	·00	·00	+·10
	197	3995·55	·00	2037·75	·00	−·25	−·09
	Eros	1737·85	·00	2353·48	·00	...	...
January 22	29° 534	444·60	·00	3914·51	·00	−·17	+·08
922	28° 507	1754·15	·00	1780·85	·00	+·35	−·14
	196	2984·77	·00	1139·12	·00	−·03	+·08
	197	3991·34	·00	2031·03	·00	−·16	−·08
	Eros	1773·93	·00	2329·09	·00	...	...
January 24	198	725·61	−·01	2895·13	·00	−·35	+·25
925	199	1403·70	·00	1484·11	·00	−·30	−·01
	28° 517	1751·00	·00	3290·85	·00	−·04	−·20
	200	1838·63	·00	1149·01	·00	+·11	−·05
	201	3114·98	−·01	3126·27	−·01	+·12	+·05
	202	3138·70	·00	1613·02	·00	+·35	−·04
	Eros	2015·22	·00	2101·75	·00	...	...
January 24	198	723·21	−·01	2916·21	·00	−·32	+·17
926	199	1394·13	−·01	1501·75	−·01	−·21	+·03
	28° 517	1750·53	·00	3306·40	−·01	−·13	−·16
	200	1827·64	−·01	1164·56	−·01	−·10	−·14
	201	3113·30	−·02	3134·71	−·02	+·21	+·09
	202	3129·38	·00	1621·52	·00	+·45	+·05
	Eros	2076·61	·00	2077·83	·00	...	...
January 28	26° 572	1754·95	·00	1383·01	·00	+·05	+·05
927	26° 574	2045·98	·00	2255·12	·00	−·54	−·04
	26° 579	2659·44	·00	4028·82	·00	+·27	−·06
	203	3711·72	·00	1165·83	·00	+·21	+·03
	Eros	1396·77	·00	2437·44	·00	...	...

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1901.		″	″	″	″	″	″
January 29	25° 580	636·14	·00	688·30	·00	−·05	−·11
928	203	839·64	·00	2621·76	·00	+·12	+·15
	204	1802·60	·00	3251·35	·00	+·23	+·08
	25° 584	2509·21	·00	1147·45	·00	−·08	−·33
	26° 596	3102·34	·00	3866·06	·00	−·20	+·22
	205	3679·03	·00	1855·17	·00	−·05	·00
	Eros	1664·61	·00	2307·41	·00	...	...
January 29	25° 580	656·32	−·03	668·95	−·03	−·15	+·01
930	203	827·57	−·01	2604·94	·00	+·07	+·12
	204	1779·56	·00	3249·52	−·01	+·19	+·09
	25° 584	2520·58	·00	1157·82	·00	+·12	−·36
	26° 596	3068·49	−·03	3885·11	−·03	−·28	+·07
	205	3678·13	−·01	1883·72	−·01	+·06	+·10
	Eros	2053·43	·00	2099·27	·00	...	...
February 1	24° 568	366·00	·00	2928·78	·00	+·04	+·17
931	24° 571	639·84	·00	1506·63	·00	−·11	−·38
	206	2058·37	·00	3871·63	·00	+·09	−·01
	207	2639·91	·00	810·13	·00	+·05	+·14
	208	3068·64	·00	3020·89	·00	+·06	+·06
	209	3668·08	·00	1915·78	·00	−·13	+·05
	Eros	1574·22	·00	2335·60	·00	...	...
February 1	24° 568	362·91	·00	2917·80	·00	+·05	+·15
933	24° 571	639·80	·00	1496·26	·00	−·27	−·45
	206	2053·29	·00	3863·76	·00	+·10	+·08
	207	2641·05	·00	803·57	·00	+·07	+·12
	208	3065·32	·00	3015·00	·00	+·02	+·16
	209	3666·80	·00	1911·19	·00	+·01	−·01
... ...							
	Eros	1736·17	·00	2243·22	·00	...	...
February 3	23° 586	917·54	−·04	266·60	−·05	+·43	+·11
934	210	1020·99	−·01	2176·37	−·01	−·53	+·07
	211	1147·86	−·01	3719·92	−·01	−·41	+·28
	212	3053·37	−·03	3369·63	−·03	+·24	−·03
	213	3188·61	−·01	2189·09	−·01	+·32	−·22
	214	3214·22	−·01	388·96	−·01	−·03	−·19
	Eros	2071·00	·00	2057·89	·00	...	...
February 3	23° 586	923·20	−·05	266·83	−·07	+·38	−·05
935	210	1027·25	−·01	2175·93	−·01	−·35	+·07
	211	1154·82	−·01	3718·93	−·02	+·28	+·36
	212	3060·06	−·04	3367·02	−·05	+·14	+·13
	213	3194·70	−·01	2186·68	−·01	+·26	−·07
	214	3219·59	−·01	387·33	−·02	−·15	−·44
	Eros	2126·19	·00	2032·43	·00	...	...

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1901.		″	″	″	″	″	″
February 5 936	215	1376·51	·00	2364·11	·00	+·04	−·01
	216	1729·54	·00	1613·12	·00	+·16	+·15
	23° 611	2268·57	·00	1968·33	·00	−·06	−·05
	23° 613	2609·17	−·01	3001·52	−·01	−·07	−·13
	22° 629	2743·22	·00	754·44	−·01	−·04	·00
	23° 617	3736·79	−·01	2011·52	−·01	−·02	+·03
	Eros	1979·27	·00	2037·73	·00	...	...
February 5 937	215	1399·09	·00	2370·26	·00	−·08	+·06
	216	1753·93	·00	1620·15	·00	+·20	+·26
	23° 611	2291·93	·00	1976·82	·00	−·01	−·08
	23° 613	2629·82	−·01	3010·70	−·01	−·11	−·10
	22° 629	2769·80	·00	764·36	−·01	+·01	−·19
	23° 617	3759·93	−·02	2023·65	−·01	+·01	+·04
	Eros	2053·60	·00	2020·66	·00	...	...
February 6 938	217	324·12	·00	1069·66	·00	−·40	−·05
	23° 617	574·12	·00	3502·66	−·01	−·17	+·18
	218	1722·70	·00	1426·13	·00	−·01	−·21
	219	2035·72	·00	3090·13	·00	−·16	+·01
	220	2930·26	·00	2721·74	·00	+·34	+·05
	221	3687·03	·00	1086·71	·00	+·42	·00
	Eros	1260·31	·00	2395·39	·00	...	...
February 6 939	217	319·92	·00	1069·70	·00	−·31	+·01
	23° 617	562·33	·00	3503·53	−·01	+·02	+·14
	218	1717·36	·00	1430·50	·00	+·12	−·23
	219	2025·47	·00	3095·45	·00	−·25	+·04
	220	2921·28	·00	2729·74	·00	+·10	+·11
	221	3682·94	·00	1097·14	·00	+·30	−·08
	Eros	1304·16	·00	2373·42	·00	...	...
February 6 940	217	334·84	·00	1069·58	·00	−·09	+·11
	23° 617	583·59	·00	3503·01	−·01	+·19	+·03
	218	1733·64	·00	1426·87	·00	−·12	−·26
	219	2045·96	·00	3090·96	·00	−·39	+·01
	220	2940·77	·00	2722·93	·00	·00	+·07
	221	3697·98	·00	1088·25	·00	+·41	−·02
	Eros	1418·60	·00	2325·06	·00	...	...
February 11 941	223	792·50	·00	1835·70	·00	−·01	+·04
	21° 644	2020·74	·00	3151·95	·00	−·15	−·03
	224	2443·77	·00	1173·23	·00	−·08	+·05
	21° 647	3433·85	·00	3701·46	−·01	+·12	−·08
	226	3817·54	·00	1633·84	·00	+·13	+·05
	Eros	1862·03	·00	2192·07	·00	...	...

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
1901.		″	″	″	″	″	″
February 11 942	222	756·05	·00	2961·18	·00	+·08	+·16
	223	789·99	·00	1832·33	·00	+·09	·00
	21° 644	2017·49	·00	3149·33	·00	−·27	−·02
	224	2441·93	·00	1171·01	·00	−·12	−·08
	21° 647	3430·21	·00	3699·80	−·01	+·02	−·02
	226	3815·31	·00	1632·54	·00	+·17	−·03
	Eros	1909·17		2166·69		...	...
February 11 943	223	774·92	·00	1853·74	·00	−·01	−·10
	21° 644	2007·12	·00	3165·25	·00	−·14	−·02
	224	2423·88	·00	1185·32	·00	−·13	+·01
	21° 647	3421·67	−·02	3709·40	−·02	+·20	+·12
	226	3798·87	−·01	1640·93	−·01	+·08	·00
	Eros	2323·84	·00	1984·15	·00	...	...
February 11 944	222	746·88	·00	2978·99	·00	+·01	+·26
	223	779·19	−·01	1850·40	−·01	+·03	+·01
	21° 644	2007·80	·00	3164·20	−·01	−·05	+·03
	224	2429·50	·00	1185·75	·00	−·11	−·12
	21° 647	3421·15	−·03	3711·43	−·03	−·15	−·11
	226	3802·89	−·01	1644·03	−·01	+·29	−·05
	Eros	2467·26	·00	1919·85	·00	...	...
February 11 945	222	743·06	−·01	2978·76	−·01	−·13	−·03
	223	776·69	−·02	1850·32	−·02	+·08	−·04
	21° 644	2003·54	−·01	3164·77	−·01	−·23	+·12
	224	2427·40	·00	1187·19	·00	+·12	−·03
	226	3800·24	−·02	1646·64	−·01	+·17	−·02
	Eros	2532·91	·00	1890·02	·00	...	...
February 12 946	225	614·43	·00	2442·12	·00	−·06	−·04
	226	635·91	·00	3032·20	·00	−·05	+·11
	227	1218·65	·00	1813·79	·00	+·11	·00
	228	2251·34	·00	2880·90	·00	−·02	+·07
	229	2323·23	·00	1275·94	·00	+·03	+·02
	20° 772	3334·23	·00	2125·56	·00	·00	−·17
	Eros	1870·71	·00	2177·18	·00	...	...
February 12 947	225	616·81	·00	2434·40	·00	+·26	−·09
	226	637·16	·00	3024·60	·00	−·09	·00
	227	1223·00	·00	1807·58	·00	+·06	−·03
	228	2252·93	·00	2877·31	·00	−·03	+·05
	229	2329·09	·00	1272·45	·00	−·16	+·06
	20° 772	3337·76	·00	2124·53	·00	−·04	·00
	Eros	1916·16	·00	2153·48	·00		
February 12 948	225	611·40	·00	2437·89	·00	+·16	−·10
	226	632·38	·00	3028·06	·00	−·03	−·01
	228	2248·03	·00	2878·57	·00	−·06	+·04
	229	2321·91	·00	1273·57	·00	−·07	+·11
	20° 772	3331·77	·00	2124·34	·00	+·02	−·03
	Eros	1954·67	·00	2134·54	·00		

TABLE III.—Measured Co-ordinates and Residuals, Thompson 26-inch Refractor.

Date and Plate No.	No.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	Residuals. x.	Residuals. y.
		"	"	"	"	"	"
1901.							
February 13	230	776·05	·00	1138·85	·00	+·19	−·01
949	231	1400·88	·00	2643·15	·00	−·12	+·04
	232	2081·78	·00	2467·77	·00	+·14	+·10
	233	2334·20	·00	1835·20	·00	−·22	−·03
	19° 740	3273·71	·00	566·97	·00	−·10	−·06
	234	3290·69	·00	2386·50	·00	+·12	−·04
	Eros	1741·96	·00	2036·79	·00		
February 14	19° 740	429·55	−·01	2009·84	−·01	−·41	−·06
952	234	454·64	−·01	3828·91	−·01	−·39	−·01
	19° 745	1316·04	−·01	313·05	−·02	+·15	+·07
	237	3260·49	−·01	3025·21	−·01	+·66	−·01
	Eros	2337·13	·00	1985·58	·00		
February 17	18° 725	442·20	·00	2939·86	·00	+·39	−·12
954	18° 727	632·63	−·01	824·70	−·01	+·04	−·33
	19° 782	1111·89	·00	3798·95	−·01	+·08	−·03
	18° 734	1948·65	·00	1662·83	·00	−·18	+·29
	18° 738	3308·87	−·01	3369·60	−·01	+·14	+·37
	240	3739·53	·00	268·41	−·01	−·42	−·21
	Eros	2185·70	·00	2039·08	·00		
1901.							
February 17	18° 725	434·81	·00	2947·04	·00	+·25	+·04
955	18° 727	626·65	−·01	832·09	−·01	+·15	−·22
	19° 782	1103·64	·00	3806·79	−·01	+·11	−·11
	18° 734	1941·87	·00	1671·45	·00	+·03	+·08
	18° 738	3301·05	−·01	3378·97	−·01	−·02	+·33
	240	3734·02	·00	278·07	−·01	−·46	−·13
	Eros	2222·55	·00	2028·58	·00		
February 20	241	733·99	·00	1439·36	·00	+·08	+·10
958	242	987·25	·00	3058·06	·00	·00	−·12
	243	1994·57	·00	3795·87	−·01	−·10	+·10
	244	2899·30	·00	1394·41	·00	+·03	−·07
	Eros	1903·26	·00	2127·26	·00		
February 20	241	855·74	·00	1426·67	·00	+·14	+·13
959	242	1107·52	·00	3045·64	·00	−·01	−·15
	243	2114·07	·00	3784·41	−·01	−·02	·00
	244	3021·29	·00	1383·64	·00	−·13	+·01
	Eros	2156·64	·00	2059·57	·00		

TABLE IV.—Plate Constants, Astrographic 13-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.			
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.		Corrections to	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.	c'.	f'.
	h m s	° ′								″	″	″	″
5126	2 43 51	44 54	−·00060	−·00058	−·00117	−·00100	−·00099	+·00096	+·00006	+ 12·25	+ 26·32	− 0·02	+ 0·04
5129	2 44 40	45 12	43	46	124	100	− 140	+ 107	+ 6	+ 22·04	− 23·45	+ ·01	+ ·01
5130	2 44 40	45 12	50	53	111	104	− 113	+ 95	+ 16	+ 28·54	− 21·99	− ·02	+ ·01
5131	2 43 55	45 17	58	58	(128)	(116)	− 105	+ 100	+ 24	+ 16·26	− 15·53	+ ·07	− ·03
5133	2 43 55	45 17	67	61	114	104	− 137	+ 130	+ 34	+ 16·26	+ 34·06	+ ·06	− ·04
5134	2 43 53	45 37	55	56	106	93	− 111	+ 104	+ 11	+ 13·55	+ 2·26	− ·06	+ ·01
5138	2 43 55	46 0	28	23	104	90	− 724	+ 652	− 7	+ 11·68	− 43·02	+ ·01	− ·10
5139	2 43 55	46 0	38	40	106	82	− 105	+ 60	− 2	− 11·53	+ 7·69	− ·01	− ·11
5141	2 43 46	46 21	41	45	96	(69)	− 113	+ 77	+ 11	+ 18·32	+ 57·32	− ·04	+ ·05
5142	2 42 51	47 1	52	55	108	99	− 98	+ 84	+ 16	− 6·67	+ 0·32	+ ·01	·00
5143	2 43 25	47 8	56	58	108	95	− 130	+ 124	+ 16	+ 22·84	− 69·37	+ ·02	− ·01
5145	2 43 25	47 8	63	60	109	104	− 581	+ 583	+ 19	+ 48·00	− 16·64	·00	·00
5146	2 43 25	47 8	65	61	105	102	− 685	+ 688	+ 12	+ 48·95	+ 18·45	+ ·03	·00
5148	2 43 9	47 28	39	42	109	104	− 125	+ 83	+ 21	+ 37·57	−154·88	+ ·01	·00
5150	2 43 9	47 28	65	61	106	97	− 35	+ 38	+ 18	+ 12·16	+ 74·34	+ ·01	·00
5152	2 43 9	47 28	69	62	101	100	− 75	+ 81	+ 12	− 54·15	+ 33·90	+ ·01	·00
5154	2 42 25	48 8	36	37	109	95	− 119	+ 69	+ 9	+ 19·68	+ 1·04	− ·01	+ ·06
5160	2 39 30	49 32	68	62	105	95	− 74	+ 80	− 1	+ 1·11	− 31·63	+ ·01	+ ·01
5161	2 39 30	49 32	69	62	103	95	− 221	+ 228	+ 6	− 12·73	− 33·24	+ ·03	+ ·02
5162	2 39 15	49 53	40	44	101	93	− 79	+ 38	+ 17	+ 11·02	− 6·11	− ·02	− ·08
5169	2 34 5	51 22	69	62	96	95	− 148	+ 155	+ 6	− 16·61	− 27·80	+ ·03	+ ·02
5170	2 34 5	51 22	70	63	89	87	− 134	+ 140	+ 6	− 5·30	− 22·35	+ ·10	+ ·02
5172	2 34 5	51 22	51	57	93	94	− 206	+ 232	− 1	+ 84·82	− 39·25	+ ·03	+ ·02
5173	2 32 55	51 38	38	41	89	90	− 108	+ 62	+ 2	+ 43·67	+ 37·07	+ ·08	− ·01
5174	2 32 55	51 38	42	48	90	92	− 122	+ 89	+ 8	+ 40·29	+ 40·71	+ ·05	− ·02
5177	2 32 55	51 38	69	62	92	92	− 117	+ 124	− 2	− 27·08	− 16·48	− ·05	·00
5178	2 32 55	51 38	54	59	79	89	− 143	+ 164	− 6	+ 51·08	− 22·93	− ·05	− ·04
5179	2 32 55	51 38	51	57	85	83	− 156	+ 182	− 8	+ 37·53	− 23·76	− ·08	·00
5183	2 25 43	52 50	44	50	93	93	− 76	+ 44	+ 4	+ 8·13	+ 25·43	+ ·14	+ ·01
5184	2 25 43	52 50	51	57	100	93	+ 145	− 163	+ 7	− 8·77	+ 43·17	+ ·12	+ ·06
5185	2 25 43	52 50	55	60	99	95	− 81	+ 71	+ 5	+ 5·31	+ 25·01	+ ·12	+ ·04
5186	2 25 43	52 50	71	64	101	92	− 130	+ 136	+ 3	+ 10·23	− 30·08	+ ·07	+ ·06
5187	2 25 43	52 50	71	64	97	92	− 130	+ 136	+ 5	+ 15·30	− 30·85	+ ·07	+ ·05
5189	2 25 43	52 50	51	58	102	97	− 145	+ 175	+ 11	+ 5·64	− 35·27	+ ·06	+ ·09
5190	2 25 43	52 50	−·00047	−·00053	−·00095	−·00095	−·00150	+·00190	+·00006	− 7·78	− 36·74	+ 0·06	+ 0·06

$a.e.$—Adopted scale including effect of aberration and refraction.
$a'.e'.$—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = ·00102$, $e' = -·00095$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'.$—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b' + d' = +·000066$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of reference stars. The corrections to the centre are :—

$$c + 4200'' (a + b),$$
$$f + 4200'' (d + e).$$

$c'.f'.$—Corrections to the origin deduced from provisional places of reference stars, and the adopted values for a, b, d and e.

TABLE IV.—Plate Constants, Astrographic 13-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.			
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.		Corrections to	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.	c'.	f'.
	h m s	° ′								″	″	″	″
5191	2 24 5	53 2	−·00049	−·00055	−·00101	−·00092	−·00088	+·00066	+·00002	− 3·20	+ 37·98	+ 0·10	+ 0·06
5192	2 24 5	53 2	52	58	102	94	− 177	+ 161	+ 6	+ 7·40	+ 33·52	+ ·09	+ ·05
5193	2 24 5	53 2	55	60	97	91	− 262	+ 252	+ 9	+ 9·54	+ 33·67	+ ·11	+ ·12
5200	2 24 5	53 2	71	64	96	93	− 6	+ 12	+ 4	− 7·96	− 14·37	+ ·11	+ ·09
5201	2 24 5	53 2	71	64	90	90	− 73	+ 79	+ 5	− 4·71	− 13·86	+ ·10	+ ·09
5202	2 24 5	53 2	52	58	96	92	− 134	+ 162	+ 3	+ 6·48	− 12·29	+ ·08	+ ·08
5203	2 24 5	53 2	48	54	96	91	− 114	+ 150	+ 2	+ 7·22	− 12·36	+ ·09	+ ·08
5204	2 23 8	53 14	49	56	97	95	− 144	+ 179	0	+ 16·01	− 8·67	+ ·07	+ ·07
5205	2 20 34	53 25	48	54	98	98	− 136	+ 111	+ 4	+ 9·24	− 19·52	+ ·09	+ ·11
5206	2 20 34	53 25	52	58	99	99	− 87	+ 70	+ 11	− 1·21	− 19·30	+ ·09	+ ·11
5207	2 16 50	53 42	50	57	102	84	− 56	+ 90	+ 16	+ 7·28	+ 32·40	+ ·09	·00
5208	2 16 50	53 42	47	52	100	81	− 108	+ 151	+ 10	+ 6·55	+ 28·30	+ ·13	+ ·03
5209	2 4 58	54 17	56	62	104	104	− 53	+ 41	+ 5	− 2·79	+ 20·04	+ ·01	+ ·06
5210	2 2 52	54 19	43	47	106	108	− 130	+ 185	+ 5	+ 12·10	− 10·37	+ ·07	+ ·02
5211	2 2 52	54 19	37	30	101	113	− 100	+ 178	+ 13	+ 15·02	− 10·82	+ ·07	+ ·02
5212	1 58 44	54 21	58	63	104	99	− 102	+ 94	+ 12	+ 22·54	+ 7·61	+ ·05	·00
5213	1 58 44	54 21	65	66	106	96	− 584	+ 586	+ 12	+ 35·94	+ 25·02	+ ·05	+ ·02
5214	1 58 44	54 21	74	67	105	101	− 129	+ 136	+ 12	+ 12·00	− 15·07	+ ·03	+ ·08
5215	1 58 44	54 21	63	65	100	101	− 109	+ 123	+ 7	+ 17·18	− 16·09	+ ·02	+ ·08
5216	1 58 44	54 21	43	45	104	96	− 56	+ 114	+ 14	+ 0·08	− 30·13	+ ·03	+ ·06
5217	1 58 44	54 21	39	35	99	101	− 108	+ 180	+ 6	+ 4·82	− 16·58	+ ·03	+ ·06
5218	1 56 42	54 20	57	63	102	96	− 126	+ 117	+ 3	+ 35·80	+ 24·04	+ ·03	− ·03
5219	1 56 42	54 20	60	65	103	92	− 31	+ 26	+ 6	− 46·39	+ 34·50	+ ·06	− ·02
5220	1 56 42	54 20	63	65	102	97	− 59	+ 58	+ 1	+ 15·10	+ 28·30	+ ·07	− ·03
5222	1 56 42	54 20	74	67	111	105	− 155	+ 161	− 1	+ 25·46	− 19·37	·00	+ ·06
5223	1 56 42	54 20	73	67	101	96	− 128	+ 134	− 2	+ 7·61	− 16·42	− ·02	+ ·04
5226	1 54 40	54 19	61	64	103	92	− 346	+ 343	+ 12	+ 17·00	− 13·57	+ ·06	+ ·03
5227	1 54 40	54 19	63	65	102	87	− 62	+ 61	+ 9	+ 2·59	− 10·15	+ ·08	+ ·03
5228	1 54 40	54 19	65	66	99	90	− 78	+ 80	+ 10	+ 2·37	− 11·53	+ ·08	+ ·06
5229	1 54 40	54 19	73	66	107	101	− 94	+ 101	+ 7	+ 9·71	− 65·87	+ ·05	+ ·04
5230	1 50 39	54 12	57	63	99	94	− 101	+ 90	+ 4	+ 18·12	+ 10·21	+ ·04	+ ·02
5231	1 50 39	54 12	60	65	100	90	− 89	+ 84	+ 7	+ 18·72	+ 11·06	+ ·06	+ ·02
5232	1 50 39	54 12	63	66	101	94	− 134	+ 132	+ 13	+ 21·11	+ 10·30	+ ·04	·00
5234	1 50 39	54 12	48	53	99	94	− 99	+ 144	+ 1	+ 12·12	− 38·46	+ ·05	+ ·03
5235	1 50 39	54 12	40	36	100	95	− 102	+ 174	+ 3	+ 11·77	− 40·63	+ ·08	+ ·03
5236	1 50 39	54 12	−·00037	−·00022	−·00102	−·00097	−·00159	+·00248	·00000	+ 4·57	− 45·35	+ 0·05	+ 0·04

$a.e.$—Adopted scale including effect of aberration and refraction.
$a'.e'.$—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = -·00102$, $e' = -·00095$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'.$—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b' + d' = +·000066$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of reference stars. The corrections to the centre are :—

$$c + 4200'' (a + b),$$
$$f + 4200'' (d + e).$$

$c'.f'.$—Corrections to the origin deduced from provisional places of reference stars and the adopted values for a, b, d and e.

TABLE IV.—Plate Constants, Astrographic 13-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.			
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.		Corrections to	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.	c'.	f'.
	h m s	° ′								″	″	″	″
5237	1 48 44	54 6	−·00065	−·00066	−·00098	−·00094	+·00324	−·00311	+·00007	− 25·30	+ 29·62	+ 0·03	+ 0·03
5238	1 48 44	54 6	62	65	98	93	− 168	+ 184	+ 10	− 8·16	+ 24·97	+ ·07	+ ·01
5239	1 46 48	54 1	62	66	99	99	− 107	+ 103	+ 10	+ 26·63	− 3·03	+ ·08	− ·02
5240	1 46 48	54 1	64	67	112	99	− 99	+ 98	+ 12	+ 24·73	− 1·98	·00	− ·01
5241	1 46 48	54 1	66	67	98	98	− 104	+ 106	+ 6	+ 27·61	− 2·39	+ ·08	− ·02
5242	1 46 48	54 1	75	68	104	94	− 404	+ 411	+ 11	+ 25·46	− 68·34	+ ·08	− ·02
5243	1 46 48	54 1	75	68	104	96	− 133	+ 140	+ 10	+ 11·63	− 45·74	+ ·08	− ·02
5248	1 41 28	53 36	74	67	94	101	− 138	+ 145	+ 9	+ 8·55	+ 31·82	+ ·09	+ ·08
5249	1 41 28	53 36	74	67	88	99	− 113	+ 120	+ 8	+ 1·84	+ 36·13	+ ·08	+ ·08
5250	1 41 28	53 18	74	67	91	94	− 85	+ 92	+ 7	+ 0·83	+ 35·76	+ ·10	+ ·07
5253	1 35 21	52 52	65	67	106	93	− 568	+ 567	+ 5	+ 29·77	− 12·84	+ ·06	+ ·07
5254	1 35 21	52 52	68	68	103	86	− 95	+ 106	0	+ 29·13	− 8·64	+ ·06	+ ·07
5256	1 35 58	52 49	64	67	113	92	− 102	+ 118	+ 7	+ 26·56	+ 4·81	+ ·06	+ ·07
5257	1 35 21	52 52	61	65	116	83	− 179	+ 199	+ 2	+ 6·68	− 44·92	+ ·06	+ ·07
5258	1 35 21	52 52	58	64	113	91	− 116	+ 141	+ 6	+ 1·45	− 42·47	+ ·06	+ ·07
5259	1 35 21	52 52	45	48	110	88	− 116	+ 172	+ 12	− 4·10	− 45·54	+ ·06	+ ·07
5260	1 35 21	52 52	41	41	108	88	− 163	+ 231	+ 2	− 11·65	− 49·13	+ ·06	+ ·07
5261	1 34 20	52 38	63	66	111	99	− 92	+ 87	+ 6	+ 16·25	− 29·62	+ ·03	+ ·04
5262	1 34 20	52 38	65	67	115	95	− 88	+ 87	+ 19	+ 2·63	− 29·21	+ ·03	+ ·04
5263	1 34 20	52 38	76	69	111	95	− 146	+ 153	+ 2	− 5·05	− 59·42	+ ·03	+ ·04
5264	1 34 20	52 38	76	69	116	91	− 149	+ 156	+ 1	− 14·88	− 58·80	+ ·03	+ ·04
5267	1 31 40	52 9	73	69	115	105	− 112	+ 117	+ 23	+ 40·23	− 12·15	+ ·08	+ ·09
5268	1 32 52	52 7	76	70	105	98	− 151	+ 157	+ 19	+ 22·33	− 4·21	+ ·04	+ ·09
5269	1 34 7	52 9	76	70	114	103	− 84	+ 91	+ 26	− 16·32	+ 29·38	+ ·04	+ ·09
5270	1 29 45	51 36	65	67	113	96	− 725	+ 715	+ 12	+ 50·47	+ 0·19	− ·02	+ ·07
5271	1 29 45	51 36	67	68	111	92	− 62	+ 60	+ 1	+ 26·24	− 0·71	·00	+ ·07
5272	1 29 45	51 36	69	69	100	88	− 119	+ 120	+ 8	− 27·00	− 0·11	− ·02	+ ·07
5273	1 29 45	51 36	76	70	110	91	− 127	+ 133	+ 5	+ 4·20	− 24·32	− ·02	+ ·07
5274	1 29 45	51 36	77	70	115	93	− 115	+ 122	+ 15	+ 7·76	− 23·69	− ·02	+ ·07
5275	1 28 14	51 0	77	70	125	106	− 165	+ 172	+ 1	+ 16·56	+ 10·58	− ·06	+ ·06
5276	1 26 34	48 38	62	66	94	94	− 129	+ 154	+ 18	+ 0·40	+ 13·62	− ·01	+ ·07
5277	1 26 34	48 38	47	51	102	98	− 190	+ 247	− 4	− 6·43	+ 9·54	− ·01	+ ·07
5278	1 26 34	48 38	43	43	103	96	− 118	+ 188	0	− 10·56	+ 13·19	− ·01	+ ·07
5279	1 26 45	48 17	78	71	102	102	− 196	+ 202	− 8	− 22·32	−152·27	− ·03	+ ·07
5280	1 26 45	48 17	78	71	105	105	+ 647	− 641	0	− 25·21	− 57·72	− ·03	+ ·07
5283	1 26 45	48 17	54	59	106	101	− 115	+ 155	+ 3	+ 11·14	− 60·56	− ·02	+ ·07
5285	1 27 29	47 31	71	70	100	95	− 98	+ 98	+ 22	+ 18·84	+ 22·63	− ·01	+ ·02
5286	1 27 29	47 31	−·00065	−·00067	−·00102	−·00093	−·00104	+·00126	+·00019	+ 5·32	− 14·77	− 0·01	+ 0·02

$a.e.$—Adopted scale including effect of aberration and refraction.
$a'.e'.$—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = -·00102$, $e' = -·00095$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'.$—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b' + d' = +·000066$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of reference stars. The corrections to the centre are :—

$$c + 4200'' (a + b),$$
$$f + 4200'' (d + e).$$

$c'.f'.$—Corrections to the origin deduced from provisional places of reference stars and the adopted values for a, b, d and e.

TABLE IV.—Plate Constants, Astrographic 13-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.			
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.		Corrections to	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.	c'.	f'.
	h m s	° ′								″	″	″	″
5287	1 28 50	46 45	−·00078	−·00071	−·00101	−·00096	−·00123	+·00129	−·00010	+ 53·26	− 3·62	+ 0·08	+ 0·07
5288	1 30 15	45 56	78	72	110	97	− 124	+ 129	0	+ 0·63	+ 6·01	− ·01	+ ·10
5289	1 30 15	45 56	79	72	109	94	− 86	+ 92	+ 3	− 4·98	+ 5·75	− ·01	+ ·10
5290	1 30 15	45 56	79	72	109	92	− 118	+ 125	+ 4	− 3·81	+ 3·22	− ·01	+ ·10
5294	1 30 15	45 56	58	62	111	91	− 454	+ 489	− 15	− 0·69	− 25·53	− ·01	+ ·10
5297	1 30 15	45 56	40	40	104	98	− 493	+ 570	− 1	− 2·88	− 32·41	− ·01	+ ·10
5299	1 32 16	45 8	74	71	104	94	− 83	+ 83	+ 14	+ 9·51	− 13·55	− ·07	+ ·08
5300	1 32 16	45 8	78	72	94	89	− 202	+ 207	+ 14	+ 12·03	− 13·09	− ·07	+ ·08
5304	1 32 16	45 8	63	66	94	93	− 100	+ 126	+ 21	− 7·80	− 61·12	− ·07	+ ·08
5306	1 32 16	45 8	48	51	95	90	− 86	+ 144	+ 9	− 4·02	− 59·96	− ·07	+ ·08
5307	1 32 16	45 8	41	40	90	95	− 615	+ 692	+ 11	+ 11·81	−105·19	− ·07	+ ·08
5308	1 33 25	44 43	74	71	105	96	− 69	+ 71	+ 13	− 2·69	− 1·83	− ·09	+ ·05
5309	1 34 36	44 19	74	70	105	94	− 136	+ 136	+ 4	+ 42·97	− 53·27	+ ·04	+ ·11
5310	1 34 36	44 19	76	71	103	91	− 44	+ 47	− 4	+ 34·74	− 48·71	·00	+ ·10
5313	1 34 36	44 19	79	72	119	99	− 257	+ 263	0	+ 20·37	− 86·72	− ·09	+ ·09
5314	1 37 25	43 28	77	72	101	94	− 155	+ 158	− 7	+ 39·38	− 8·06	− ·04	+ ·06
5315	1 37 25	43 28	78	72	102	91	− 85	+ 88	− 2	+ 27·00	− 6·22	+ ·02	+ ·01
5318	1 37 25	43 28	80	72	107	89	− 28	+ 34	+ 5	− 2·33	− 58·49	+ ·01	+ ·04
5319	1 37 25	43 28	80	72	112	95	− 650	+ 656	+ 12	+ 15·65	− 99·35	·00	+ ·04
5322	1 37 25	43 28	62	64	112	88	− 172	+ 204	+ 3	+ 16·50	− 45·71	− ·04	+ ·05
5324	1 37 25	43 28	44	45	115	99	− 944	+ 1013	+ 7	+ 53·44	−122·28	− ·03	+ ·02
5326	1 38 56	43 1	38	34	112	86	− 1020	+ 1110	− 6	+ 53·32	− 17·34	·00	+ ·07
5327	1 42 22	42 34	60	62	88	94	− 127	+ 163	+ 6	+ 32·77	− 9·01	+ ·02	+ ·12
5328	1 42 22	42 34	54	57	83	95	− 161	+ 209	− 1	+ 31·45	− 9·99	·00	+ ·11
5329	1 42 22	42 34	44	44	89	93	− 109	+ 181	− 4	+ 30·28	− 13·20	+ ·01	+ ·09
5330	1 46 0	41 20	75	71	104	101	− 118	+ 132	+ 6	+ 0·03	− 11·98	− ·12	+ ·07
5331	1 49 57	40 28	76	71	107	96	− 126	+ 140	+ 8	+ 1·48	+ 0·64	+ ·02	+ ·04
5333	1 54 19	39 37	80	73	...	...	− 134	+ 144	+ 9	+ 5·00	− 23·88	− ·08	+ ·12
5334	1 54 19	39 37	78	72	...	...	− 163	+ 174	− 1	+ 8·80	− 27·35	− ·01	+ ·04
5335	1 54 19	39 37	54	55	...	...	− 152	+ 205	− 6	+ 2·89	− 37·70	− ·01	+ ·04
5336	1 54 19	39 37	43	41	...	...	− 83	+ 160	− 2	+ 9·98	− 34·11	·00	+ ·05
5337	1 55 53	39 7	80	73	101	89	− 410	+ 418	+ 12	+ 37·76	− 22·77	+ ·02	+ ·02
5338	1 57 6	39 4	80	72	103	99	− 720	+ 730	+ 15	+ 50·74	− 18·74	+ ·02	+ ·05
5339	2 6 27	37 27	55	56	92	99	− 222	+ 271	+ 15	+ 19·93	+ 13·19	+ ·08	·00
5341	2 11 48	36 37	−·00078	−·00070	−·00107	−·00090	−·00075	+·00076	+·00005	− 4·42	− 9·54	− 0·01	− 0·05

$a.e.$—Adopted scale including effect of aberration and refraction.
$a'.e'.$—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = -·00102$, $e' = -·00095$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'.$—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b'+d' = +·000066$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of reference stars. The corrections to the centre are:—

$$c + 4200''(a+b),$$
$$f + 4200''(d+e).$$

$c'.f'.$—Corrections to the origin deduced from provisional places of reference stars and the adopted values for a, b, d and e.

TABLE IV.—Plate Constants Astrographic 13-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.			
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.		Corrections to	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.	c'.	f'.
	h m s	° ′								″	″	″	″
5342	2 11 48	36 37	−·00079	−·00071	−·00115	−·00088	−·00041	+·00044	+·00006	− 10·88	− 8·20	− 0·01	− 0·05
5343	2 11 48	36 37	80	71	114	96	− 65	+ 70	+ 6	− 16·39	− 9·96	− ·08	− ·03
5344	2 14 29	36 10	80	71	89	90	− 162	+ 171	+ 7	+ 21·16	+ 29·03	− ·06	+ ·05
5345	2 14 29	36 10	79	71	97	112	− 164	+ 175	+ 12	+ 17·39	+ 24·86	− ·03	+ ·01
5346	2 14 29	36 10	56	56	97	107	− 132	+ 180	+ 5	+ 20·61	+ 20·27	− ·03	+ ·03
5347	2 14 29	36 10	42	40	104	101	− 120	+ 200	− 12	+ 22·67	+ 21·83	− ·01	+ ·07
5348	2 14 29	36 10	36	32	92	87	− 98	+ 190	− 11	+ 12·66	+ 25·79	− ·08	+ ·11
5349	2 23 1	34 53	80	71	90	95	− 665	+ 668	+ 14	+ 38·74	+ 24·49	+ ·01	·00
5350	2 23 1	34 53	48	46	89	99	− 56	+ 124	+ 10	+ 1·00	+ 10·90	− ·01	− ·01
5351	2 23 1	34 53	39	36	91	98	− 71	+ 157	+ 9	+ 2·68	− 1·43	− ·01	− ·01
5352	2 23 1	34 53	29	21	90	98	− 133	+ 245	+ 11	− 0·82	− 8·13	− ·01	− ·01
5353	2 25 55	34 27	80	71	114	104	− 88	+ 89	+ 9	+ 14·98	+ 74·67	− ·03	− ·05
5354	2 25 55	34 27	81	72	117	101	− 593	+ 602	+ 4	+ 44·12	+ 5·39	+ ·02	− ·05
5355	2 25 55	34 27	81	72	115	96	− 293	+ 303	+ 9	+ 13·94	− 29·93	+ ·02	− ·05
5356	2 25 55	34 27	41	37	112	96	+ 56	+ 30	+ 1	+ 2·49	+ 33·38	− ·03	− ·05
5359	2 38 11	32 45	45	41	99	93	− 138	+ 214	+ 2	+ 31·50	− 5·84	− 0·15	+ 0·03
5365	2 41 25	32 20	50	46	114	104	− 85	+ 151	+ 7	− 4·55	− 30·71	− ·07	+ ·06
5366	2 41 25	32 20	41	36	111	97	− 87	+ 172	− 1	− 3·73	− 34·09	+ ·02	+ ·04
5367	2 41 25	32 20	29	20	106	94	− 70	+ 183	+ 2	− 7·84	− 34·58	+ ·01	+ ·04
5368	2 44 35	31 54	80	70	98	92	− 94	+ 96	− 3	+ 33·53	+ 26·78	+ ·02	+ ·03
5369	2 44 35	31 54	81	71	96	92	− 93	+ 97	− 4	+ 27·13	+ 26·60	+ ·02	+ ·03
5371	2 44 35	31 54	46	41	91	92	− 98	+ 173	− 7	+ 0·78	− 19·85	+ ·02	+ ·03
5372	2 44 35	31 54	38	32	91	84	− 40	+ 132	+ 13	− 4·80	− 7·40	+ ·02	+ ·03
5379	2 51 6	31 3	51	47	85	91	− 291	+ 357	+ 19	+ 40·66	− 12·42	− ·15	+ ·03
5387	3 11 31	28 32	64	57	97	95	− 111	+ 153	+ 24	+ 40·09	+ 12·16	− ·16	·00
5390	3 15 43	28 4	41	32	101	100	− 774	+ 866	+ 18	+ 26·76	− 7·10	− ·06	− ·04
5393	3 32 57	26 4	44	34	94	89	− 131	+ 219	+ 3	+ 34·92	− 23·60	− ·27	+ ·02
5394	3 43 55	24 51	82	68	94	90	− 104	+ 115	+ 23	+ 2·61	− 23·58	− ·05	− ·01
5397	3 51 16	24 2	45	32	116	98	− 845	+ 932	+ 17	+ 47·03	− 58·54	− ·07	− ·02
5398	3 51 16	24 2	35	20	94	92	− 70	+ 179	+ 18	+ 32·69	− 9·46	− ·08	− ·02
5404	3 58 40	23 13	42	28	96	88	− 82	+ 176	+ 1	+ 11·29	+ 74·79	− ·14	+ ·05
5407	4 2 30	22 51	−·00081	−·00066	−·00107	−·00094	−·01065	+·01079	·00000	− 18·14	+ 2·40	+ 0·01	− 0·02

$a.e.$—Adopted scale including effect of aberration and refraction.
$a'.e'.$—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = -·00102$, $e' = -·00095$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'.$—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b' + d' = +·000066$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of reference stars. The corrections to the centre are :—

$$c + 4200'' (a + b),$$
$$f + 4200'' (d + e).$$

$c'f'$—Corrections to the origin deduced from provisional places of reference stars and the adopted values for a, b, d and e.

TABLE IV.—Plate Constants, Astrographic 13-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.			
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.		Corrections to	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.	c'.	f'.
	h m s	° ′								″	″	″	″
5408	4 20 31	20 57	−·00082	−·00065	−·00104	−·00088	−·00181	+·00186	+·00008	+ 82·30	+ 0·08	0·00	− 0·02
5409	4 20 31	20 57	82	65	99	92	− 89	+ 97	− 4	+ 73·69	− 4·38	·00	− ·02
5412	4 20 31	20 57	52	37	107	103	− 1225	+ 1299	+ 10	+110·71	−165·32	·00	− ·02
5413	4 20 31	20 57	35	16	102	88	− 30	+ 142	+ 1	+ 55·61	− 74·80	·00	− ·02
5414	4 24 18	20 33	82	65	101	86	− 97	+ 100	0	+ 30·29	+ 16·99	+ ·03	+ ·05
5415	4 24 18	20 33	82	65	93	91	− 113	+ 118	− 10	− 21·63	+ 50·33	− ·02	·00
5416	4 24 18	20 33	82	65	105	89	− 742	+ 749	+ 4	+ 64·02	+ 34·74	+ ·08	+ ·02
5420	4 28 5	20 10	82	64	106	90	− 89	+ 93	+ 5	− 3·92	+ 51·63	+ ·03	+ ·04
5421	4 28 5	20 10	79	62	115	92	− 156	+ 174	+ 6	− 2·55	− 0·30	+ ·10	+ ·05
5422	4 28 5	20 10	78	60	106	87	− 114	+ 136	0	− 1·69	+ 1·92	+ ·05	+ ·05
5426	4 28 5	20 10	50	32	108	90	− 81	+ 161	+ 9	− 11·70	+ 0·23	+ ·07	+ ·01
5427	4 28 5	20 10	40	21	106	81	− 72	+ 174	+ 6	+ 70·75	− 1·66	+ ·06	+ ·02
5428	4 31 48	19 47	61	44	(78)	90	− 101	+ 158	− 14	+ 19·96	− 4·57	+ ·11	− ·01
5429	4 35 33	19 26	81	63	89	91	− 82	+ 87	+ 10	+ 17·77	− 48·03	+ ·07	+ ·04
5430	4 35 33	19 26	82	63	99	94	− 489	+ 496	+ 2	+ 34·89	− 48·98	− ·03	·00
5431	4 35 33	19 26	81	62	102	101	− 786	+ 797	+ 3	+ 40·34	− 50·91	− ·05	− ·04
5434	4 43 2	18 40	72	54	99	101	− 74	+ 111	+ (54)	+ 22·94	− 54·53	+ ·06	− ·17
5436	4 54 7	17 33	82	62	84	91	− 67	+ 77	+ 14	− 21·16	− 32·86	+ ·04	+ ·09
5438	4 54 7	17 33	79	59	84	94	− 67	+ 87	+ 14	− 29·68	− 29·66	+ ·04	+ ·08
5441	4 54 7	17 33	70	51	82	93	− 601	+ 642	+ 12	− 10·31	−134·22	− ·01	+ ·03
5452	5 12 54	15 45	−·00055	−·00032	−·00096	−·00093	−·00096	+·00174	+·00019	+ 14·06	+ 35·67	+ 0·02	− 0·01

$a.e.$—Adopted scale including effect of aberration and refraction.
$a'.e'.$—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = -·00102$, $e' = -·00095$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'.$—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b' + d' = +·000066$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of reference stars. The corrections to the centre are:—

$$c + 4200'' (a + b),$$
$$f + 4200'' (d + e).$$

$c'.f'.$—Corrections to the origin deduced from provisional places of reference stars and the adopted values for a, b, d and e.

TABLE V.—Plate Constants, Thompson 26-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.	
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.
	h m s	° ′								″	″
744	2 44 49	44 52	+ ·00691	+ ·00699	+ ·00610	+ ·00614	− ·00018	− ·00077	+ ·00003	+ 8·85	+ 44·89
745	2 43 51	44 54	651	650	618	620	+ 526	− 530	+ 20	− 136·82	+ 42·26
746	2 43 51	44 54	646	648	622	628	+ 428	− 428	+ 20	− 50·31	− 9·42
747	2 43 55	45 17	684	685	607	623	+ 492	− 568	− 2	− 186·91	− 174·18
748	2 43 53	45 37	680	676	606	617	+ 558	− 618	− 18	− 3·51	− 6·08
749	2 43 53	45 37	665	658	612	620	+ 372	− 398	− 16	− 1·60	+ 115·42
751	2 43 55	46 0	677	674	621	624	− 123	+ 65	+ 10	− 86·90	− 83·93
752	2 43 55	46 0	674	668	613	622	+ 666	− 734	+ 6	− 108·30	− 81·08
753	2 43 55	46 0	645	647	623	621	+ 516	− 514	+ 26	− 117·97	+ 227·41
754	2 43 46	46 21	691	703	624	606	+ 460	− 560	+ 8	− 74·56	− 40·26
755	2 43 46	46 21	667	660	614	608	+ 427	− 459	+ 6	− 92·32	+ 70·95
756	2 43 25	47 8	666	659	611	626	+ 481	− 511	+ 8	− 74·45	− 130·29
757	2 43 25	47 8	644	647	615	624	+ 442	− 440	− 2	− 91·49	+ 42·43
759	2 43 9	47 28	683	686	608	613	+ 514	− 590	+ 2	− 8·44	− 146·62
760	2 43 9	47 28	679	676	597	606	+ 489	− 549	− 2	− 8·47	− 147·05
761	2 43 9	47 28	645	647	610	606	+ 464	− 462	− 8	− 46·42	+ 124·24
762	2 42 47	47 45	688	700	606	609	+ 451	− 547	+ 4	− 35·59	− 14·87
763	2 42 25	48 8	687	696	614	605	+ 464	− 554	+ 14	− 30·98	− 45·88
764	2 42 25	48 8	682	683	620	(643)	+ 475	− 547	+ 20	− 29·18	− 44·69
766	2 40 37	49 13	643	647	608	606	+ 328	− 324	+ 8	+ 3·61	− 22·44
770	2 39 30	49 32	644	647	602	617	+ 275	− 273	+ 16	+ 199·96	− 54·02
771	2 39 30	49 32	643	647	613	612	+ 369	− 365	+ 8	+ 180·75	− 49·94
778	2 34 5	51 22	643	646	599	612	+ 468	− 464	− 20	− 43·19	− 44·71
782	2 32 55	51 38	668	658	610	608	+ 518	− 550	− 8	− 84·49	+ 26·46
783	2 32 55	51 38	664	654	609	610	+ 480	− 504	0	− 82·67	+ 27·78
787	2 25 43	52 50	663	654	606	611	+ 435	− 461	+ 8	− 21·60	+ 13·03
788	2 25 43	52 50	660	651	611	612	+ 422	− 442	+ 2	− 24·05	+ 11·49
789	2 25 43	52 50	657	649	610	613	+ 360	− 378	− 2	− 24·01	+ 15·06
790	2 25 43	52 50	641	645	608	616	− 140	+ 142	+ 6	− 16·33	+ 10·30
791	2 25 43	52 50	641	645	609	621	− 15	+ 19	+ 4	− 33·59	− 42·62
792	2 25 43	52 50	660	651	602	612	− 394	+ 420	+ 2	− 59·19	− 119·28
793	2 25 43	52 50	663	654	606	616	− 141	+ 173	+ 4	− 62·54	− 107·44
794	2 24 5	53 2	657	649	613	608	+ 566	− 580	− 4	− 173·16	− 29·84
795	2 24 5	53 2	654	647	613	613	+ 406	− 414	− 4	+ 186·95	− 39·97
796	2 24 5	53 2	+ ·00640	+ ·00644	+ ·00616	+ ·00616	+ ·00326	− ·00322	+ ·00002	+ 188·14	− 41·35

$a.e.$—Adopted scale including effect of aberration and refraction.
$a'.e'.$—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = +·00610$, $e' = +·00614$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'.$—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b' + d' = +·000034$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of comparison stars. The corrections to the centre are :—

$$c + 2100''\,(a + b),$$
$$f + 2100''\,(d + e).$$

TABLE V.—Plate Constants, Thompson 26-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.	
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.
	h m s	° ′								″	″
797	2 24 5	53 2	+·00640	+·00644	+·00625	+·00615	+·00125	−·00121	−·00006	−81·08	−78·28
798	2 24 5	53 2	661	651	616	613	+ 89	− 63	− 4	−63·36	−77·93
799	2 24 5	53 2	664	654	607	611	+ 54	− 20	− 6	−73·30	−80·63
800	2 23 8	53 14	661	652	605	607	+ 65	− 35	0	−146·28	+572·82
801	2 20 34	53 25	664	655	598	621	+ 496	− 526	+ 12	−29·11	−31·98
802	2 20 34	53 25	661	652	607	615	+ 533	− 557	− 2	−29·27	−22·50
803	2 20 34	53 25	659	650	609	613	+ 109	− 127	− 2	−18·75	−34·29
804	2 4 58	54 17	657	647	604	617	+ 412	− 430	− 2	−31·60	+21·44
806	2 1 46	54 3	640	642	603	624	+ 105	− 101	0	−13·88	+6·54
807	2 1 46	54 3	641	642	607	615	− 20	+ 24	− 8	−9·29	−0·24
811	1 56 42	54 20	668	661	619	616	+ 30	+ 22	+ 6	−21·10	−19·11
812	1 56 42	54 20	671	669	617	613	+ 84	− 22	+ 12	−18·56	−13·35
817	1 50 39	54 12	653	645	599	613	+ 442	− 454	0	−9·07	+0·17
818	1 50 39	54 12	651	643	597	620	+ 414	− 422	+ 8	−10·30	+0·79
819	1 50 39	54 12	662	652	590	608	− 355	+ 391	0	+12·97	−71·92
820	1 50 39	54 12	670	667	593	621	− 266	+ 328	+ 2	+12·59	−68·36
821	1 48 44	54 6	632	641	609	613	+ 35	− 31	0	−46·90	+13·08
822	1 46 48	54 1	649	642	611	615	+ 512	− 518	+ 2	−86·99	+11·50
823	1 46 48	54 1	646	642	614	611	+ 476	− 480	− 6	−59·39	+0·22
844	1 29 45	51 36	646	641	607	603	+ 101	− 107	+ 2	−24·75	+9·72
845	1 29 45	51 36	645	641	601	596	+ 407	− 411	− 4	−30·18	+13·59
846	1 29 45	51 36	635	639	607	608	+ 437	− 433	0	−32·00	+15·28
847	1 29 45	51 36	637	639	604	606	− 89	+ 85	− 2	−19·45	+34·00
848	1 26 34	48 38	651	644	602	617	− 357	+ 381	+ 2	+1·07	−84·93
849	1 26 34	48 38	666	660	606	618	+ 123	− 65	+ 4	−5·40	−76·31
850	1 26 34	48 38	676	683	600	618	+ 34	+ 58	+ 4	−8·78	−78·19
851	1 26 45	48 17	634	638	607	609	+ 384	− 380	+ 6	−17·41	+69·39
852	1 26 45	48 17	634	638	600	609	+ 99	− 95	+ 6	−6·88	−139·39
853	1 26 45	48 17	668	663	605	609	+ 45	+ 17	+ 6	−10·95	−28·46
854	1 26 45	48 17	678	685	609	615	+ 71	+ 23	+ 2	−22·04	−30·44
855	1 27 57	47 7	637	638	607	605	+ 913	− 913	+ 8	−16·55	+63·36
856	1 27 57	47 7	636	638	607	612	+ 329	− 329	− 2	+5·50	+43·08
858	1 30 15	45 56	634	637	609	618	+ 443	− 441	− 6	−32·41	+6·82
859	1 30 15	45 56	633	637	603	615	+ 311	− 309	− 12	−29·44	+5·27
860	1 30 15	45 56	633	637	604	618	+ 418	− 416	− 8	−28·68	+9·59
861	1 30 15	45 56	+·00665	+·00659	+·00610	+·00623	+·00131	−·00073	+·00006	−31·45	+16·41

$a.e.$—Adopted scale including effect of aberration and refraction.
$a'.e'.$—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = +·00610$, $e' = +·00614$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'.$—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b' + d' = +·000034$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of comparison stars. The corrections to the centre are :—

$$c + 2100''(a + b),$$
$$f + 2100''(d + e).$$

TABLE V.—Plate Constants, Thompson 26-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.	
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.
	h m s	° ′								″	″
863	1 32 16	45 8	+·00637	+·00637	+·00594	+·00604	+·001224	−·001225	+·00002	− 46·94	+ 193·03
864	1 32 16	45 8	635	637	601	610	+ 395	− 395	+ 6	− 25·11	+ 153·11
865	1 32 16	45 8	634	637	599	606	+ 434	− 432	+ 4	− 27·47	+ 153·81
866	1 32 16	45 8	646	642	606	611	+ 26	− 6	+ 12	− 50·14	− 21·83
867	1 32 16	45 8	669	665	605	615	+ 141	− 73	+ 10	− 53·67	− 32·94
868	1 32 16	45 8	675	676	609	608	+ 47	+ 39	+ 18	− 50·45	− 31·55
869	1 34 36	44 19	637	638	610	612	− 82	+ 80	+ 10	− 42·99	+ 28·19
870	1 34 36	44 19	636	637	607	614	+ 101	− 101	+ 12	− 26·03	− 46·90
871	1 34 36	44 19	635	637	604	611	− 7	+ 7	+ 10	− 56·12	+ 22·09
872	1 37 25	43 28	637	638	617	632	+ 316	− 320	+ 14	− 10·29	− 37·60
873	1 37 25	43 28	636	637	612	627	+ 325	− 327	+ 10	− 7·48	− 40·44
874	1 37 25	43 28	635	637	610	620	+ 423	− 423	+ 12	− 8·46	− 37·78
875	1 37 25	43 28	651	646	606	615	− 402	+ 432	+ 10	− 32·04	+ 53·79
876	1 37 25	43 28	658	652	607	616	− 414	+ 460	0	− 29·90	+ 51·56
877	1 37 25	43 28	681	688	609	619	− 17	+ 131	+ 8	− 40·82	+ 56·41
878	1 40 34	42 37	637	638	619	613	+ 364	− 368	+ 8	− 9·11	− 23·08
879	1 40 34	42 37	636	637	614	612	+ 160	− 162	+ 2	− 2·10	− 20·06
880	1 40 34	42 37	647	643	618	612	− 46	+ 70	+ 10	− 22·20	+ 58·86
881	1 40 34	42 37	655	649	611	609	− 20	+ 58	+ 2	− 29·94	+ 59·82
882	1 40 34	42 37	665	660	610	615	+ 2	+ 58	+ 6	− 29·72	+ 57·91
883	1 49 57	40 28	631	636	616	617	+ 49	− 47	+ 20	− 13·08	+ 58·90
884	1 49 57	40 28	631	636	617	616	− 134	+ 138	+ 16	− 12·58	+ 47·01
885	1 54 19	39 37	633	636	611	605	+ 414	− 406	0	− 5·64	− 20·10
886	1 54 19	39 37	654	650	606	601	− 133	+ 173	+ 6	− 27·42	+ 70·43
887	1 56 39	39 12	631	636	609	613	+ 99	− 93	+ 2	− 27·75	− 33·05
889	2 6 27	37 27	663	660	612	615	+ 50	+ 10	− 6	− 28·03	+ 62·64
890	2 6 27	37 27	671	670	609	616	+ 48	+ 30	0	− 13·05	+ 69·07
891	2 11 48	36 37	632	638	611	615	− 1	+ 1	− 6	+ 200·86	− 152·04
892	2 11 48	36 37	631	637	620	612	+ 79	− 77	− 8	− 29·22	− 6·53
894	2 14 29	36 10	633	638	611	612	+ 33	− 25	− 6	− 0·66	+ 46·27
895	2 14 29	36 10	634	638	606	604	+ 42	− 32	− 10	+ 4·79	+ 45·28
896	2 14 29	36 10	654	651	615	615	+ 37	+ 5	− 4	− 2·35	+ 46·18
897	2 14 29	36 10	677	678	606	616	+ 48	+ 44	− 2	+ 21·95	+ 39·98
898	2 14 29	36 10	692	703	608	612	+ 66	+ 66	− 6	− 19·50	+ 39·66
899	2 25 55	34 27	632	637	610	608	+ 103	− 103	+ 6	− 19·10	+ 66·80
900	2 25 55	34 27	632	636	612	614	+ 25	− 23	+ 10	− 32·22	+ 52·18
901	2 25 55	34 27	+·00630	+·00636	+·00615	+·00608	−·00148	+·00150	−·00006	− 53·07	+ 4·00

a.e.—Adopted scale including effect of aberration and refraction.
a′.e′.—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = +·00610$, $e' = +·00614$.
b.d.—Adopted orientation including effect of refraction.
b′.d′.—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b' + d' = +·000034$.
c.f.—Corrections to the origin deduced from the finally adopted places of comparison stars. The corrections to the centre are :—

$$c + 2100'' (a + b),$$
$$f + 2100'' (d + e).$$

TABLE V.—Plate Constants, Thompson 26-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.	
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.	
	R.A.	Dec. North.	a.	e.			b.	d.		c.	f.
	h m s	° ′								″	″
904	2 41 25	32 20	+·00632	+·00639	+·00619	+·00599	+·00203	−·00205	+·00002	− 30·53	− 0·82
905	2 41 25	32 20	631	638	614	610	+ 155	− 155	+ 2	− 29·31	− 1·43
906	2 41 25	32 20	678	681	616	611	+ 19	+ 79	+ 10	− 30·49	− 11·64
907	2 41 25	32 20	690	700	612	605	+ 104	+ 24	+ 12	− 26·86	− 14·68
908	2 44 35	31 54	631	638	603	604	+ 512	− 512	+ 12	− 21·96	− 7·95
909	2 44 35	31 54	630	638	601	602	+ 237	− 237	+ 18	− 16·52	− 8·90
910	2 44 35	31 54	630	638	592	599	+ 483	− 481	+ 16	− 23·52	− 8·15
912	2 44 35	31 54	657	658	596	604	− 69	+ 123	+ 16	− 46·81	+ 75·83
913	2 44 35	31 54	664	665	587	609	− 266	+ 334	+ 16	− 33·82	+ 82·43
914	2 44 35	31 54	671	674	587	591	− 461	+ 545	+ 12	− 32·27	+ 80·38
915	2 51 6	31 3	653	654	617	617	+ 58	− 10	+ 12	+ 32·94	+ 25·06
917	2 54 29	30 38	630	638	622	625	+ 351	− 351	+ 14	− 35·64	− 9·84
918	2 54 29	30 38	630	638	621	621	+ 422	− 420	+ 8	− 30·07	− 16·44
919	2 54 29	30 38	630	638	620	615	+ 211	− 209	+ 16	− 29·70	− 18·48
920	2 54 29	30 38	654	656	631	627	− 155	+ 205	+ 20	− 30·13	− 14·50
921	3 8 2	28 57	631	640	594	607	+ 458	− 448	− 26	− 33·14	− 18·22
922	3 8 2	28 57	633	640	593	616	+ 235	− 223	− 24	− 24·50	− 20·44
925	3 14 54	28 8	654	658	634	618	+ 8	+ 46	0	+ 113·08	− 15·42
926	3 14 54	28 8	666	671	639	617	− 492	+ 572	+ 6	+ 129·95	− 40·73
927	3 29 23	26 28	629	640	620	613	+ 469	− 469	+ 6	− 20·01	+ 19·22
928	3 32 57	26 4	631	641	601	627	− 894	+ 906	+ 4	+ 19·04	− 32·43
930	3 32 57	26 4	667	674	610	619	+ 779	− 695	− 4	− 12·77	− 2·97
931	3 43 55	24 51	630	641	611	618	− 303	+ 311	+ 16	+ 2·61	− 27·37
933	3 43 55	24 51	634	644	613	623	− 98	+ 118	+ 18	− 0·33	− 15·68
934	3 51 16	24 2	677	689	628	623	− 90	+ 198	− 12	+ 4·82	+ 40·30
935	3 51 16	24 2	695	712	620	636	− 134	+ 282	− 4	− 0·88	+ 39·39
936	3 58 40	23 13	655	665	602	609	− 316	+ 378	0	− 6·25	+ 175·22
937	3 58 40	23 13	665	675	611	620	− 46	+ 128	− 4	− 35·37	+ 172·15
938	4 2 30	22 51	629	642	633	623	+ 3	− 3	0	+ 1·01	+ 8·60
939	4 2 30	22 51	629	642	622	622	+ 312	− 310	− 6	+ 1·85	+ 9·48
940	4 2 30	22 51	631	641	616	617	+ 52	− 46	− 8	− 10·63	+ 8·66
941	4 20 31	20 57	631	646	617	610	− 51	+ 51	+ 4	− 46·32	− 16·53
942	4 20 31	20 57	629	644	611	615	+ 24	− 20	− 4	− 45·25	− 12·41
943	4 20 31	20 57	646	658	617	618	− 369	+ 413	+ 12	− 22·84	− 37·55
944	4 20 31	20 57	667	681	611	617	− 118	+ 206	− 6	− 31·99	− 33·15
945	4 20 31	20 57	+·00687	+·00706	+·00618	+·00625	+·00017	+·00115	+·00016	− 32·19	− 32·76

$a.e.$—Adopted scale including effect of aberration and refraction.
a' e'.—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = +·00610$, $e' = +·00614$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'$.—Orientation, as determined from each photograph, corrected for refraction. Mean value adopted, $b' + d' = +·000034$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of comparison stars. The corrections to the centre are:—

$$c + 2100''(a + b),$$
$$f + 2100''(d + e).$$

TABLE V.—Plate Constants, Thompson 26-inch Refractor.

No. of Plate.	Assumed Co-ordinates of Centre.		Scale.				Orientation.			Corrections to Origin.	
			Adopted.		a'.	e'.	Adopted.		$b'+d'$.	Adopted.	
	R.A.	Dec. North.	a.	e.			b.	d.		c,	f.
	h m s	° ′								″	″
946	4 24 18	20 33	+ ·00629	+ ·00644	+ ·00609	+ ·00617	− ·00313	+ ·00317	− ·00004	− 18·50	+ 15·43
947	4 24 18	20 33	630	644	603	614	− 56	+ 62	+ 2	− 27·52	+ 24·80
948	4 24 18	20 33	630	644	605	607	− 191	+ 199	0	− 18·67	+ 20·47
949	4 28 5	20 10	633	647	608	619	− 74	+ 90	+ 2	+ 259·65	+ 76·02
952	4 31 48	19 47	654	668	(647)	609	+ 44	+ 18	+ 2	− 27·33	+ 6·93
954	4 43 2	18 40	639	655	599	624	+ 16	+ 16	+ 24	− 20·42	− 20·45
955	4 43 2	18 40	643	658	596	620	+ 95	− 55	+ 18	− 15·20	− 27·59
958	4 54 7	17 33	630	647	609	613	− 391	+ 399	− 2	+ 110·44	+ 45·21
959	4 54 7	17 33	+ ·00632	+ ·00649	+ ·00599	+ 00·609	− ·00294	+ ·00308	− ·00004	− 13·60	+ 58·19

$a.e.$—Adopted scale inoluding effect of aberration and refraction.
$a'.e'.$—Scale, as determined from each photograph, corrected for aberration and refraction. Mean values adopted, $a' = +·00610$, $e' = +·00614$.
$b.d.$—Adopted orientation including effect of refraction.
$b'.d'.$—Orientation, as determined from each photograph, corrected for refraction. Mean valne adopted, $b' + d' = +·000034$.
$c.f.$—Corrections to the origin deduced from the finally adopted places of comparison stars. The corrections to the centre are :—

$$c + 2100''(a + b),$$
$$f + 2100''(d + e).$$

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 49° 399.		
Provisional.....	1h 24m 0s·47	49° 25′ 30″·8
1900.		
5276 Dec. 6	−″·16	″·00
5277 ,,	−·03	−·06
5278 ,,	−·08	+·09
Mean	−·09	+·01
Redn. to L.	+·02	−·07
Deduced.....	1h 24m 0s·477	49° 25′ 30″·86
+ 46° 370.		
Provisional.....	1h 24m 6s·10	46° 29′ 29″·3
1900.		
5287 Dec. 10	−″·55	+″·23
Redn. to L.	+·03	−·09
Deduced.....	1h 24m 6s·150	46° 29′ 29″·16
+ 51° 317.		
Provisional.....	1h 24m 26s·15	51° 34′ 41″·5
1900.		
5270 Nov. 27	+″·42	−″·50
5271 ,,	+·31	−·44
5272 ,,	−·04	−·31
5273 ,,	+·32	−·11
5274 ,,	+·43	−·22
5275 Nov. 29	+·16	−·38
Mean	+·25	−·34
Redn. to L.	+·01	−·08
Deduced.....	1h 24m 26s·123	51° 34′ 41″·92
+ 47° 429.		
Provisional.....	1h 24m 33s·51	47° 22′ 50″·3
1900.		
5285 Dec. 9	−″·44	+″·33
5286 ,,	−·24	+·30
5287 Dec. 10	−·34*	+·38*
Mean	−·34	+·33
Redn. to L.	·00	−·07
Deduced.....	1h 24m 33s·544	47° 22′ 50″·04

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 46° 373.		
Provisional.....	1h 24m 47s·93	47° 3′ 4″·5
1900.		
5285 Dec. 9	−″·21	+″·08
5286 ,,	−·24	+·04
5287 Dec. 10	−·10	−·10
Mean	−·18	·00
Redn. to L.	·00	−·07
Deduced.....	1h 24m 47s·948	47° 3′ 4″·57
+ 47° 434.		
Provisional.....	1h 24m 51s·71	47° 54′ 4″·4
1900.		
5276 Dec. 6	+″·35	+″·08
5277 ,,	+·20	+·36
5278 ,,	+·31	+·12
5279 Dec. 7	+·28	+·13
5280 ,,	+·40	+·15
5283 ,,	+·44	+·11
5285 Dec. 9	+·31	−·23
5286 ,,	+·42	−·17
Mean	+·34	+·06
Redn. to L.	+·01	−·06
Deduced.....	1h 24m 51s·675	47° 54′ 4″·40
+ 48° 453.		
Provisional.....	1h 24m 54s·32	48° 49′ 42″·4
1900.		
5276 Dec. 6	−″·45	+″·18
5277 ,,	−·36	+·24
5278 ,,	−·52	+·27
5279 Dec. 7	−·59	+·08
5280 ,,	−·63	+·15
5283 ,,	−·37	+·03
Mean	−·49	+·16
Redn. to L.	+·02	−·06
Deduced.....	1h 24m 54s·367	48° 49′ 42″·30

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 48° 454.		
Provisional.....	1h 25m 25s·86	48° 31′ 27″·5
1900.		
5276 Dec. 6	+″·44	−″·10
5277 ,,	+·17	+·08
5278 ,,	+·28	·00
5279 Dec. 7	+·24	+·02
5280 ,,	+·25	−·16
5283 ,,	+·22	·00
Mean	+·27	−·03
Redn. to L.	+·02	−·06
Deduced.....	1h 25m 25s·831	48° 31′ 27″·59
+ 48° 455.		
Provisional.....	1h 25m 26s·34	48° 16′ 17″·5
1900.		
5276 Dec. 6	−″·07	−″·18
5277 ,,	−·13	−·17
5278 ,,	−·02	−·16
5279 Dec. 7	−·04	−·08
5280 ,,	·00	−·11
5283 ,,	−·15	−·21
5285 Dec. 9	·00	−·32
5286 ,,	−·14	−·32
Mean	−·07	−·20
Redn. to L.	+·01	−·06
Deduced.....	1h 25m 26s·346	48° 16′ 17″·76
+ 51° 323.		
Provisional.....	1h 25m 46s·48	51° 57′ 17″·2
1900.		
5270 Nov. 27	−″·26	+″·08
5271 ,,	−·30	+·49
5272 ,,	−·48	+·34
5273 ,,	−·53	+·14
5274 ,,	−·41	−·02
Mean	−·40	+·21
Redn. to L.	+·01	−·08
Deduced.....	1h 25m 46s·522	51° 57′ 17″·07

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 50° 298.		
Provisional.....	1h 26m 12s·70	50° 38′ 52″·1
1900.		
5275 Nov. 29	+″·41	+″·38
Redn. to L.	+·03	−·10
Deduced.....	1h 26m 12s·654	50° 38′ 51″·82
+ 47° 442.		
Provisional.....	1h 26m 16s·90	47° 54′ 12″·9
1900.		
5276 Dec. 6	+″·02	−″·13
5277 ,,	+·16	−·12
5278 ,,	+·04	−·12
5279 Dec. 7	+·08	+·10
5280 ,,	+·02	−·08
5283 ,,	−·01	−·05
5285 Dec. 9	+·24	−·39
5286 ,,	+·15	−·30
Mean	+·09	−·14
Redn. to L.	+·01	−·06
Deduced.....	1h 26m 16s·890	47° 54′ 13″·10
+ 50° 299.		
Provisional.....	1h 26m 22s·59	50° 18′ 34″·4
1900.		
5275 Nov. 29	−″·32	+″·14
Redn. to L.	+·03	−·10
Deduced.....	1h 26m 22s·620	50° 18′ 34″·36
+ 50° 300.		
Provisional.....	1h 26m 48s·72	50° 58′ 5″·0
1900.		
5270 Nov. 27	+″·54	+″·10
5271 ,,	+·57	−·01
5272 ,,	+·46	−·12
5273 ,,	+·70	−·15
5274 ,,	+·82	−·16
5275 Nov. 29	+·74	+·03
Mean	+·65	−·04
Redn. to L.	+·01	−·08
Deduced.....	1h 26m 48s·651	50° 58′ 5″·12

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 50° 301.		
Provisional.....	1h 26m 59s·90	50° 22′ 1″·1
1900.		
5275 Nov. 29	+″·02	+″·20
Redn. to L.	+·03	−·10
Deduced.....	1h 26m 59s·895	50° 22′ 1″·00
+ 48° 463.		
Provisional.....	1h 27m 16s·21	48° 30′ 18″·9
1900.		
5276 Dec. 6	−″·05	+″·22
5277 ,,	−·03	+·12
5278 ,,	−·05	+·27
5279 Dec. 7	+·02	+·30
5280 ,,	+·23	+·24
5283 ,,	+·13	+·24
Mean	+·04	+·23
Redn. to L.	+·02	−·06
Deduced	1h 27m 16s·204	48° 30′ 18″·73
+ 51° 331.		
Provisional.....	1h 27m 58s·69	51° 19′ 13″·4
1900.		
5270 Nov. 27	+″·03	+″·21
5271 ,,	+·06	+·16
5272 ,,	−·09	+·08
5273 ,,	+·11	+·20
5274 ,,	+·05	+·16
5275 Nov. 29	−·06	+·09
Mean	−·00	+·14
Redn. to L.	+·01	−·08
Deduced.....	1h 27m 58s·689	51° 19′ 13″·34
+ 45° 376.		
Provisional.....	1h 28m 0s·36	45° 27′ 47″·3
1900.		
5288 Dec. 13	−″·16	+″·05
5289 ,,	−·22	+·08
5290 ,,	−·15	+·09

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 45° 376.—*contd.*		
1900.		
5294 Dec. 13	−″·21	−″·17
5297 ,,	−·15	+·03
5299 Dec. 15	−·04	−·24
5300 ,,	−·12	+·03
5304 ,,	−·14	−·21
5306 ,,	−·27	−·06
5307 ,,	−·17	−·36
Mean	−·16	−·08
Redn. to L.	+·04	−·07
Deduced.....	1h 28m 0s·372	45° 27′ 47″·45
+ 47° 450.		
Provisional.....	1h 28m 5s·32	47° 54′ 30″·5
1900.		
5276 Dec. 6	−″·01	+″·27
5277 ,,	+·08	+·18
5278 ,,	+·03	+·13
5279 Dec. 7	−·22	+·21
5280 ,,	−·09	+·49
5283 ,,	−·08	+·14
5285 Dec. 9	+·12	+·21
5286 ,,	−·03	+·25
Mean	−·02	+·23
Redn. to L.	+·01	−·06
Deduced.....	1h 28m 5s·321	47° 54′ 30″·33
+ 48° 470.		
Provisional.....	1h 28m 20s·31	49° 3′ 3″·7
1900.		
5276 Dec. 6	−″·45	−″·40
5277 ,,	−·31	−·44
5278 ,,	−·34	−·30
5279 Dec. 7	−·52	−·57
5280 ,,	−·29	−·66
5283 ,,	−·44	−·45
Mean	−·39	−·47
Redn. to L.	+·02	−·06
Deduced.....	1h 28m 20s·347	49° 3′ 4″·23

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 45° 379.		
Provisional.....	1h 28m 33s·25	46° 0′ 46″·0
1900.		
5287 Dec. 10	+″·46	−″·27
5288 Dec. 13	+·66	−·01
5289 ,,	+·33	·00
5290 ,,	+·47	+·08
5294 ,,	+·30	−·07
5297 ,,	+·15	−·05
Mean	+·40	−·08
Redn. to L.	+·04	−·08
Deduced.....	1h 28m 33s·208	46° 0′ 46″·16
+ 51° 334.		
Provisional.....	1h 28m 33s·79	51° 38′ 28″·9
1900.		
5267 Nov. 25	+″·17	+″·15
5268 ,,	+·08	−·02
5269 ,,	+·16	+·22
5270 Nov. 27	+·07	−·05
5271 ,,	+·09	+·03
5272 ,,	+·01	−·11
5273 ,,	+·11	−·07
5274 ,,	+·05	−·10
5275 Nov. 29	+·05	−·26
Mean	+·09	−·03
Redn. to L.	·00	−·08
Deduced.....	1h 28m 33s·781	51° 38′ 29″·01
+ 44° 326.		
Provisional.....	1h 28m 37s·80	45° 4′ 57″·8
1900.		
5288 Dec. 13	+″·05	−″·06
5289 ,,	−·06	−·22
5290 ,,	−·11	−·15
5294 ,,	+·13	−·34
5297 ,,	+·10	+·07
5299 Dec. 15	+·16	−·40
5300 ,,	−·15	−·36
5304 ,,	−·06	−·36
5306 ,,	+·02	−·27
5307 ,,	−·34	−·28
5308 Dec. 16	−·13	−·42
Mean	−·04	−·27
Redn. to L.	+·04	−·07
Deduced.....	1h 28m 37s·800	45° 4′ 58″·14

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 45° 383.		
Provisional.....	1h 29m 15s·87	45° 19′ 0″·2
1900.		
5288 Dec. 13	+″·57	+″·04
5289 ,,	+·47	−·05
5290 ,,	+·45	−·07
5294 ,,	+·74	−·15
5297 ,,	+·38	+·08
5299 Dec. 15	+·49	−·12
5300 ,,	+·27	−·12
5304 ,,	+·34	−·12
5306 ,,	+·32	−·04
5307 ,,	+·23	+·07
5308 Dec. 16	+·31*	+·01*
Mean	+·42	−·05
Redn. to L.	+·04	−·07
Deduced.....	1h 29m 15s·826	45° 19′ 0″·32
+ 44° 329.		
Provisional.....	1h 29m 20s·36	44° 24′ 51″·6
1900.		
5299 Dec. 15	−″·31	+″·08
5300 ,,	−·39	−·03
5304 ,,	+·01	+·04
5306 ,,	−·22	+·16
5307 ,,	−·13	(+·43)
5308 Dec. 16	−·22	−·17
5309 Dec. 17	−·31	−·15
5310 ,,	−·35	−·09
5313 ,,	+·11	−·04
Mean	−·20	−·04
Redn. to L.	+·04	−·07
Deduced.....	1h 29m 20s·376	44° 24′ 51″·71
+ 51° 338.		
Provisional.....	1h 29m 22s·51	51° 39′ 7″·7
1900.		
5267 Nov. 25	−″·27	−″·09
5268 ,,	−·45	−·09
5269 ,,	−·30	−·19
5275 Nov. 29	−·34	−·38
Mean	−·34	−·21
Redn. to L.	·00	−·08
Deduced.....	1h 29m 22s·545	51° 39′ 7″·99

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 46° 389.		
Provisional.....	1h 29m 30s·47	46° 22′ 51″·8
1900.		
5287 Dec. 10	+″·46	+″·33
5288 Dec. 13	+·30	+·26
5289 ,,	+·41	+·34
5290 ,,	+·45	+·31
5294 ,,	+·34	+·41
5297 ,,	+·47	+·25
Mean	+·41	+·32
Redn. to L.	+·04	−·08
Deduced.....	1h 29m 30s·426	46° 22′ 51″·56
+ 46° 393.		
Provisional.....	1h 29m 59s·28	46° 36′ 11″·5
1900.		
5287 Dec. 10	−″·45	−″·24
5288 Dec. 13	−·80	−·11
5289 ,,	−·54	−·07
5290 ,,	−·66	−·14
5294 ,,	−·82	−·21
5297 ,,	−·72	−·10
Mean	−·63	−·16
Redn. to L.	+·04	−·08
Deduced.....	1h 29m 59s·337	46° 36′ 11″·74
+ 48° 477.		
Provisional.....	1h 30m 3s·17	48° 41′ 35″·7
1900.		
5276 Dec. 6	+″·40	+″·14
5277 ,,	+·10	+·01
5278 ,,	+·37	−·14
5279 Dec. 7	+·36	−·21
5280 ,,	+·24	−·22
5283 ,,	+·36	−·22
Mean	+·31	−·11
Redn. to L.	+·02	−·06
Deduced.....	1h 30m 3s·137	48° 41′ 35″·87

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 46° 397.		
Provisional.....	1h 30m 18s·73	46° 48′ 53″·8
1900.		
5285 Dec. 9	+″·05	−″·13
5286 ,,	+·03	−·50
5287 Dec. 10	+·16	−·18
5288 Dec. 13	−·03	−·10
5289 ,,	+·08	−·11
5290 ,,	+·05	−·09
5294 ,,	−·12	+·13
5297 ,,	+·19	−·17
Mean	+·06	−·17
Red^{n}. to L.	+·02	−·08
Deduced.....	1h 30m 18s·722	46° 48′ 54″·05
+ 47° 460.		
Provisional.....	1h 30m 20s·27	48° 12′ 43″·7
1900.		
5276 Dec. 6	−″·04	−·09
5277 ,,	+·15	−·22
5278 ,,	−·04	−·17
5279 Dec. 7	−·03	+·02
5280 ,,	−·25	+·12
5283 ,,	−·08	+·34
5285 Dec. 9	−·24	+·35
5286 ,,	−·09	+·36
Mean	−·08	+·10
Red^{n}. to L.	+·01	−·06
Deduced.....	1h 30m 20s·277	48° 12′ 43″·66
+ 51° 339.		
Provisional.....	1h 30m 24s·34	51° 14′ 15″·9
1900.		
5270 Nov. 27	−″·34	+″·03
5271 ,,	−·12	+·05
5272 ,,	−·18	+·05
5273 ,,	−·46	−·03
5274 ,,	−·54	+·14
5275 Nov. 29	−·37	+·02
Mean	−·34	+·04
Red^{n}. to L.	+·01	−·08
Deduced.....	1h 30m 24s·375	51° 14′ 15″·94

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 47° 462.		
Provisional.....	1h 30m 32s·85	47° 33′ 44″·7
1900.		
5285 Dec. 9	−″·11	+″·12
5286 ,,	−·11	+·28
5287 Dec. 10	+·10	+·20
Mean	−·03	+·20
Red^{n}. to L.	·00	−·07
Deduced.....	1h 30m 32s·853	47° 33′ 44″·57
+ 52° 387.		
Provisional.....	1h 30m 39s·42	52° 35′ 43″·1
1900.		
5253 Nov. 22	+″·46	−″·12
5254 ,,	+·40	+·03
5256 ,,	+·60	+·15
5257 ,,	+·59	+·10
5258 ,,	+·62	+·15
5259 ,,	+·44	−·07
5260 ,,	+·41	+·03
5261 Nov. 23	+·52	−·22
5262 ,,	+·76	− 13
5263 ,,	+·58	+·04
5264 ,,	+·51	−·03
5267 Nov. 25	+·75	−·07
5268 ,,	+·47	−·03
5269 ,,	+·54	−·25
Mean	+·55	−·05
Red^{n}. to L.	−·04	−·07
Deduced.....	1h 30m 39s·363	52° 35′ 43″·22
+ 47° 463.		
Provisional.....	1h 30m 40s·33	47° 48′ 17″·0
1900.		
5279 Dec. 7	+″·46	+″·05
5280 ,,	+·17	+·10
5283 ,,	+·06	+·09
5285 Dec. 9	+·30	+·02
5286 ,,	+·20	+·06
Mean	+·24	+·06
Red^{n}. to L.	·00	−·05
Deduced.....	1h 30m 40s·306	47° 48′ 16″·99

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 50° 314.		
Provisional.....	1h 30m 44s·59	50° 44′ 59″·5
1900.		
5275 Nov. 29	−″·34	+″·17
Red^{n}. to L.	+·03	−·10
Deduced.....	1h 30m 44s·623	50° 44′ 59″·43
+ 49° 418.		
Provisional.....	1h 30m 56s·34	49° 25′ 43″·6
1900.		
5276 Dec. 6	+″·59	+″·55
Red^{n}. to L.	+·02	−·07
Deduced.....	1h 30m 56s·174	49° 25′ 43″·12
+ 51° 344.		
Provisional.....	1h 31m 9s·48	52° 7′ 14″·8
1900.		
5261 Nov. 23	+″·50	+″·18
5262 ,,	+·56	−·04
5263 ,,	+·62	+·21
5264 ,,	+·46	+·12
5267 Nov. 25	+·65	+·14
5268 ,,	+·44	+·17
5269 ,,	+·61	+·08
5270 Nov. 27	+·27	+·06
5271 ,,	+·24	+·03
5272 ,,	+·26	+·02
5273 ,,	+·34	·00
5274 ,,	+·22	+·04
Mean	+·44	+·09
Red^{n}. to L.	−·02	−·07
Deduced.....	1h 31m 9s·435	52° 7′ 14″·78
+ 46° 404.		
Provisional.....	1h 31m 12s·89	46° 26′ 18″·7
1900.		
5287 Dec. 10	−″·15	−″·10
5288 Dec. 13	−·41	−·33
5289 ,,	−·53	−·21

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 46° 404—*contd.*		
1900.		
5290 Dec. 13	−″·49	−″·18
5294 ,,	−·47	−·15
5297 ,,	−·36	−·33
Mean	−·36	−·20
Red^{n}. to L.	+·04	−·08
Deduced.....	1^{h} 31^{m} 12^{s}·920	46° 26′ 18″·98
+ 45° 392.		
Provisional.....	1^{h} 31^{m} 13^{s}·76	45° 56′ 57″·6
1900.		
5288 Dec. 13	+″·04	+″·16
5289 ,,	+·13	+·23
5290 ,,	−·06	+·25
5294 ,,	−·12	+·25
5297 ,,	−·09	+·13
5299 Dec. 15	−·22	+·20
5300 ,,	−·13	+·19
5304 ,,	−·30	+·04
5306 ,,	−·25	+·22
5307 ,,	−·26	+·05
Mean	−·13	+·17
Red^{n}. to L.	+·04	−·07
Deduced.....	1^{h} 31^{m} 13^{s}·769	45° 56′ 57″·50
+ 45° 394.		
Provisional.....	1^{h} 31^{m} 25^{s}·13	45° 26′ 52″·2
1900.		
5288 Dec. 13	−″·11	+″·16
5289 ,,	−·07	+·22
5290 ,,	−·05	+·16
5294 ,,	−·01	+·09
5297 ,,	+·01	+·08
5299 Dec. 15	+·09	+·14
5300 ,,	−·06	+·09
5304 ,,	−·03	+·11
5306 ,,	−·18	−·01
5307 ,,	−·33	+·02
5308 Dec. 16	−·16	+·12
Mean	−·09	+·11
Red^{n}. to L.	+·04	−·07
Deduced.....	1^{h} 31^{m} 25^{s}·135	45° 26′ 52″·16

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 44° 335.		
Provisional.....	1^{h} 32^{m} 5^{s}·13	44° 18′ 30″·9
1900.		
5299 Dec. 15	+″·35	+″·09
5300 ,,	+·39	+·01
5304 ,,	+·63	−·21
5306 ,,	+·45	−·09
5307 ,,	+·53	+·02
5308 Dec. 16	+·56	−·01
5309 Dec. 17	+·48	−·18
5310 ,,	+·36	−·07
5313 ,,	+·71	+·01
Mean	+·50	−·05
Red^{n}. to L.	+·04	−·07
Deduced.....	1^{h} 32^{m} 5^{s}·079	44° 18′ 31″·02
+ 44° 337.		
Provisional.....	1^{h} 32^{m} 20^{s}·58	45° 9′ 17″·9
1900.		
5288 Dec. 13	−″·02	−″·08
5289 ,,	+·09	−·22
5290 ,,	+·14	−·33
5294 ,,	+·43	−·13
5297 ,,	+·21	−·03
5299 Dec. 15	+·03	+·11
5300 ,,	−·01	+·10
5304 ,,	−·11	+·22
5306 ,,	−·18	+·06
5307 ,,	−·16	+·22
5308 Dec. 16	−·03	+·16
5309 Dec. 17	−·27*	+·35*
5310 ,,	−·18*	+·62*
5313 ,,	+·22*	+·13*
Mean	+·01	+·07
Red^{n}. to L.	+·04	−·07
Deduced.....	1^{h} 32^{m} 20^{s}·575	45° 9′ 17″·90
+ 45° 398.		
Provisional.....	1^{h} 32^{m} 22^{s}·31	45° 55′ 6″·9
1900.		
5287 Dec. 10	+″·39†	−″·22†
5288 Dec. 13	−·06	−·04
5289 ,,	−·08	−·01
5290 ,,	−·05	·00
5294 ,,	−·14	+·09

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 45° 398—*contd.*		
1900.		
5297 Dec. 13	−″·11	−″·01
5299 Dec. 15	−·36	−·03
5300 ,,	−·20	+·05
5304 ,,	−·45	−·08
5306 ,,	−·31	−·11
5307 ,,	−·19	−·14
Mean	−·20	−·03
Red^{n}. to L.	+·04	−·07
Deduced.....	1^{h} 32^{m} 22^{s}·325	45° 55′ 7″·00
+ 44° 341.		
Provisional.....	1^{h} 32^{m} 30^{s}·31	44° 53′ 26″·2
1900.		
5309 Dec. 17	−″·08	+″·07
5310 ,,	−·08	+·24
Mean	−·08	+·16
Red^{n}. to L.	+·04	−·08
Deduced.....	1^{h} 32^{m} 30^{s}·314	44° 53′ 26″·12
+ 52° 393.		
Provisional.....	1^{h} 32^{m} 31^{s}·70	52° 43′ 46″·9
1900.		
5253 Nov. 22	+″·06	−″·38
5254 ,,	−·12	−·43
5256 ,,	+·06	−·34
5256 ,,	−·22	−·15
5258 ,,	·00	−·16
5259 ,,	−·06	−·33
5260 ,,	−·26	−·44
5261 Nov. 23	+·06	−·32
5262 ,,	+·05	−·43
5263 ,,	−·14	−·12
5264 ,,	−·09	−·04
5267 Nov. 25	+·17	−·37
5268 ,,	+·06	−·42
5269 ,,	+·13	−·37
Mean	−·01	−·31
Red^{n}. to L.	−·04	−·07
Deduced.....	1^{h} 32^{m} 31^{s}·705	52° 43′ 47″·28

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 43° 337.		
Provisional.....	1h 32m 39s·73	43° 38′ 8″·3
1900.		
5309 Dec. 17	+″·11	+″·06
5310 ,,	+·04	−·19
5313 ,,	−·19	+·07
5314 Dec. 19	−·27	−·37
5315 ,,	−·04	−·03
5318 ,,	+·06	−·04
5319 ,,	+·08	−·07
5322 ,,	·00	−·05
5324 ,,	·00	−·24
Mean	−·02	−·09
Redn. to L.	+·01	−·07
Deduced.....	1h 32m 39s·731	43° 38′ 8″·46
+ 53° 355.		
Provisional.....	1h 33m 5s·05	53° 37′ 37″·1
1900.		
5253 Nov. 22	+″·14	+″·03
5254 ,,	−·01	+·32
5256 ,,	+·02	−·02
5257 ,,	+·26	−·03
5258 ,,	+·18	−·15
5259 ,,	+·32	+·04
5260 ,,	+·28	+·17
Mean	+·17	+·05
Redn. to L.	−·05	−·08
Deduced.....	1h 33m 5s·037	53° 37′ 37″·13
+ 43° 341.		
Provisional.....	1h 33m 10s·22	43° 31′ 33″·1
1900.		
5309 Dec. 17	+″·30	−″·07
5310 ,,	+·31	−·11
5313 ,,	+·11	+·01
5314 Dec. 19	+·22	−·27
5315 ,,	+·06	−·11
5318 ,,	+·29	−·01
5319 ,,	+·51	−·05
5322 ,,	+·29	+·09
5324 ,,	+·41	+·03
Mean	+·28	−·05
Redn. to L.	+·01	−·07
Deduced.....	1h 33m 10s·194	43° 31′ 33″·22

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 52° 399.		
Provisional.....	1h 33m 13s·47	52° 24′ 27″·0
1900.		
5253 Nov. 22	−″·09	+″·07
5254 ,,	−·18	−·34
5256 ,,	−·27	−·11
5257 ,,	−·15	−·20
5258 ,,	−·17	−·12
5259 ,,	−·18	−·22
5260 ,,	−·21	−·22
5261 Nov. 23	−·26	−·03
5262 ,,	−·30	−·20
5263 ,,	−·32	−·11
5264 ,,	−·15	−·07
5267 Nov. 25	−·24	−·22
5268 ,,	−·06	−·01
5269 ,,	−·24	+·01
Mean	−·21	−·12
Redn. to L.	−·04	−·07
Deduced.....	1h 33m 13s·497	52° 24′ 27″·19
+ 51° 357.		
Provisional.....	1h 33m 13s·70	51° 45′ 32″·9
1900.		
5267 Nov. 25	+″·10	+″·43
5268 ,,	+·01	+·21
5269 ,,	+·06	+·22
5270 Nov. 27	−·22	+·35
5271 ,,	+·05	+·24
5272 ,,	+·30	+·31
5273 ,,	−·05	+·26
5274 ,,	−·02	+·30
Mean	+·03	+·29
Redn. to L.	·00	−·08
Deduced.....	1h 33m 13s·697	51° 45′ 32″·69
+ 43° 343.		
Provisional.....	1h 33m 21s·02	43° 52′ 39″·2
1900.		
5308 Dec. 16	−″·19	+″·42
5309 Dec. 17	−·01	+·15
5310 ,,	+·01	+·09
5314 Dec. 19	−·06	+·49
5315 ,,	(−·39)	(+·59)

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 43° 343—*contd.*		
1900.		
5318 Dec. 19	−″·31	+″·13
5319 ,,	−·06	+·05
5322 ,,	−·09	+·16
5324 ,,	−·03	−·10
Mean	−·09	+·20
Redn. to L.	+·02	−·06
Deduced.....	1h 33m 21s·026	43° 52′ 39″·06
+ 51° 360.		
Provisional.....	1h 33m 34s·41	52° 8′ 21″·6
1900.		
5253 Nov. 22	−″·06	−″·01
5254 ,,	+·04	−·18
5256 ,,	+·09	−·18
5257 ,,	−·19	+·02
5258 ,,	+·06	−·14
5259 ,,	−·10	−·19
5260 ,,	+·20	−·15
5261 Nov. 23	−·11	−·14
5262 ,,	−·21	−·30
5263 ,,	+·02	−·18
5264 ,,	−·23	−·26
5267 Nov. 25	+·11	−·11
5268 ,,	−·11	−·10
5269 ,,	−·08	−·03
5270 Nov. 27	−·07	−·08
5271 ,,	−·25	−·18
5272 ,,	+·06	+·06
5273 ,,	−·07	−·06
5274 ,,	−·01	+·03
Mean	−·05	−·12
Redn. to L.	−·03	−·08
Deduced	1h 33m 34s·418	52° 8′ 21″·80
+ 53° 363.		
Provisional.....	1h 33m 51s·49	53° 21′ 39″·3
1900.		
5253 Nov. 22	−″·17	+″·52
5254 ,,	−·08	+·80
5256 ,,	+·23	+·57
5257 ,,	+·21	+·76
5258 ,,	+·05	+·52
5259 ,,	+·10	+·63

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 363—*contd.*		
1900.		
5260 Nov. 22	+″·06	+″·76
5261 Nov. 23	−·07	+·61
5262 ,,	−·01	+·72
5263 ,,	−·11	+·40
5264 ,,	−·01	+·57
Mean	+·01	+·62
Redn. to L.	−·05	−·08
Deduced.....	1h 33m 51s·494	53° 21′ 38″·76
+ 51° 363.		
Provisional.....	1h 34m 2s·55	51° 21′ 27″·4
1900.		
5267 Nov. 25	−″·87	−″·01
5268 ,,	−·30	−·22
5269 ,,	−·44	−·19
5270 Nov. 27	−·42	−·19
5271 ,,	−·47	−·33
5272 ,,	−·27	−·27
5273 ,,	−·46	−·17
5274 ,,	−·60	−·15
Mean	−·48	−·18
Redn. to L.	·00	−·08
Deduced.....	1h 34m 2s·601	51° 21′ 27″·66
+ 51° 364.		
Provisional.....	1h 34m 10s·34	52° 1′ 21″·5
1900.		
5261 Nov. 23	+″·15	+″·48
5262 ,,	−·08	+·32
5263 ,,	+·09	+·31
5264 ,,	+·04	+·11
5267 Nov. 25	−·14	+·34
5268 ,,	−·08	+·34
5269 ,,	−·10	+·49
Mean	−·02	+·35
Redn. to L.	−·04	−·07
Deduced.....	1h 34m 10s·346	52° 1′ 21″·22

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 44° 346.		
Provisional.....	1h 34m 45s·27	44° 16′ 29″·3
1900.		
5308 Dec. 16	+″·15	+″·13
5309 Dec. 17	+·46	−·05
5310 ,,	+·39	−·05
5313 ,,	+·26	+·10
5314 Dec. 19	−·06	+·37
5315 ,,	+·24	+·33
5318 ,,	+·20	+·26
5319 ,,	+·28	−·09
5322 ,,	+·13	+·30
5324 ,,	+·41	+·04
Mean	+·25	+·12
Redn. to L.	+·02	−·07
Deduced.....	1h 34m 45s·245	44° 16′ 29″·25
+ 44° 347.		
Provisional.....	1h 34m 48s·01	44° 30′ 48″·4
1900.		
5299 Dec. 15	−″·23	+″·03
5300 ,,	−·15	−·14
5304 ,,	−·09	−·01
5306 ,,	−·19	−·20
5307 ,,	−·20	−·29
5308 Dec. 16	−·18	−·13
5309 Dec. 17	+·07	−·14
5310 ,,	+·04	−·28
5313 ,,	−·26	−·13
Mean	−·13	−·14
Redn. to L.	+·04	−·07
Deduced.....	1h 34m 48s·018	44° 30′ 48″·61
+ 45° 416.		
Provisional.....	1h 35m 22s·66	45° 54′ 23″·8
1900.		
5288 Dec. 13	+″·03	+″·04
5289 ,,	−·06	+·01
5290 ,,	+·05	+·04
5294 ,,	·00	+·19
5297 ,,	−·07	+·08
Mean	−·01	+·07
Redn. to L.	+·04	−·08
Deduced.....	1h 35m 22s·657	45° 54′ 23″·81

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 52° 406.		
Provisional.....	1h 35m 23s·22	52h 52′ 14″·4
1900.		
5253 Nov. 22	+″·28	+″·18
5254 ,,	+·19	+·23
5256 ,,	−·10	+·32
5257 ,,	+·06	+·22
5258 ,,	−·02	+·26
5259 ,,	−·11	+·17
5260 ,,	+·03	+·16
5261 Nov. 23	+·03	−·05
5262 ,,	+·07	+·06
5263 ,,	−·05	+·31
5264 ,,	−·02	+·30
5267 Nov. 25	−·05	−·10
5268 ,,	+·15	+·21
5269 ,,	+·05	+·13
Mean	+·04	+·16
Redn. to L.	−·04	−·07
Deduced.....	1h 35m 23s·220	52° 52′ 14″·31
+ 44° 352.		
Provisional.....	1h 35m 50s·84	45° 4′ 17″·8
1900.		
5299 Dec. 15	−″·28	−″·02
5300 ,,	+·04	−·08
5304 ,,	−·20	+·22
5306 ,,	+·09	−·06
5307 ,,	+·14	−·07
5308 Dec. 16	−·15	−·27
5309 Dec. 17	−·18	−·12
5310 ,,	−·21	−·10
5313 ,,	−·34	−·37
Mean	−·13	−·12
Redn. to L.	+·04	−·07
Deduced.....	1h 35m 50s·848	45° 4′ 17″·99
+ 42° 351.		
Provisional.....	1h 35m 58s·00	42° 21′ 32″·0
1900.		
5326 Dec. 20	+″·45	−″·03
Redn. to L.	+·02	−·10
Deduced.....	1h 35m 57s·958	42° 21′ 32″·13

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 42° 352.		
Provisional.....	1h 36m 3s·70	43° 8′ 4″·2
1900.		
5314 Dec. 19	″ ·00	″ +·12
5315 ,,	−·10	+·11
5318 ,,	−·04	+·16
5319 ,,	−·04	+·17
5322 ,,	−·01	+·18
5324 ,,	−·13	+·31
5326 Dec. 20	−·30	+·24
Mean	−·11	+·20
Redn. to L.	·00	−·07
Deduced.....	1h 36m 3s·710	43° 8′ 4″·07
+ 42° 354.		
Provisional.....	1h 36m 15s·96	42° 30′ 56″·9
1900.		
5314 Dec. 19	″ +·33*	″ −·62*
5315 ,,	+·09*	−·47*
5316 ,,	+·13*	−·50*
5319 ,,	+·01*	−·39*
5322 ,,	+·32*	−·57*
5324 ,,	+·38*	−·17*
5326 Dec. 20	+·33	+·01
Mean	+·26	−·27
Redn. to L.	·00	−·08
Deduced.....	1h 36m 15s·937	42° 30′ 57″·25
+ 45° 422.		
Provisional.....	1h 36m 23s·98	45° 32 10″·0
1900.		
5299 Dec. 15	″ +·34	″ +·12
5300 ,,	+·45	+·30
5304 ,,	+·45	+·38
5306 ,,	+·67	+·41
5307 ,,	+·83	+·31
5308 Dec. 16	+·46*	+·22*
Mean	+·54	+·30
Redn. to L.	+·04	−·06
Deduced.....	1h 36m 23s·925	45° 32′ 9″·76

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 44° 354.		
Provisional.....	1h 37m 11s·17	44° 49′ 5″·3
1900.		
5308 Dec. 16	″ −·36	″ −·10
5309 Dec. 17	−·14	+·10
5310 ,,	−·39	−·04
5313 ,,	−·62	+·09
Mean	−·37	·00
Redn. to L.	+·04	−·07
Deduced.....	1h 37m 11s·200	44° 49′ 5″·37
+ 52° 420.		
Provisional.....	1h 37m 17s·16	52° 22′ 54″·2
1900.		
5253 Nov. 22	″ −·13	″ −·12
5254 ,,	−·03	−·10
5256 ,,	−·31	−·18
5257 ,,	−·46	−·40
5258 ,,	−·18	−·15
5259 ,,	−·21	−·18
5260 ,,	−·06	−·21
5261 Nov. 23	−·07	+·01
5262 ,,	−·03	−·04
5263 ,,	−·01	−·21
5264 ,,	−·19	−·17
5267 Nov. 25	−·38	−·12
5268 ,,	−·27	−·06
5269 ,,	−·37	−·09
Mean	−·20	−·13
Redn. to L.	−·04	−·07
Deduced.....	1h 37m 17s·186	52° 22′ 54″·40
+ 42° 356.		
Provisional.....	1h 37m 17s·38	43° 12′ 1″·7
1900.		
5314 Dec. 19	″ +·59	″ −·04
5315 ,,	+·61	−·04
5318 ,,	+·33	+·08
5319 ,,	+·22	+·33
5322 ,,	+·27	+·05
5324 ,,	+·06	+·12
5326 Dec. 20	+·35	+·23
Mean	+·35	+·12
Redn. to L.	·00	−·07
Deduced.....	1h 37m 17s·348	43° 12′ 1″·65

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 375.		
Provisional.....	1h 37m 25s·55	53° 26′ 42″·0
1900.		
5248 Nov. 18	″ −·30	″ +·02
5249 ,,	−·44	+·08
5250 ,,	−·23	+·13
5253 Nov. 22	−·33	−·22
5254 ,,	−·30	−·02
5256 ,,	−·22	−·18
5257 ,,	−·16	−·11
5258 ,,	−·41	−·24
5259 ,,	−·29	+·01
5260 ,,	−·30	−·07
5261 Nov. 23	−·49*	−·11*
5262 ,,	−·40*	−·11*
5263 ,,	−·26*	−·45*
5264 ,,	−·08*	−·32*
Mean	−·30	−·09
Redn. to L.	−·05	−·07
Deduced.....	1h 37m 25s·589	53° 26′ 42″·16
+ 54° 368.		
Provisional.....	1h 37m 46s·98	54° 22′ 59″·8
1900.		
5248 Nov. 18	″ −·30	″ +·02
5249 ,,	−·45	+·13
5250 ,,	−·31	+·21
Mean	−·35	+·12
Redn. to L.	−·06	−·05
Deduced.....	1h 37m 47s·026	54° 22′ 59″·73
+ 52° 424.		
Provisional.....	1h 37m 58s·52	52° 41′ 8″·6
1900.		
5253 Nov. 22	″ −·13	″ +·05
5254 ,,	−·07	−·05
5256 ,,	−·04	+·09
5257 ,,	−·14	−·07
5258 ,,	−·27	−·06
5259 ,,	−·14	+·16
5260 ,,	−·15	+·07
5261 Nov. 23	−·16	−·09

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 52° 424.—*contd.*		
1900.		
5262 Nov. 23	−″·39	+″·23
5263 ,,	−·18	·00
5264 ,,	−·23	−·01
Mean	−·18	+·03
Redn. to L.	−·05	−·08
Deduced.....	1h 37m 58s·545	52° 41′ 8″·65
+ 42° 360.		
Provisional.....	1h 38m 5s·28	42° 44′ 13″·9
1900.		
5314 Dec. 19	−″·17	−″·01
5315 ,,	−·21	−·18
5318 ,,	−·23	−·26
5319 ,,	−·36	−·06
5322 ,,	−·33	−·14
5324 ,,	−·39	+·07
5326 Dec. 20	−·04	·00
5327 Dec. 21	−·25	+·32
5328 ,,	−·24	+·09
5329 ,,	−·34	+·27
Mean	−·24	+·03
Redn. to L.	·00	−·08
Deduced.....	1h 38m 5s·301	42° 44′ 13″·95
+ 42° 361.		
Provisional.....	1h 38m 13s·55	43° 8′ 42″·0
1900.		
5314 Dec. 19	−″·18	+″·20
5315 ,,	−·03	+·15
5318 ,,	−·14	+·06
5319 ,,	−·24	+·13
5322 ,,	−·14	−·05
5324 ,,	−·14	+·08
5326 Dec. 20	+·33	+·17
5328 Dec. 21	(−·31)	(+·45)
5329 ,,	(−·13)	(+·64)
Mean	−·03	+·12
Redn. to L.	·00	−·07
Deduced.....	1h 38m 13s·553	43° 8′ 41″·95

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 52° 433.		
Provisional.....	1h 39m 43s·33	53° 6′ 22″·5
1900.		
5248 Nov. 18	+″·18	+″·28
5249 ,,	+·13	+·19
5250 ,,	−·08	+·12
5253 Nov. 22	+·01	+·01
5254 ,,	+·11	−·24
5256 ,,	−·02	−·07
5257 ,,	+·15	−·10
5258 ,,	+·11	+·06
5259 ,,	+·23	+·02
5260 ,,	+·04	−·06
5261 Nov. 23	−·13*	−·28*
5262 ,,	−·04*	−·07*
5263 ,,	−·22*	−·15*
5264 ,,	−·03*	−·14*
Mean	+·04	·00
Redn. to L.	−·06	−·06
Deduced.....	1h 39m 43s·332	53° 6′ 22″·56
+ 43° 364.		
Provisional.....	1h 40m 15s·62	44° 8′ 45″·0
1900.		
5309 Dec. 17	−″·46†	+″·01†
5310 ,,	+·01†	−·01†
5313 ,,	−·03†	+·13†
5314 Dec. 19	−·25	+·20
5315 ,,	+·10	−·17
5318 ,,	−·05	−·02
5319 ,,	+·11	−·30
5322 ,,	·00	+·03
5324 ,,	−·10	−·32
Mean	−·03	−·10
Redn. to L.	−·01	−·06
Deduced.....	1h 40m 15s·623	44° 8′ 45″·16
+ 42° 370.		
Provisional.....	1h 40m 16s·73	43° 12′ 16″·9
1900.		
5314 Dec. 19	−″·20	−″·11
5315 ,,	−·32	−·14
5318 ,,	−·29	+·09
5319 ,,	−·53	+·25
5322 ,,	−·48	−·03

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 42° 370—*contd.*		
1900.		
5324 Dec. 19	−″·42	+″·23
5326 Dec. 20	−·65	−·06
5327 Dec. 21	−·18	−·07
5328 ,,	−·32	−·16
5329 ,,	−·32	−·14
Mean	−·38	−·03
Redn. to L.	−·01	−·07
Deduced.....	1h 40m 16s·765	43° 12′ 17″·00
+ 41° 342.		
Provisional.....	1h 41m 11s·29	41° 41′ 38″·1
1900.		
5327 Dec. 21	−″·10	+″·20
5328 ,,	−·12	+·18
5329 ,,	+·04	+·02
5330 Dec. 24	−·21	−·12
Mean	−·11	+·05
Redn. to L.	·00	−·08
Deduced.....	1h 41m 11s·300	41° 41′ 38″·13
+ 42° 373.		
Provisional.....	1h 41m 25s·37	42° 34′ 50″·5
1900.		
5326 Dec. 20	−″·64	−″·22
5327 Dec. 21	−·60	−·12
5328 ,,	−·66	−·06
5329 ,,	−·58	−·14
Mean	−·62	−·15
Redn. to L.	·00	−·10
Deduced.....	1h 41m 25s·425	42° 34′ 50″·75
+ 53° 388.		
Provisional.....	1h 41m 35s·26	53° 23′ 25″·3
1900.		
5248 Nov. 18	+″·20	+″·07
5249 ,,	+·29	+·11
5250 ,,	+·25	−·19
Mean	+·25	·00
Redn. to L.	−·07	−·05
Deduced.....	1h 41m 35s·240	53° 23′ 25″·35

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 41° 347.		
Provisional.....	1h 41m 45s·12	41° 55′ 23″·7
1900.		
5327 Dec. 21	+″·09	−″·01
5328 ,,	+·12	+·17
5329 ,,	+·22	+·06
5330 Dec. 24	+·04*	−·09*
Mean	+·12	+·04
Redn. to L.	−·01	−·08
Deduced.....	1h 41m 45s·110	41° 55′ 23″·74
+ 52° 441.		
Provisional.....	1h 41m 53s·01	52° 44′ 58″·8
1900.		
5248 Nov. 18	−″·22	−″·32
5249 ,,	−·30	−·39
5250 ,,	−·27	−·18
Mean	−·26	−·30
Redn. to L.	−·06	−·05
Deduced.....	1h 41m 53s·045	52° 44′ 59″·15
+ 42° 375.		
Provisional.....	1h 41m 55s·68	42° 42′ 44″·0
1900.		
5326 Dec. 20	+″·23	−″·25
5327 Dec. 21	+·02	−·14
5328 ,,	−·13	−·11
5329 ,,	−·11	−·27
Mean	+·03	−·20
Redn. to L.	·00	−·09
Deduced.....	1h 41m 55s·677	42° 42′ 44″·29
+ 54° 383.		
Provisional.....	1h 42m 39s·69	54° 38′ 37″·7
1900.		
5248 Nov. 18	+″·16	−″·68
5249 ,,	+·27	−·63
5250 ,,	+·13	−·47
Mean	+·19	−·59
Redn. to L.	−·07	−·05
Deduced.....	1h 42m 39s·676	54° 38′ 38″·34

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 41° 352.		
Provisional.....	1h 42m 55s·49	42° 12′ 33″·9
1900.		
5327 Dec. 21	+″·15	−″·06
5328 ,,	+·18	−·15
5329 ,,	+·25	·00
5330 Dec. 24	+·33†	−·28†
Mean	+·19	−·07
Redn. to L.	·00	−·08
Deduced.....	1h 42m 55s·473	42° 12 34″·05
+ 53° 395.		
Provisional.....	1h 43m 10s·98	53° 25′ 1″·0
1900.		
5239 Nov. 15	+″·10	−″·11
5240 ,,	+·33	−·06
5241 ,,	+·08	+·02
5242 ,,	+·25	+·06
5243 ,,	+·25	+·27
5248 Nov. 18	+·21	+·21
5249 ,,	+·20	+·14
5250 ,,	+·31	+·16
Mean	+·22	+·09
Redn. to L.	−·06	−·03
Deduced.....	1h 43m 10s·962	53° 25′ 0″·94
+ 43° 373.		
Provisional.....	1h 43m 11s·22	43° 14′ 14″·9
1900.		
5326 Dec. 20	−″·04	−″·12
5327 Dec. 21	−·09	−·02
5328 ,,	+·02	+·09
5329 ,,	+·05	−·08
Mean	−·02	−·04
Redn. to L.	·00	−·09
Deduced.....	1h 43m 11s·222	43° 14′ 15″·03

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 41° 353.		
Provisional.....	1h 43m 14s·31	41° 29′ 28″·9
1900.		
5330 Dec. 24	−″·19	+″·16
Redn. to L.	·00	−·06
Deduced.....	1h 43m 14s·327	41° 29′ 28″·80
+ 54° 388.		
Provisional.....	1h 43m 57s·65	54° 43′ 14″·4
1900.		
5237 Nov. 14	−″·03*	−″·10*
5238 ,,	−·17*	−·13*
5239 Nov. 15	−·14	−·23
5240 ,,	−·18	−·08
5241 ,,	−·29	−·24
5242 ,,	−·05	−·33
5243 ,,	+·03	−·27
Mean	−·12	−·20
Redn. to L.	−·06	−·01
Deduced.....	1h 43m 57s·670	54° 43′ 14″·61
+ 53° 398.		
Provisional.....	1h 44m 0s·49	53° 14′ 45″·6
1900.		
5248 Nov. 18	−″·04	+″·18
5249 ,,	−·10	+·17
5250 ,,	·00	+·05
Mean	−·05	+·13
Redn. to L.	−·07	−·05
Deduced.....	1h 44m 0s·503	53° 14′ 45″·52
+ 54° 392.		
Provisional.....	1h 44m 42s·20	54° 54′ 37″·5
1900.		
5237 Nov. 14	−″·08	+″·01
5238 ,,	−·06	−·14
Mean	−·07	−·07
Redn. to L.	−·06	−·01
Deduced.....	1h 44m 42s·215	54° 54′ 37″·58

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 54° 393.		
Provisional.....	1h 44m 53s·51	54° 25′ 44″·7
1900.		
5230 Nov. 13	+·02	−·08
5231 ,,	+·02	−·01
5232 ,,	+·18	−·24
5234 ,,	−·26	+·14
5235 ,,	−·25	·00
5236 ,,	−·20	−·07
5237 Nov. 14	−·02	−·12
5238 ,,	+·04	+·09
5239 Nov. 15	+·12	−·10
5240 ,,	(+·58)	−·01
5241 ,,	+·04	·00
5242 ,,	−·20	+·10
5243 ,,	−·15	−·11
5248 Nov. 18	+·09*	−·18*
5249 ,,	+·25*	−·11*
5250 ,,	−·03*	+·04*
Mean	−·03	−·04
Redn. to L.	−·06	−·02
Deduced.....	1h 44m 53s·520	54° 25′ 44″·76
+ 42° 388.		
Provisional.....	1h 45m 3s·10	43° 1′ 46″·3
1900.		
5327 Dec. 21	+·30	+·05
5328 ,,	+·13	+·01
5329 ,,	+·01	+·12
Mean	+·15	+·06
Redn. to L.	−·01	−·09
Deduced.....	1h 45m 3s·087	43° 1′ 46″·33
+ 53° 402.		
Provisional.....	1h 45m 11s·65	53° 22′ 19″·4
1900.		
5237 Nov. 14	−·05	+·24
5238 ,,	−·01	+·05
5239 Nov. 15	−·19	+·34
5240 ,,	−·16	+·07
5241 ,,	−·02	+·21
5242 ,,	+·10	+·09
5243 ,,	−·02	+·06

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 402—*contd.*		
1900.		
5248 Nov. 18	·00	+·36
5249 ,,	+·19	+·31
5250 ,,	+·26	+·16
Mean	+·02	+·19
Redn. to L.	−·06	−·02
Deduced.....	1h 45m 11s·655	53° 22′ 19″·23
+ 42° 390.		
Provisional.....	1h 45m 21s·83	42° 16′ 6″·8
1900.		
5327 Dec. 21	+·13	+·04
5328 ,,	+·29	+·08
5329 ,,	+·19	+·03
5330 Dec. 24	+·10*	−·03*
Mean	+·18	+·03
Redn. to L.	−·01	−·08
Deduced.....	1h 45m 21s·815	42° 16′ 6″·85
+ 40° 384.		
Provisional.....	1h 45m 37s·35	40° 57′ 32″·0
1900.		
5330 Dec. 24	+·36	+·02
Redn. to L.	·00	−·06
Deduced.....	1h 45m 37s·319	40° 57′ 32″·04
+ 39° 421.		
Provisional.....	1h 46m 25s·48	40° 3′ 10″·9
1900.		
5331 Dec. 26	+·56	−·05
Redn. to L.	·00	−·04
Deduced.....	1h 46m 25s·431	40° 3′ 10″·99

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 41° 362.		
Provisional.....	1h 46m 43s·17	41° 20′ 51″·6
1900.		
5330 Dec. 24	−·26	+·21
Redn. to L.	·00	−·06
Deduced.....	1h 46m 43s·193	41° 20′ 51″·45
+ 40° 390.		
Provisional.....	1h 46m 49s·09	40° 59′ 27″·4
1900.		
5330 Dec. 24	−·12	+·27
5331 Dec. 26	+·39	−·05
Mean	+·14	+·11
Redn. to L.	·00	−·05
Deduced.....	1h 46m 49s·078	40° 59′ 27″·34
+ 41° 364.		
Provisional.....	1h 47m 10s·15	42° 2′ 16″·0
1900.		
5327 Dec. 21	+·58†	−·19†
5328 ,,	+1·05†	−·61†
5329 ,,	+·75†	−·52†
5330 Dec. 24	+·21	−·17
Mean	+·21	−·17
Redn. to L.	·00	−·06
Deduced.....	1h 47m 10s·131	42° 2′ 16″·23
+ 40° 394.		
Provisional.....	1h 47m 17s·33	40° 14′ 11″·1
1900.		
5331 Dec. 26	−·57	+·08
Redn. to L.	·00	−·04
Deduced.....	1h 47m 17s·380	40° 14′ 11″·06

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 416.		
Provisional... ...	1h 48m 7s·41	53° 23′ 58″·9
1900.		
5230 Nov. 13	−″·11	+″·01
5231 ,,	−·12	+·06
5232 ,,	−·22	+·02
5234 ,,	−·02	+·08
5235 ,,	−·15	+·05
5236 ,,	−·11	+·19
5237 Nov. 14	−·21	+·02
5238 ,,	−·10	+·01
5239 Nov. 15	−·10	·00
5240 ,,	−·20	+·16
5241 ,,	−·01	·00
5242 ,,	−·34	−·17
5243 ,,	−·23	−·18
Mean	−·15	+·02
Redn. to L.	−·06	−·01
Deduced.....	1h 48m 7s·433	53° 23′ 58″·89
+ 54° 413.		
Provisional.....	1h 48m 13s·17	54° 14′ 10″·7
1900.		
5226 Nov. 11	−″·17*	−″·13*
5227 ,,	−·20*	−·10*
5228 ,,	−·44*	−·21*
5229 ,,	−·07*	+·03*
5230 Nov. 13	−·11	+·08
5231 ,,	+·06	−·01
5232 ,,	−·04	−·08
5234 ,,	+·04	−·05
5235 ,,	+·25	+·01
5236 ,,	+·07	+·03
5237 Nov. 14	+·07	+·02
5238 ,,	+·10	−·10
5239 Nov. 15	·00	−·14
5240 ,,	+·05	−·15
5241 ,,	+·07	−·21
5242 ,,	+·27	−·03
5243 ,,	+·03	·00
Mean	+·03	−·07
Redn. to L.	−·06	−·01
Deduced.....	1h 48m 13s·173	54° 14′ 10″·78

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 419		
Provisional.....	1h 48m 25s·78	53° 41′ 49″·2
1900.		
5226 Nov. 11	−″·35†	−″·15†
5227 ,,	−·45†	−·41†
5228 ,,	−·43†	−·46†
5229 ,,	−·09†	·00†
5230 Nov. 13	−·07	+·02
5231 ,,	−·12	−·11
5232 ,,	−·18	−·02
5234 ,,	−·15	+·04
5235 ,,	−·06	+·13
5236 ,,	+·12	+·17
5237 Nov. 14	−·14	+·04
5238 ,,	−·17	+·08
5239 Nov. 15	+·03	+·03
5240 ,,	−·13	+·05
5241 ,,	−·06	−·01
5242 ,,	−·16	−·05
5243 ,,	−·08	−·11
Mean	−·10	+·02
Redn. to L.	−·06	−·01
Deduced.....	1h 48m 25s·798	53° 41′ 49″·19
+ 40° 400.		
Provisional.....	1h 48m 27s·43	40° 23′ 51″·7
1900.		
5330 Dec. 24	+″·03†	−″·37†
5331 Dec. 26	+·20	−·06
Mean	+·20	−·06
Redn. to L.	·00	−·04
Deduced.....	1h 47m 27s·413	40° 23′ 51″·80
+ 40° 401.		
Provisional.....	1h 48m 38s·95	41° 8′ 58″·0
1900.		
5330 Dec. 24	+″·21	+″·27
5331 Dec. 26	+·50	+·21
Mean	+·36	+·24
Redn. to L.	·00	−·05
Deduced.....	1h 48m 38s·918	41° 8′ 57″·81

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 39° 434.		
Provisional.....	1h 48m 52s·63	40° 12′ 43″·8
1900.		
5331 Dec. 26	−″·38	−″·19
5333 Dec. 28	−·05†	·00†
5334 ,,	−·55†	+·45†
5335 ,,	−·70†	+·37†
5336 ,,	−·33†	+·22†
Mean	−·38	−·19
Redn. to L.	·00	−·01
Deduced.....	1h 48m 52s·663	40° 12′ 44″·00
+ 41° 374.		
Provisional.....	1h 50m 28s·41	41° 24′ 8″·4
1900.		
5330 Dec. 24	−″·45	+″·12
Redn. to L.	·00	−·06
Deduced.....	1h 50m 28s·450	41° 24′ 8″·34
+ 41° 377.		
Provisional.....	1h 51m 9s·56	41° 16′ 37″·8
1900.		
5331 Dec. 26	−″·27	−″·28
Redn. to L.	·00	−·04
Deduced.....	1h 51m 9s·584	41° 16′ 38″·12
+ 54° 424.		
Provisional.....	1h 51m 12s·93	54° 52′ 53″·3
1900.		
5218 Nov. 10	+″·27†	+″·07†
5219 ,,	+·01†	+·14†
5220 ,,	+·05†	+·17†
5222 ,,	+·33†	+·19†
5223 ,,	+·04†	+·28†
5226 Nov. 11	+·19	+·05
5227 ,,	+·34	+·15
5228 ,,	+·21	+·19
5229 ,,	+·45	−·07

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 54° 424—*contd.*		
1900.		
5230 Nov. 13	+″·10	+″·18
5231 ,,	+·06	+·17
5232 ,,	+·15	+·16
5234 ,,	+·17	+·09
5235 ,,	+·12	·00
5236 ,,	+·13	−·03
5237 Nov. 14	+·09	+·02
5238 ,,	+·20	+·09
Mean	+·19	+·08
Red^{n}. to L.	−·06	−·01
Deduced.....	1^{h} 51^{m} 12^{s}·915	54° 52′ 53″·23
+ 40° 406.		
Provisional.....	1^{h} 51^{m} 13^{s}·90	40° 16′ 19″·2
1900.		
5331 Dec. 26	+″·18	+″·23
5333 Dec. 28	(+·67)	(−·15)
5334 ,,	+·24	+·10
5335 ,,	+·22	−·02
5336 ,,	+·19	+·01
Mean	+·21	+·10
Red^{n}. to L.	·00	−·05
Deduced.....	1^{h} 51^{m} 13^{s}·882	40° 16′ 19″·15
+ 53° 428.		
Provisional.....	1^{h} 51^{m} 36^{s}·40	54° 7′ 12″·8
1900.		
5218 Nov. 10	−″·30	+″·11
5219 ,,	−·21	+·01
5220 ,,	−·18	+·10
5222 ,,	+·14	+·53
5223 ,,	−·07	+·32
5226 Nov. 11	−·09	+·06
5227 ,,	−·05	+·06
5228 ,,	+·02	−·01
5229 ,,	+·04	+·51
5230 Nov. 13	−·07	+·14
5231 ,,	−·10	+·08
5232 ,,	−·11	+·22
5234 ,,	·00	+·25
5235 ,,	+·13	+·18
5236 ,,	−·10	+·19
5237 Nov. 14	−·06	+·33
5238 ,,	+·11	+·25

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 428—*contd.*		
1900.		
5239 Nov. 15	+″·21	+″·18
5240 ,,	−·26	+·04
5241 ,,	+·19	+·24
5242 ,,	+·13	+·32
5243 ,,	+·17	+·37
Mean	−·02	+·21
Red^{n}. to L.	−·06	−·01
Deduced.....	1^{h} 51^{m} 36^{s}·409	54° 7′ 12″·60
+ 54° 429.		
Provisional.....	1^{h} 52^{m} 10^{s}·13	55° 5′ 40″·4
1900.		
5218 Nov. 10	−″·11*	+″·19*
5219 ,,	−·05*	+·25*
5220 ,,	−·15*	+·18*
5222 ,,	+·09*	−·27*
5223 ,,	−·08*	+·15*
5226 Nov. 11	−·07	+·27
5227 ,,	−·01	+·37
5228 ,,	−·30	+·38
5229 ,,	−·03	−·11
5230 Nov. 13	−·15	+·04
5231 ,,	−·28	+·15
5232 ,,	−·10	+·09
5234 ,,	−·26	+·01
5235 ,,	−·32	·00
5236 ,,	−·16	+·01
Mean	−·14	+·13
Red^{n}. to L.	−·06	−·01
Deduced.....	1^{h} 52^{m} 10^{s}·153	55° 5′ 40″·28
+ 40° 412.		
Provisional.....	1^{h} 52^{m} 20^{s}·66	40° 25′ 34″·2
1900.		
5331 Dec. 26	−″·13	+″·05
5333 Dec. 28	−·08	−·11
5334 ,,	+·10	−·11
5335 ,,	−·05	+·09
5336 ,,	−·15	−·01
Mean	−·07	−·01
Red^{n}. to L.	·00	−·05
Deduced.....	1^{h} 52^{m} 20^{s}·666	40° 25′ 34″·26

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 39° 447.		
Provisional.....	1^{h} 52^{m} 22^{s}·22	40° 3′ 3″·6
1900.		
5331 Dec. 26	+″·19	+″·05
5333 Dec. 28	+·28	+·11
5334 ,,	+·20	+·04
5335 ,,	+·26	+·05
5336 ,,	+·25	+·09
5337 Dec. 29	+·34†	+·01†
5338 ,,	+·28†	−·05†
Mean	+·23	+·06
Red^{n}. to L.	·00	−·05
Deduced.....	1^{h} 52^{m} 22^{s}·200	40° 3′ 3″·59
+ 39° 448.		
Provisional.....	1^{h} 53^{m} 36^{s}·22	40° 4′ 42″·7
1900.		
5331 Dec. 26	+″·02	+″·01
5333 Dec. 28	−·24	+·16
5334 ,,	−·03	+·02
5335 ,,	+·13	+·15
5336 ,,	+·12	+·19
5337 Dec. 29	−·19†	+·31†
5338 ,,	−·01†	+·39†
Mean	·00	+·10
Red^{n}. to L.	·00	−·05
Deduced.....	1^{h} 53^{m} 36^{s}·220	40° 4′ 42″·65
+ 40° 415.		
Provisional.....	1^{h} 53^{m} 39^{s}·20	40° 51′ 51″·0
1900.		
5331 Dec. 26	−″·44	+″·04
Red^{n}. to L.	·00	−·04
Deduced.....	1^{h} 53^{m} 39^{s}·238	40° 51′ 51″·00

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 37° 452.		
Provisional.....	1h 54m 18s·52	38° 6′ 44″·9
1900.		
5337 Dec. 29	+·08	+·17
5338 ,,	−·06	+·32
Mean	+·01	+·25
Redn. to L.	−·03	−·06
Deduced.....	1h 54m 18s·522	38° 6′ 44″·71
+ 39° 450.		
Provisional.....	1h 54m 28s·70	39° 28′ 55″·2
1900.		
5333 Dec. 28	−·22	−·14
5334 ,,	−·27	−·10
5335 ,,	−·17	−·31
5336 ,,	−·05	−·18
5337 Dec. 29	−·01	−·23
5338 ,,	+·16	−·37
Mean	−·08	−·23
Redn. to L.	−·01	−·06
Deduced.....	1h 54m 28s·708	39° 28′ 55″·49
+ 38° 392.		
Provisional.....	1h 54m 46s·78	39° 8′ 29″·7
1900.		
5333 Dec. 28	−·28	+·10
5334 ,,	−·43	−·05
5335 ,,	−·30	−·15
5336 ,,	−·14	−·21
5337 Dec. 29	−·02	−·21
5338 ,,	−·04	+·14
Mean	−·19	−·07
Redn. to L.	·00	−·05
Deduced.....	1h 54m 46s·796	39° 8′ 29″·82

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 437.		
Provisional.....	1h 55m 22s·66	53° 32′ 1″·0
1900.		
5212 Nov. 9	+·08*	−·12*
5213 ,,	+·20*	−·22*
5214 ,,	+·41*	−·07*
5215 ,,	+·06*	+·10*
5216 ,,	+·63*	+·02*
5217 ,,	+·48*	+·01*
5218 Nov. 10	+·26	−·18
5219 ,,	+·40	−·22
5220 ,,	+·35	−·20
5222 ,,	+·49	−·15
5223 ,,	+·34	−·14
5226 Nov. 11	+·57	−·17
5227 ,,	+·50	−·27
5228 ,,	+·64	−·22
5229 ,,	+·43	−·04
5230 Nov. 13	+·39*	−·29*
5231 ,,	+·47*	−·33*
5232 ,,	+·34*	−·23*
5234 ,,	+·44*	−·32*
5235 ,,	+·32*	−·35*
5236 ,,	+·41*	−·38*
5237 Nov. 14	+·45†	−·38†
5238 ,,	+·17†	−·17†
Mean	+·30	−·13
Redn. to L.	−·06	−·02
Deduced.....	1h 55m 22s·633	53° 32′ 1″·15
+ 53° 439.		
Provisional.....	1h 55m 38s·33	54° 0′ 15″·3
1900.		
5218 Nov. 10	+·09	+·05
Redn. to L.	−·06	−·03
Deduced.....	1h 55m 38s·327	54° 0′ 15″·28
+ 39° 454.		
Provisional.....	1h 55m 45s·12	40° 11′ 2″·6
1900.		
5333 Dec. 28	−·29	+·02
5334 ,,	−·07	−·21

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 39° 454—*contd.*		
1900.		
5335 Dec. 28	−·09	−·09
5336 ,,	−·17	−·11
Mean	−·16	−·10
Redn. to L.	·00	−·05
Deduced.....	1h 55m 45s·134	40° 11′ 2″·75
+ 54° 444.		
Provisional.....	1h 56m 26s·83	54° 45′ 0″·1
1900.		
5212 Nov. 9	−·12	−·10
5213 ,,	−·15	+·06
5214 ,,	+·09	−·05
5215 ,,	−·20	−·01
5216 ,,	−·16	−·14
5217 ,,	+·01	−·07
5218 Nov. 10	−·11	−·10
5219 ,,	+·02	+·01
5220 ,,	−·01	−·07
5222 ,,	−·11	−·12
5223 ,,	−·07	−·09
5226 Nov. 11	+·05	+·07
5227 ,,	−·03	+·09
5228 ,,	+·07	+·17
5229 ,,	−·05	−·13
Mean	−·05	−·03
Redn. to L.	−·06	−·03
Deduced.....	1h 56m 26s·842	54° 45′ 0″·16
+ 37° 465.		
Provisional.....	1h 56m 38s·11	38° 3′ 41″·9
1900.		
5337 Dec. 29	−·24	−·28
5338 ,,	−·17	−·31
Mean	−·21	−·30
Redn. to L.	−·03	−·06
Deduced.....	1h 56m 38s·130	38° 3′ 42″·26

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
	+ 53° 440.	
Provisional.....	1h 56m 44s·97	54° 12′ 43″·4
1900.		
5212 Nov. 9	+·01	−·21
5213 ,,	+·09	+·07
5214 ,,	−·01	+·10
5215 ,,	−·02	+·05
5216 ,,	−·16	−·10
5217 ,,	−·14	+·11
5218 Nov. 10	+·28	−·11
5219 ,,	+·20	−·15
5220 ,,	+·25	−·06
5222 ,,	−·17	+·14
5223 ,,	−·08	−·05
5226 Nov. 11	+·23	+·05
5227 ,,	+·01	−·14
5228 ,,	+·10	+·14
5229 ,,	−·06	+·14
5230 Nov. 13	+·11	·00
5231 ,,	+·15	+·13
5232 ,,	+·08	+·15
5234 ,,	+·12	−·12
5235 ,,	+·08	+·04
5236 ,,	−·03	+·02
Mean	+·05	+·01
Redn. to L.	−·06	−·02
Deduced.....	1h 56m 44s·971	54° 12′ 43″·41
	+ 55° 484.	
Provisional.....	1h 57m 4s·01	55° 17′ 12″·7
1900.		
5212 Nov. 9	−·17	+·35
5213 ,,	−·01	+·14
5214 ,,	+·15	−·10
5215 ,,	−·15	−·23
5216 ,,	−·20	+·03
5217 ,,	−·16	+·13
5218 Nov. 10	−·25	+·18
5219 ,,	−·11	+·11
5220 ,,	−·26	+·15
5222 ,,	+·11	−·17
5223 ,,	−·09	·00
Mean	−·10	+·05
Redn. to L.	−·07	−·03
Deduced.....	1h 57m 4s·030	55° 17′ 12″·68

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
	+ 37° 468.	
Provisional.....	1h 57m 6s·22	38° 9′ 53″·1
1900.		
5337 Dec. 29	+·08	−·31
5338 ,,	−·08	−·08
Mean	·00	−·20
Redn. to L.	−·03	−·06
Deduced..... ..	1h 57m 6s·222	38° 9′ 53″·36
	+ 54° 448.	
Provisional.....	1h 57m 6s·30	54° 38′ 20″·9
1900.		
5212 Nov. 9	+·32	−·05
5213 ,,	+·25	−·10
5214 ,,	+·23	+·02
5215 ,,	+·13	+·01
5216 ,,	+·05	−·01
5217 ,,	+·11	−·12
5218 Nov. 10	+·20	−·21
5219 ,,	+·27	+·04
5220 ,,	+·32	−·25
5222 ,,	−·05	−·08
5223 ,,	−·11	−·02
5226 Nov. 11	+·25	−·13
5227 ,,	+·20	−·13
5228 ,,	+·30	−·15
5229 ,,	+·03	−·05
Mean	+·17	−·08
Redn. to L.	−·06	−·02
Deduced.....	1h 57m 6s·288	54° 38′ 21″·00
	+ 39° 457.	
Provisional.....	1h 57m 45s·21	39° 34′ 30″·3
1900.		
5333 Dec. 28	+·37	+·19
5334 ,,	+·54	+·15
5335 ,,	+·35	+·10
5336 ,,	+·35	+·13
5337 Dec. 29	+·35	+·17
5338 ,,	+·56	−·06
Mean	+·42	+·11
Redn. to L.	−·01	−·05
Deduced.....	1h 57m 45s·175	39° 34′ 30″·24

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
	+ 54° 452.	
Provisional.....	1h 57m 57s·90	54° 16′ 33″·9
1900.		
5210 Nov. 7	−·03	−·06
5211 ,,	−·03	−·07
5212 Nov. 9	+·12	−·18
5213 ,,	+·04	−·01
5214 ,,	−·33	−·05
5215 ,,	+·02	+·02
5216 ,,	−·38	−·19
5217 ,,	−·28	·00
5218 Nov. 10	−·08	−·19
5219 ,,	+·12	−·17
5220 ,,	+·01	−·08
5222 ,,	−·18	+·15
5223 ,,	−·17	+·01
5226 Nov. 11	−·05	−·13
5227 ,,	+·03	−·01
5228 ,,	−·01	−·04
5229 ,,	−·21	−·01
Mean	−·08	−·06
Redn. to L.	−·06	−·03
Deduced.....	1h 57m 57s·916	54° 16′ 33″·99
	+ 54° 453.	
Provisional.....	1h 58m 17s·94	55° 8′ 36″·0
1900.		
5212 Nov. 9	+·02	−·01
5213 ,,	+·06	+·03
5214 ,,	−·06	−·13
5216 ,,	−·37	+·09
5217 ,,	−·19	−·10
5218 Nov. 10	−·20	+·03
5219 ,,	−·10	+·01
5220 ,,	−·22	−·15
5222 ,,	−·26	−·34
5223 ,,	−·15	−·08
5226 Nov. 11	−·08*	·00*
5227 ,,	−·19*	+·25*
5228 ,,	−·24*	−·01*
5229 ,,	−·25*	−·31*
Mean	−·16	−·05
Redn. to L.	−·07	−·02
Deduced.....	1h 58m 17s·969	55° 8′ 36″·07

* Weigh ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 38° 402.		
Provisional.....	1h 58m 43s·34	38° 57′ 18″·1
1900.		
5333 Dec. 28	−·09†	−·30†
5334 ,,	+·05†	−·34†
5335 ,,	+·11†	−·50†
5336 ,,	+·03†	−·35†
5337 Dec. 29	−·15	−·15
5338 ,,	−·07	+·01
Mean	−·11	−·07
Redn. to L.	−·03	−·06
Deduced.....	1h 58m 43s·352	38° 57′ 18″·23
+ 54° 457.		
Provisional.....	1h 59m 8s·35	54° 26′ 56″·3
1900.		
5210 Nov. 7	+·17	+·01
5211 ,,	+·13	+·02
5212 Nov. 9	+·36	−·05
5213 ,,	+·14	+·01
5214 ,,	−·14	+·09
5215 ,,	+·02	+·10
5216 ,,	−·20	+·09
5217 ,,	+·05	−·07
5218 Nov. 10	+·09	−·03
5219 ,,	+·09	+·01
5220 ,,	+·20	−·10
5222 ,,	−·11	+·09
5223 ,,	+·06	+·11
5226 Nov. 11	−·01	+·22
5227 ,,	−·06	+·16
5228 ,,	+·25	+·18
5229 ,,	−·18	+·20
Mean	+·05	+·07
Redn. to L.	−·06	−·03
Deduced.....	1h 59m 8s·351	54° 26′ 56″·26
+ 39° 464.		
Provisional.....	1h 59m 43s·25	39° 16′ 52″·7
1900.		
5333 Dec. 28	−·11†	+·15†
5334 ,,	+·20†	+·01†
5335 ,,	+·27†	+·28†

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 39° 464—*contd.*		
1900.		
5336 Dec. 28	−·15†	+·18†
5337 Dec. 29	−·06	+·42
5338 ,,	−·21	+·21
Mean	−·14	+·32
Redn. to L.	−·03	−·06
Deduced.....	1h 59m 43s·265	39° 16′ 52″·44
+ 53° 451.		
Provisional.....	2h 0m 2s·99	53° 49′ 48″·7
1900.		
5210 Nov. 7	+·12	+·15
5211 ,,	−·05	+·18
5212 Nov. 9	−·05	+·14
5213 ,,	−·09	+·17
5214 ,,	−·09	+·17
5215 ,,	−·06	+·13
5216 ,,	−·19	+·01
5217 ,,	−·13	+·12
5218 Nov. 10	−·11	+·16
5219 ,,	−·22	+·08
5220 ,,	−·01	+·22
5222 ,,	−·16	+·15
5223 ,,	−·18	+·07
5226 Nov. 11	−·25*	+·31*
5227 ,,	+·17*	+·19*
5228 ,,	+·05*	+·36*
5229 ,,	+·21*	+·06*
Mean	−·06	+·15
Redn. to L.	−·07	−·03
Deduced.....	2h 0m 3s·004	53° 49′ 48″·58
+ 38° 408.		
Provisional.....	2h 0m 22s·60	38° 25′ 18″·3
1900.		
5337 Dec. 29	−·13†	−·03†
5338 ,,	−·15	−·02
Mean	−·15	−·02
Redn. to L.	−·03	−·06
Deduced.....	2h 0m 22s·615	38° 25′ 18″·38

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 39° 468.		
Provisional.....	2h 0m 30s·27	40° 7′ 15″·3
1900.		
5337 Dec. 29	−·07	+·13
5338 ,,	−·18	−·22
Mean	−·13	−·05
Redn. to L.	−·03	−·06
Deduced.....	2h 0m 30s·284	40° 7′ 15″·41
+ 53° 453.		
Provisional.....	2h 1m 36s·45	54° 7′ 38″·4
1900.		
5209 Nov. 6	−·07	+·12
5210 Nov. 7	−·10	+·28
5211 ,,	−·19	+·15
5212 Nov. 9	−·17	+·19
5213 ,,	−·24	+·08
5214 ,,	−·21	+·23
5215 ,,	−·15	+·29
5216 ,,	+·14	+·07
5217 ,,	−·27	+·18
5218 Nov. 10	−·26	+·15
5219 ,,	−·18	+·16
5220 ,,	−·21	+·25
5222 ,,	−·11	+·27
5223 ,,	−·03	+·17
Mean	−·14	+·18
Redn. to L.	−·07	−·04
Deduced.....	2h 1m 36s·474	54° 7′ 38″·26
+ 37° 486.		
Provisional.....	2h 2m 27s·04	37° 23′ 5″·2
1901.		
5339 Jan. 2	−·78	−·22
Redn. to L.	+·02	−·01
Deduced.....	2h 2m 27s·103	37° 23′ 5″·43

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 54° 469.		
Provisional.....	2h 3m 9s·16	55° 0′ 48″·4
1900.		
5209 Nov. 6	−″·02	−″·13
5210 Nov. 7	+·05	−·38
5211 ,,	+·13	−·55
5212 Nov. 9	−·14*	−·33*
5213 ,,	−·03*	−·32*
5214 ,,	+·13*	−·07*
5215 ,,	+·29*	−·24*
5216 ,,	·00*	−·13*
5217 ,,	+·10*	−·18*
Mean	+·05	−·28
Redn. to L.	−·07	−·04
Deduced.....	2h 3m 9s·162	55° 0 48″·72
+ 53° 459.		
Provisional.....	2h 3m 20s·88	53° 51′ 27″·5
1900.		
5209 Nov. 6	+″·13	+″·01
5210 Nov. 7	+·10	−·02
5211 ,,	+·05	+·01
5212 Nov. 9	−·10	+·09
5213 ,,	+·06	−·09
5214 ,,	+·16	−·02
5215 ,,	+·19	−·19
5216 ,,	+·43	+·06
5217 ,,	+·28	−·09
5218 Nov. 10	+·40†	+·06†
5222 ,,	+·18†	−·09†
5223 ,,	+·80†	−·48†
Mean	+·14	−·02
Redn. to L.	−·06	−·04
Deduced.....	2h 3m 20s·871	53° 51′ 27″·56
+ 54° 470.		
Provisional.....	2h 3m 27s·83	54° 49′ 6″·4
1900.		
5209 Nov. 6	−″·07	−″·21
5210 Nov. 7	+·09	−·42
5211 ,,	+·13	−·49

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 54° 470—*contd.*		
1900.		
5212 Nov. 9	+″·13	−″·32
5214 ,,	+·09	−·25
5215 ,,	+·02	−·21
5216 ,,	+·38	−·05
5217 ,,	+·27	−·19
Mean	+·11	−·28
Redn. to L.	−·06	−·04
Deduced.....	2h 3m 27s·824	54° 49′ 6″·72
+ 36° 426.		
Provisional.....	2h 4m 37s·58	37° 13′ 44″·8
1901.		
5339 Jan. 2	″·00	−″·17
Redn. to L.	+·02	−·01
Deduced.....	2h 4m 37s·578	37° 13′ 44″·98
+ 38° 423.		
Provisional.....	2h 4m 41s·63	38° 13′ 52″·5
1901.		
5339 Jan. 2	+″·08	−″·14
Redn. to L.	+·02	−·01
Deduced.....	2h 4m 41s·621	38° 13′ 52″·65
+ 53° 470.		
Provisional.....	2h 4m 59s·60	54° 4′ 47″·2
1900.		
5209 Nov. 6	+″·09	+″·29
5210 Nov. 7	−·16	+·30
5211 ,,	−·02	+·52
5212 Nov. 9	−·19*	+·67*
5213 ,,	−·16*	+·27*
5214 ,,	−·23*	+·29*
5215 ,,	−·02*	+·23*
5216 ,,	+·19*	+·37*
5217 ,,	+·03*	+·35*
Mean	−·04	+·36
Redn. to L.	−·06	−·04
Deduced.....	2h 4m 59s·611	54° 4′ 46″·88

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 36° 427.		
Provisional.....	2h 5m 25s·33	36° 52′ 51″·2
1901.		
5339 Jan. 2	−″·01	+″·21
Redn. to L.	+·02	−·01
Deduced.....	2h 5m 25s·329	36° 52′ 51″·00
+ 54° 483.		
Provisional.....	2h 6m 11s·44	54° 38′ 27″·7
1900.		
5209 Nov. 6	+″·16	−″·19
5210 Nov. 7	−·21	+·06
5211 ,,	−·06	−·07
Mean	−·02	−·08
Redn. to L.	−·06	−·04
Deduced.....	2h 6m 11s·449	54° 38′ 27″·82
+ 53° 474.		
Provisional.....	2h 6m 26s·07	53° 44′ 57″·3
1900.		
5209 Nov. 6	+″·05	+″·18
5210 Nov. 7	−·02	+·12
5211 ,,	−·12	+·30
Mean	−·02	+·20
Redn. to L.	−·06	−·04
Deduced.....	2h 6m 26s·079	53° 44′ 57″·14
+ 36° 435.		
Provisional.....	2h 6m 45s·24	36° 54′ 1″·3
1901.		
5339 Jan. 2	+″·10	+″·03
5341 Jan. 4	+·02†	−·24†
5342 ,,	+·30†	−·47†
5343 ,,	+·53†	−·33†
Mean	+·10	+·03
Redn. to L.	+·02	−·01
Deduced.....	2h 6m 45s·230	36° 54′ 1″·28

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 54° 494.		
Provisional.....	2h 7m 42s·06	54° 50′ 56″·8
1900.		
5209 Nov. 6	+″·01	−″·20
Redn. to L.	−·05	−·06
Deduced.....	2h 7m 42s·065	54° 50′ 57″·06
+ 37° 505.		
Provisional.....	2h 7m 52s·48	37° 56′ 20″·6
1901.		
5339 Jan. 2	″·00	−″·06
Redn. to L.	+·02	−·01
Deduced.....	2h 7m 52s·478	37° 56′ 20″·67
+ 36° 440.		
Provisional.....	2h 7m 53s·58	37° 8′ 58″·9
1901.		
5339 Jan. 2	+″·26	+″·15
5341 Jan. 4	+·05	+·06
5342 ,,	+·15	−·04
5343 ,,	−·01	+·04
Mean	+·13	+·06
Redn. to L.	+·03	·00
Deduced.....	2h 7m 53s·567	37° 8′ 58″·84
+ 37° 506.		
Provisional.....	2h 8m 4s·51	38° 10′ 15″·6
1901.		
5339 Jan. 2	+″·15	+″·10
Redn. to L.	+·02	−·01
Deduced.....	2h 8m 4s·496	38° 10′ 15″·51

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 486.		
Provisional.....	2h 8m 4s·91	54° 3′ 51″·3
1900.		
5209 Nov. 6	−″·10	+″·09
Redn. to L.	−·05	−·06
Deduced.....	2h 8m 4s·927	54° 3′ 51″·27
+ 54° 497.		
Provisional.....	2h 8m 17s·16	54° 37′ 14″·1
1900.		
5209 Nov. 6	−″·20	+″·06
Redn. to L.	−·05	−·06
Deduced.....	2h 8m 17s·187	54° 37′ 14″·10
+ 37° 512.		
Provisional.....	2h 9m 25s·44	37° 55′ 2″·3
1901.		
5339 Jan. 2	+″·18	+″·08
Redn. to L.	+·02	−·01
Deduced.....	2h 9m 25s·423	37° 55′ 2″·23
+ 36° 446.		
Provisional.....	2h 9m 52s·90	36° 18′ 19″·4
1901.		
5341 Jan. 4	+″·27	−″·06
5342 ,,	+·47	+·12
5343 ,,	+·17	+·18
5344 Jan. 5	(−·56)	(−·07)
5345 ,,	−·07*	+·05*
5346 ,,	−·20*	·00*
5347 ,,	+·26*	+·18*
5348 ,,	−·30*	+·29*
Mean	+·14	+·10
Redn. to L.	+·02	−·01
Deduced.....	2h 9m 52s·887	36° 18′ 19″·31

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 36° 450.		
Provisional.....	2h 10m 27s·29	36° 40′ 59″·7
1901.		
5341 Jan. 4	+″·11	−″·22
5342 ,,	+·28	−·22
5343 ,,	+·18	−·08
5344 Jan. 5	(−·30)	(+·02)
5345 ,,	+·28*	−·23*
5346 ,,	−·01*	+·09*
5347 ,,	+·29*	+·48*
5348 ,,	−·07*	+·46*
Mean	+·16	−·01
Redn. to L.	+·02	−·01
Deduced.....	2h 10m 27s·275	36° 40′ 59″·72
+ 37° 514.		
Provisional.....	2h 10m 54s·33	37° 40′ 56″·7
1901.		
5341 Jan. 4	−″·18	+″·49
5342 ,,	−·44	+·56
5343 ,,	−·19	+·20
Mean	−·27	+·42
Redn. to L.	+·03	·00
Deduced.....	2h 10m 54s·350	37° 40′ 56″·28
+ 36° 453.		
Provisional.....	2h 11m 8s·34	37° 1′ 11″·2
1901.		
5341 Jan. 4	+″·11	−″·35
5342 ,,	+·22	−·44
5343 ,,	+·08	−·52
5344 Jan. 5	(−·31)	(+·06)
5345 ,,	−·09†	−·42†
5346 ,,	−·07†	−·30†
5347 ,,	−·15†	+·05†
Mean	+·14	−·44
Redn. to L.	+·03	·00
Reduced.....	2h 11m 8s·326	37° 1′ 11″·64

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 37° 516.		
Provisional.....	2h 11m 14s·73	37° 22′ 8″·5
1901.		
5341 Jan. 4	+·11	+·10
5342 ,,	+·23	+·18
5343 ,,	+·17	−·05
Mean	+·17	+·08
Redn. to L.	+·03	·00
Deduced.....	2h 11m 14s·713	37° 22′ 8″·42
+ 53° 497.		
Provisional.....	2h 11m 34s·85	53° 49′ 0″·0
1900.		
5207 Oct. 31	−·06	+·04
5208 ,,	−·19	+·22
Mean	−·13	+·13
Redn. to L.	−·08	−·05
Deduced.....	2h 11m 34s·873	53° 48′ 59″·92
+ 37° 518.		
Provisional.....	2h 11m 49s·14	37° 37′ 28″·1
1901.		
5341 Jan. 4	−·09	+·06
5342 ,,	−·09	+·20
5343 ,,	−·08	+·26
Mean	−·09	+·17
Redn. to L.	+·03	·00
Deduced.....	2h 11m 49s·145	37° 37′ 27″·93
+ 52° 563.		
Provisional.....	2h 12m 6s·04	53° 6′ 51″·1
1900.		
5207 Oct. 31	+·13	−·25
5208 ,,	+·18	−·12
Mean	+·16	−·19
Redn. to L.	−·08	−·05
Deduced.....	2h 12m 6s·031	53° 6′ 51″·34

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 501.		
Provisional.....	2h 12m 6s·45	53° 38′ 0″·6
1900.		
5207 Oct. 31	+·04	−·22
5208 ,,	−·01	−·18
Mean	+·02	−·20
Redn. to L.	−·08	−·05
Deduced.....	2h 12m 6s·457	53° 38′ 0″·85
+ 36° 458.		
Provisional.....	2h 12m 32s·93	36° 36′ 17″·0
1901.		
5341 Jan. 4	−·19	+·07
5342 ,,	−·33	+·03
5343 ,,	−·30	+·17
5344 Jan. 5	(−·42)	(+·01)
5345 ,,	−·26	+·08
5346 ,,	−·17	+·18
5347 ,,	−·06	+·23
5348 ,,	−·31	+·34
Mean	−·23	+·16
Redn. to L.	+·02	−·01
Deduced.....	2h 12m 32s·947	36° 36′ 16″·85
+ 53° 507.		
Provisional.....	2h 14m 20s·08	54° 3′ 4″·0
1900.		
5207 Oct. 31	−·39	+·15
5208 ,,	−·11	+·16
Mean	−·25	+·16
Redn. to L.	−·08	−·05
Deduced.....	2h 14m 20s·117	54° 3′ 3″·89
+ 36° 464.		
Provisional.....	2h 14m 57s·56	36° 36′ 45″·2
1901.		
5341 Jan. 4	−·23	+·11
5342 ,,	−·81	+·08
5343 ,,	−·59	+·12

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 36° 464—*contd.*		
1901.		
5344 Jan. 5	(−·04)	(+·05)
5345 ,,	−·44	+·13
5346 ,,	−·16	+·12
5347 ,,	−·29	+·20
5348 ,,	−·36	+·15
Mean	−·41	+·13
Redn. to L.	+·02	−·01
Deduced.....	2h 14m 57s·592	36° 36′ 45″·08
+ 54° 530.		
Provisional.....	2h 15m 44s·14	54° 37′ 21″·9
1900.		
5207 Oct. 31	+·53	+·28
Redn. to L.	−·08	−·05
Deduced.....	2h 15m 44s·089	54° 37′ 21″·67
+ 36° 470.		
Provisional.....	2h 17m 13s·12	37° 6′ 16″·2
1901.		
5344 Jan. 5	(+·21)	(+·42)
5345 ,,	+·23	+·08
5346 ,,	+·36	+·17
5347 ,,	−·12	+·04
5348 ,,	+·14	+·07
Mean	+·15	+·09
Redn. to L.	+·01	−·02
Deduced.....	2h 17m 13s·107	37° 6′ 16″·13
+ 53° 519.		
Provisional.....	2h 17m 20s·15	53° 44′ 9″·8
1900.		
5205 Oct. 29	+·02	−·11
5206 ,,	+·18	−·07
Mean	+·10	−·09
Redn. to L.	−·08	−·09
Deduced.....	2h 17m 20s·148	53° 44′ 9″·98

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 521.		
Provisional.....	2h 17m 28s·85	53° 19′ 11″·5
1900.		
5205 Oct. 29	−″·09	−″·11
5206 ,,	−·13	−·15
5207 Oct. 31	−·23	−·16
5208 ,,	−·19	−·13
Mean	−·16	−·14
Redn. to L.	−·08	−·07
Deduced.....	2h 17m 28s·877	53° 19′ 11″·71
+ 52° 576.		
Provisional.....	2h 17m 35s·33	52° 59′ 36″·9
1900.		
5205 Oct. 29	−″·10	+″·02
5206 ,,	−·11	−·08
5207 Oct. 31	+·16	−·16
5208 ,,	+·20	−·21
Mean	+·04	−·11
Redn. to L.	−·08	−·07
Deduced.....	2h 17m 35s·334	52° 59′ 37″·08
+ 36° 473.		
Provisional.....	2h 17m 36s·76	36° 38′ 51″·3
1901.		
5344 Jan. 5	(+″·28)	(−″·32)
5345 ,,	+·03	−·26
5346 ,,	+·10	−·30
5347 ,,	−·18	−·57
5348 ,,	+·17	−·41
Mean	+·03	−·39
Redn. to L.	+·01	−·02
Deduced.....	2h 17m 36s·757	36° 38′ 51″·71
+ 52° 580.		
Provisional.....	2h 19m 3s·14	52° 55′ 1″·6
1900.		
5183 Oct. 26	−″·24*	−″·20*
5184 ,,	−·02*	−·33*
5185 ,,	−·13*	−·11*
+ 52° 580—*contd.*		
1900.		
5187 Oct. 26	−″·16*	+″·08*
5190 ,,	−·34*	+·02*
5191 Oct. 27	+·38	−·24
5192 ,,	+·29	−·19
5193 ,,	+·05	−·27
5200 ,,	+·01	−·23
5201 ,,	−·19	−·09
5202 ,,	−·06	−·10
5203 ,,	−·10	−·22
5204 Oct. 28	+·01	+·21
5205 Oct. 29	+·09	+·09
5206 ,,	+·14	−·01
Mean	+·01	−·06
Redn. to L.	−·08	−·08
Deduced.....	2h 19m 3s·147	52° 55′ 1″·74
+ 36° 478.		
Provisional.....	2h 19m 9s·89	36° 39′ 59″·7
1901.		
5344 Jan. 5	(+″·11)	(+″·07)
5345 ,,	−·27	+·08
5346 ,,	−·40	−·16
5347 ,,	−·28	−·22
5348 ,,	−·18	−·31
Mean	−·28	−·15
Redn. to L.	+·01	−·02
Deduced.....	2h 19m 9s·912	36° 39′ 59″·87
+ 35° 470.		
Provisional.....	2h 19m 20s·77	35° 31′ 8″·5
1901.		
5344 Jan. 5	(+″·47)†	(−″·60)†
5345 ,,	+·14†	+·07†
5346 ,,	+·21†	−·01†
5347 ,,	−·18†	−·59†
5348 ,,	+·17†	−·72†
5349 Jan. 8	−·04	−·01
5350 ,,	−·17	−·19
5351 ,,	·00	−·16
5352 ,,	−·22	−·11
Mean	−·11	−·12
Redn. to L.	+·01	+·03
Deduced.....	2h 19m 20s·778	35° 31′ 8″·59
+ 34° 432.		
Provisional.....	2h 19m 25s·32	34° 35′ 21″·5
1901.		
5349 Jan. 8	−″·35	+″·06
5350 ,,	−·27	+·29
5351 ,,	−·09	+·29
5352 ,,	−·30	+·20
Mean	−·25	+·21
Redn. to L.	+·01	+·03
Deduced.....	2h 19m 25s·339	34° 35′ 21″·26
+ 53° 525.		
Provisional.....	2h 19m 30s·26	53° 40′ 27″·0
1900.		
5183 Oct. 26	−″·34†	+″·88†
5184 ,,	−·71†	+·60†
5185 ,,	−·93†	+·50†
5186 ,,	−·76†	+·32†
5187 ,,	−·78†	+·57†
5189 ,,	−·32†	+·14†
5190 ,,	−·78†	+·47†
5191 Oct. 27	−·75	+·44
5192 ,,	−·57	+·42
5193 ,,	−·77	+·24
5200 ,,	−·82	+·11
5201 ,,	−·77	+·07
5202 ,,	−·52	+·14
5203 ,,	−·69	+·12
5204 Oct. 28	−·23	+·14
5205 Oct. 29	−·25	+·18
5206 ,,	−·28	+·07
5207 Oct. 31	−·18	+·03
5208 ,,	−·16	+·03
Mean	−·43	+·15
Redn. to L.	−·08	−·07
Deduced.....	2h 19m 30s·316	53° 40′ 26″·92
+ 36° 482.		
Provisional.....	2h 19m 44s·32	36° 33′ 40″·1
1901.		
5344 Jan. 5	(+″·56)	(+″·35)
5345 ,,	+·47	+·44
5346 ,,	+·31	+·24

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 36° 482—*contd.*		
1901.		
5347 Jan. 5	+″·68	+″·21
5348 ,,	+·78	+·11
Mean	+·56	+·25
Red^{n}. to L.	+·01	−·02
Deduced.....	2^{h} 19^{m} 44^{s}·273	36° 33′ 39″·87
+ 34° 435.		
Provisional.....	2^{h} 20^{m} 8^{s}·27	34° 24′ 7″·3
1901.		
5349 Jan. 8	−″·24	−″·16
5350 ,,	−·09	+·03
5351 ,,	+·06	+·14
5352 ,,	−·05	+·05
Mean	−·08	+·02
Red^{n}. to L.	+·01	+·03
Deduced.....	2^{h} 20^{m} 8^{s}·276	34° 24′ 7″·25
+ 52° 581.		
Provisional.....	2^{h} 20^{m} 30^{s}·52	53° 2′ 59″·0
1900.		
5183 Oct. 26	−″·09	−″·16
5184 ,,	−·06	−·01
5185 ,,	+·10	−·18
5186 ,,	+·05	−·17
5187 ,,	−·01	−·04
5189 ,,	−·05	−·14
5190 ,,	−·10	−·11
5191 Oct. 27	+·07	−·22
5192 ,,	+·01	−·19
5193 ,,	−·09	−·23
5200 ,,	+·04	−·10
5201 ,,	−·18	−·13
5202 ,,	−·14	−·10
5203 ,,	−·05	−·18
5204 Oct. 28	−·18	+·20
5205 Oct. 29	+·06	+·04
5206 ,,	−·11	+·10
5207 Oct. 31	−·22	−·24
5208 ,,	−·16	−·32
Mean	−·07	−·10
Red^{n}. to L.	−·08	−·07
Deduced.....	2^{h} 20^{m} 30^{s}·537	53° 2′ 59″·17

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 34° 437.		
Provisional.....	2^{h} 20^{m} 45^{s}·21	35° 9′ 50″·4
1901.		
5349 Jan. 8	−″·49	+″·07
5350 ,,	−·65	+·07
5351 ,,	−·77	+·03
5352 ,,	−·64	·00
Mean	−·64	+·04
Red^{n}. to L.	+·01	+·03
Deduced.....	2^{h} 20^{m} 45^{s}·260	35° 9′ 50″·33
+ 54° 554.		
Provisional.....	2^{h} 21^{m} 46^{s}·72	54° 31′ 35″·8
1900.		
5207 Oct. 31	+″·24	+″·56
5208 ,,	+·42	+·56
Mean	+·33	+·56
Red^{n}. to L.	−·08	−·05
Deduced.....	2^{h} 21^{m} 46^{s}·692	54° 31′ 35″·29
+ 52° 585.		
Provisional.....	2^{h} 21^{m} 54^{s}·80	53° 5′ 37″·0
1900.		
5183 Oct. 26	+″·18	−″·26
5184 ,,	+·46	−·19
5185 ,,	+·49	−·29
5186 ,,	+·41	−·12
5187 ,,	+·35	−·27
5189 ,,	+·34	−·11
5190 ,,	+·33	−·12
5191 Oct. 27	+·40	−·25
5192 ,,	+·46	−·21
5193 ,,	+·46	−·20
5200 ,,	+·52	−·15
5201 ,,	+·27	−·18
5202 ,,	+·31	−·10
5203 ,,	+·34	−·21
5204 Oct. 28	+·27	−·17
5205 Oct. 29	+·20	−·11
5206 ,,	+·28	−·02
Mean	+·34	−·17
Red^{n}. to L.	−·08	−·07
Deduced.....	2^{h} 21^{m} 54^{s}·771	53° 5′ 37″·24

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 35° 477.		
Provisional.....	2^{h} 22^{m} 1^{s}·27	35° 29′ 1″·8
1901.		
5349 Jan. 8	+″·15	+″·06
5350 ,,	+·04	−·06
5351 ,,	+·12	−·15
5352 ,,	+·21	−·06
Mean	+·13	−·05
Red^{n}. to L.	+·01	+·03
Deduced.....	2^{h} 22^{m} 1^{s}·259	35° 29′ 1″·82
+ 34° 442.		
Provisional.....	2^{h} 22^{m} 26^{s}·92	34° 51′ 0″·5
1901.		
5349 Jan. 8	+″·03	−″·18
5350 ,,	−·13	−·15
5351 ,,	−·33	−·19
5352 ,,	−·17	−·21
5353 Jan. 9	·00	−·32
5354 ,,	+·09	−·27
5355 ,,	+·13	−·30
5356 ,,	−·08	−·23
Mean	−·06	−·23
Red^{n}. to L.	·00	+·03
Deduced.....	2^{h} 22^{m} 26^{s}·925	34° 51′ 0″·70
+ 35° 480.		
Provisional.....	2^{h} 22^{m} 51^{s}·17	35° 13′ 12″·2
1901.		
5349 Jan. 8	+″·54	−″·16
5353 Jan. 9	+·32*	−·16*
5354 ,,	+·40*	−·18*
5355 ,,	+·40*	−·19*
5356 ,,	+·36*	−·16*
Mean	+·43	−·17
Red^{n}. to L.	·00	+·03
Deduced.....	2^{h} 22^{m} 51^{s}·135	35° 13′ 12″·34

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 52° 587.		
Provisional.....	2h 22m 52s·54	52° 36′ 52″·8
1900.		
5183 Oct. 26	+·02	−·17
5184 ,,	−·01	+·01
5185 ,,	+·02	−·04
5186 ,,	·00	−·05
5187 ,,	−·02	−·03
5189 ,,	−·14	+·06
5190 ,,	−·12	+·12
5191 Oct. 27	−·21	+·14
5192 ,,	−·26	+·12
5193 ,,	−·04	−·03
5200 ,,	−·06	+·01
5201 ,,	+·05	−·09
5202 ,,	−·03	·00
5203 ,,	+·02	−·02
5204 Oct. 28	−·22	−·11
5205 Oct. 29	−·10	+·09
5206 ,,	−·15	+·15
Mean	−·09	+·01
Redn. to L.	−·08	−·07
Deduced.....	2h 22m 52s·559	52° 36′ 52″·86
+ 53° 532.		
Provisional.....	2h 23m 5s·27	53° 24′ 20″·5
1900.		
5183 Oct. 26	+·12	+·43
5184 ,,	−·03	+·36
5185 ,,	−·03	+·24
5186 ,,	−·09	+·41
5187 ,,	−·05	+·26
5189 ,,	+·23	+·25
5190 ,,	+·26	+·19
5191 Oct. 27	+·12	+·36
5192 ,,	+·18	+·30
5193 ,,	−·01	+·33
5200 ,,	−·19	+·12
5201 ,,	−·15	+·30
5202 ,,	−·04	+·19
5203 ,,	−·05	+·21
5204 Oct. 28	−·15	+·26
5205 Oct. 29	+·08	+·15
5206 ,,	+·01	+·28
Mean	+·01	+·27
Redn. to L.	−·08	−·07
Deduced.....	2h 23m 5s·278	53° 24′ 20″·30

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 35° 490.		
Provisional.....	2h 24m 41s·80	35° 40′ 21″·3
1901.		
5349 Jan. 8	·00	−·01
5350 ,,	+·10	−·07
5351 ,,	+·03	−·13
5352 ,,	+·04	−·12
Mean	+·04	−·08
Redn. to L.	+·01	+·03
Deduced.....	2h 24m 41s·795	35° 40′ 21″·35
+ 33° 447.		
Provisional.....	2h 24m 58s·02	33° 54′ 55″·1
1901.		
5353 Jan. 9	+·19	·00
5354 ,,	+·44	−·07
5355 ,,	+·31	−·09
5356 ,,	+·17	−·11
Mean	+·28	−·07
Redn. to L.	·00	+·03
Deduced.....	2h 24m 57s·998	33° 54′ 55″·14
+ 52° 592.		
Provisional.....	2h 25m 3s·16	52° 23′ 27″·7
1900.		
5183 Oct. 26	+·37	−·15
5184 ,,	+·19	−·21
5185 ,,	+·20	−·16
5186 ,,	+·14	−·01
5187 ,,	+·12	−·18
5189 ,,	−·04	−·05
5190 ,,	−·01	−·24
5191 Oct. 27	+·01	+·20
5192 ,,	−·12	+·04
5193 ,,	+·06	+·03
5200 ,,	+·16	−·19
5201 ,,	+·13	−·25
5202 ,,	−·05	−·19
5203 ,,	+·11	−·11
Mean	+·09	−·11
Redn. to L.	−·08	−·07
Deduced.....	2h 25m 3s·159	52° 23′ 27″·88

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 34° 448.		
Provisional.....	2h 25m 4s·16	34° 29′ 14″·8
1901.		
5349 Jan. 8	+·09	+·15
5350 ,,	+·14	+·12
5351 ,,	−·04	+·03
5352 ,,	−·03	+·11
5353 Jan. 9	−·01	+·20
5354 ,,	+·05	+·25
5355 ,,	−·09	+·12
5356 ,,	−·20	+·27
Mean	−·01	+·15
Redn. to L.	+·01	+·03
Deduced.....	2h 25m 4s·160	34° 29′ 14″·62
+ 35° 494.		
Provisional.....	2h 25m 5s·05	35° 18′ 44″·8
1901.		
5350 Jan. 8	+·65	−·01
5351 ,,	+·62	−·19
5352 ,,	+·65	+·06
5353 Jan. 9	+·30	−·08
5356 ,,	+·36	+·17
Mean	+·51	−·01
Redn. to L.	+·01	+·03
Deduced.....	2h 25m 5s·008	35° 18′ 44″·78
+ 34° 449.		
Provisional.....	2h 25m 6s·75	34° 57′ 20″·6
1901.		
5349 Jan. 8	+·13	+·22
5350 ,,	+·24	+·04
5351 ,,	+·20	+·13
5352 ,,	+·14	+·10
5353 Jan. 9	+·15	−·16
5354 ,,	+·08	+·01
5355 ,,	+·18	+·11
5356 ,,	−·04	+·07
Mean	+·14	+·07
Redn. to L.	+·01	+·03
Deduced.....	2h 25m 6s·738	34° 57′ 20″·50

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 539.		
Provisional.....	$2^h\ 25^m\ 29^s{\cdot}98$	$53°\ 51'\ 59''{\cdot}8$
1900.		
5183 Oct. 26	+·36†	−·36†
5184 ,,	+·44†	−·18†
5185 ,,	+·19†	−·42†
5186 ,,	+·11†	−·26†
5187 ,,	+·18†	−·15†
5189 ,,	+·13†	−·40†
5190 ,,	+·06†	−·25†
5191 Oct. 27	+·32	−·32
5192 ,,	+·50	−·36
5193 ,,	+·21	−·12
5200 ,,	+·14	−·30
5201 ,,	+·27	−·06
5202 ,,	+·09	−·16
5203 ,,	−·01	−·21
5204 Oct. 28	+·20	−·29
5205 Oct. 29	+·07	−·25
5206 ,,	+·18	−·22
Mean	+·19	−·24
Red^n. to L.	−·08	−·08
Deduced.....	$2^h\ 25^m\ 29^s{\cdot}968$	$53°\ 52'\ 0''{\cdot}12$
+ 53° 540.		
Provisional.....	$2^h\ 25^m\ 49^s{\cdot}24$	$53°\ 32'\ 5''{\cdot}6$
1900.		
5183 Oct. 26	+·09	+·20
5184 ,,	−·01	+·22
5185 ,,	−·01	+·15
5186 ,,	−·02	·00
5187 ,,	−·04	+·14
5189 ,,	−·01	+·20
5190 ,,	−·28	+·17
5191 Oct. 27	−·20	+·11
5192 ,,	−·05	+·08
5193 ,,	−·20	+·34
5200 ,,	−·11	+·24
5201 ,,	−·03	+·09
5202 ,,	−·15	+·11
5203 ,,	−·17	+·19
5204 Oct. 28	+·08	+·03
Mean	−·06	+·14
Red^n. to L.	−·08	−·07
Deduced.....	$2^h\ 25^m\ 49^s{\cdot}255$	$53°\ 32'\ 5''{\cdot}53$

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 34° 454.		
Provisional.....	$2^h\ 26^m\ 3^s{\cdot}34$	$34°\ 14'\ 9''{\cdot}7$
1901.		
5353 Jan. 9	−·31	+·26
5354 ,,	−·29	+·26
5355 ,,	−·42	+·30
5356 ,,	−·29	+·35
Mean	−·33	+·29
Red^n. to L.	·00	+·03
Deduced.....	$2^h\ 26^m\ 3^s{\cdot}366$	$34°\ 14'\ 9''{\cdot}38$
+ 34° 457.		
Provisional.....	$2^h\ 26^m\ 29^s{\cdot}24$	$34°\ 50'\ 17''{\cdot}8$
1901.		
5349 Jan. 8	+·21	−·03
5350 ,,	+·10	−·05
5351 ,,	+·14	−·23
5352 ,,	+·34	−·03
5353 Jan. 9	+·04	−·24
5354 ,,	−·01	−·28
5355 ,,	−·17	−·22
5356 ,,	−·11	−·24
Mean	+·07	−·17
Red^n. to L.	+·01	+·03
Deduced.....	$2^h\ 26^m\ 29^s{\cdot}234$	$34°\ 50'\ 17''{\cdot}94$
+ 33° 454.		
Provisional.....	$2^h\ 26^m\ 50^s{\cdot}25$	$34°\ 6'\ 3''{\cdot}8$
1901.		
5353 Jan. 9	−·24	+·17
5354 ,,	−·29	−·13
5355 ,,	−·11	−·09
5356 ,,	−·25	−·14
Mean	−·22	−·05
Red^n. to L.	·00	+·03
Deduced.....	$2^h\ 26^m\ 50^s{\cdot}267$	$34°\ 6'\ 3''{\cdot}82$

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 52° 595.		
Provisional.....	$2^h\ 27^m\ 16^s{\cdot}86$	$52°\ 23'\ 26''{\cdot}0$
1900.		
5183 Oct. 26	+·04	+·14
5184 ,,	+·09	+·10
5185 ,,	+·15	+·07
5186 ,,	−·04	−·01
5187 ,,	+·06	−·07
5189 ,,	−·18	+·11
5190 ,,	+·06	+·05
5191 Oct. 27	−·07	+·18
5192 ,,	−·21	+·21
5193 ,,	+·17	+·29
5200 ,,	+·04	+·03
5201 ,,	+·20	−·12
5202 ,,	+·21	−·01
5203 ,,	+·34	+·01
Mean	+·06	+·07
Red^n. to L.	−·08	−·07
Deduced.....	$2^h\ 27^m\ 16^s{\cdot}862$	$52°\ 23'\ 26''{\cdot}00$
+ 52° 597.		
Provisional.....	$2^h\ 27^m\ 23^s{\cdot}00$	$52°\ 57'\ 54''{\cdot}1$
1900.		
5183 Oct. 26	+·37	−·11
5184 ,,	+·29	·00
5185 ,,	+·28	−·02
5186 ,,	+·27	+·08
5187 ,,	+·21	+·03
5189 ,,	+·26	+·31
5190 ,,	+·35	+·11
5191 Oct. 27	+·11	−·22
5192 ,,	+·18	−·06
5193 ,,	+·44	+·10
5200 ,,	+·36	+·32
5201 ,,	+·30	+·27
5202 ,,	+·41	+·12
5203 ,,	+·39	+·14
5204 Oct. 28	+·29	−·02
Mean	+·30	+·07
Red^n. to L.	−·08	−·07
Deduced.....	$2^h\ 27^m\ 22^s{\cdot}976$	$52°\ 57'\ 54''{\cdot}10$

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 34° 462.		
Provisional... ..	2h 28m 12s·89	34° 42′ 41″·2
1901.		
5353 Jan. 9	−″·23	+″·13
5354 ,,	−·26	+·21
5355 ,,	−·15	+·35
5356 ,,	−·50	+·32
Mean	−·29	+·25
Redn. to L.	·00	+·03
Deduced.....	2h 28m 12s·913	34° 42′ 40″·92
+ 50° 587.		
Provisional.....	2h 28m 23s·84	50° 45′ 2″·4
1900.		
5169 Oct. 20	+″·47	+″·15
5170 ,,	−·01	+·10
5172 ,,	+·30	−·03
5173 Oct. 21	−·31	−·35
5174 ,,	−·14	−·21
5177 ,,	+·38	+·19
5178 ,,	−·03	+·21
5179 ,,	+·36	+·20
Mean	+·15	+·04
Redn. to L.	−·02	·00
Deduced.....	2h 28m 23s·826	50° 45′ 2″·36
+ 53° 546.		
Provisional.....	2h 28m 31s·85	53° 14′ 57″·6
1900.		
5183 Oct. 26	+″·02	−″·23
5184 ,,	−·15	−·05
5185 ,,	−·13	−·07
5186 ,,	−·19	−·06
5187 ,,	−·17	−·21
5189 ,,	−·18	+·05
5190 ,,	−·10	−·13
5191 Oct. 27	−·10	−·13
5192 ,,	−·28	−·20
5193 ,,	−·16	+·06
5200 ,,	−·03	+·20
5201 ,,	+·15	+·17

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 53° 546—*contd.*		
1900.		
5202 Oct. 27	+″·01	+″·07
5203 ,,	−·07	+·25
5204 Oct. 28	−·03	−·22
Mean	−·09	−·05
Redn. to L.	−·08	−·07
Deduced.....	2h 28m 31s·869	53° 14′ 57″·72
+ 53° 547.		
Provisional.....	2h 28m 34s·66	53° 52′ 42″·6
1900.		
5183 Oct. 26	+″·31	−″·15
5184 ,,	+·08	−·42
5185 ,,	+·10	+·06
5186 ,,	+·23	+·12
5187 ,,	+·52	+·24
5189 ,,	+·06	−·19
5190 ,,	+·39	−·13
Mean	+·24	−·07
Redn. to L.	−·08	−·07
Deduced.....	2h 28m 34s·642	53° 52′ 42″·74
+ 51° 598.		
Provisional.....	2h 29m 15s·62	52° 2′ 59″·3
1900.		
5169 Oct. 20	−″·62†	+″·35†
5170 ,,	−·71†	+·62†
5172 ,,	−·63†	+·51†
5173 Oct. 21	−·65	+·41
5174 ,,	−·68	+·45
5177 ,,	−·48	+·31
5178 ,,	−·77	+·45
5179 ,,	−·54	+·46
5183 Oct. 26	−·28*	+·17*
5184 ,,	−·33*	+·10*
5185 ,,	−·15*	−·03*
5186 ,,	+·02*	−·18*
5187 ,,	−·13*	−·32*
5189 ,,	−·01*	+·04*
5190 ,,	+·04*	−·10*
Mean	−·39	+·20
Redn. to L.	−·05	−·03
Deduced.....	2h 29m 15s·667	52° 2′ 59″·13

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 34° 469.		
Provisional.....	2h 29m 42s·58	34° 15′ 5″·0
1901.		
5353 Jan. 9	+″·04	+″·24
5354 ,,	+·11	+·10
5355 ,,	+·22	−·01
5356 ,,	+·40	−·07
Mean	+·19	+·07
Redn. to L.	·00	+·03
Deduced.....	2h 29m 42s·565	34° 15′ 4″·90
+ 34° 471.		
Provisional.....	2h 29m 45s·98	34° 17′ 17″·7
1901.		
5353 Jan. 9	−″·26	−″·04
5354 ,,	−·29	+·09
5355 ,,	−·28	+·03
5356 ,,	+·18	−·18
Mean	−·16	−·03
Redn. to L.	·00	+·03
Deduced.....	2h 29m 45s·993	34° 17′ 17″·70
+ 51° 599.		
Provisional.....	2h 29m 55s·79	51° 31′ 28″·6
1900.		
5169 Oct. 20	−″·41	−″·18
5170 ,,	−·45	−·12
5172 ,,	−·34	−·18
5173 Oct. 21	−·30	−·18
5174 ,,	−·39	−·30
5177 ,,	−·45	−·16
5179 ,,	−·49	−·26
Mean	−·41	−·20
Redn. to L.	−·02	·00
Deduced.....	2h 29m 55s·836	51° 31′ 28″·80

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 52° 602.		
Provisional.....	$2^h\ 30^m\ 52^s\cdot48$	52° 22′ 39″·6
1900.		
5173 Oct. 21	−·09	+·06
5174 ,,	+·13	−·03
5177 ,,	−·10	−·09
5178 ,,	−·56	+·09
5179 ,,	−·30	+·06
5183 Oct. 26	+·05	+·05
5184 ,,	−·23	+·02
5185 ,,	−·17	+·29
5186 ,,	−·17	−·06
5187 ,,	−·07	+·05
5189 ,,	−·06	−·16
5190 ,,	+·17	−·03
Mean	−·13	+·02
Red^n. to L.	−·05	−·03
Deduced.....	$2^h\ 30^m\ 52^s\cdot499$	52° 22′ 39″·61
+ 50° 589.		
Provisional.....	$2^h\ 31^m\ 23^s\cdot08$	50° 26′ 0″·8
1900.		
5169 Oct. 20	−·31	−·40
5170 ,,	−·36	−·64
5172 ,,	−·15	−·41
Mean	−·27	−·48
Red^n. to L.	−·02	·00
Deduced.....	$2^h\ 31^m\ 23^s\cdot110$	50° 26′ 1″·28
+ 51° 604.		
Provisional.....	$2^h\ 31^m\ 37^s\cdot44$	51° 38′ 37″·5
1900.		
5169 Oct. 20	+·43	−·25
5170 ,,	+·23	−·16
5172 ,,	+·12	−·10
5173 Oct. 21	+·17	−·14
5174 ,,	+·12	−·33
5177 ,,	+·16	−·13
5178 ,,	·00	−·21
5179 ,,	+·04	−·41
Mean	+·17	−·21
Red^n. to L.	−·02	·00
Deduced.....	$2^h\ 31^m\ 37^s\cdot424$	51° 38′ 37″·71

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 50° 601.		
Provisional.....	$2^h\ 33^m\ 42^s\cdot64$	51° 11′ 34″·0
1900.		
5169 Oct. 20	−·22	+·46
5170 ,,	−·06	+·28
5172 ,,	−·17	+·66
5173 Oct. 21	−·10	+·42
5174 ,,	−·17	+·41
5177 ,,	−·46	+·36
5178 ,,	−·60	+·12
5179 ,,	−·56	+·47
Mean	−·28	+·41
Red^n. to L.	−·02	·00
Deduced.....	$2^h\ 33^m\ 42^s\cdot672$	51° 11′ 33″·59
+ 32° 483.		
Provisional.....	$2^h\ 33^m\ 45^s\cdot70$	33° 3′ 52″·7
1901.		
5359 Jan. 13	−·41	+·28
Red^n. to L.	+·03	−·03
Deduced.....	$2^h\ 33^m\ 45^s\cdot730$	33° 3′ 52″·45
+ 33° 481.		
Provisional.....	$2^h\ 33^m\ 46^s\cdot99$	33° 31′ 5″·9
1901.		
5359 Jan. 13	+·26	+·14
Red^n. to L.	+·03	−·03
Deduced.....	$2^h\ 33^m\ 46^s\cdot967$	33° 31′ 5″·79
+ 32° 484.		
Provisional.....	$2^h\ 33^m\ 49^s\cdot62$	32° 23′ 1″·4
1901.		
5359 Jan. 13	+·06	+·21
Red^n. to L.	+·03	−·03
Deduced.....	$2^h\ 33^m\ 49^s\cdot613$	32° 23′ 1″·22

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 49° 741.		
Provisional.....	$2^h\ 34^m\ 18^s\cdot30$	49° 34′ 56″·1
1900.		
5160 Oct. 14	+·46	+·09
5161 ,,	+·48	+·03
5162 Oct. 15	+·16	+·02
Mean	+·35	+·04
Red^n. to L.	+·01	+·02
Deduced.....	$2^h\ 34^m\ 18^s\cdot263$	49° 34′ 56″·04
+ 49° 743.		
Provisional.....	$2^h\ 34^m\ 24^s\cdot98$	49° 41′ 21″·1
1900.		
5160 Oct. 14	+·32	+·21
5161 ,,	+·26	+·03
5162 Oct. 15	−·11	−·21
Mean	+·13	−·01
Red^n. to L.	+·01	+·02
Deduced.....	$2^h\ 34^m\ 24^s\cdot966$	49° 41′ 21″·09
+ 51° 616.		
Provisional.....	$2^h\ 35^m\ 21^s\cdot67$	52° 0′ 21″·1
1900.		
5169 Oct. 20	−·14	+·04
5170 ,,	−·11	+·14
5172 ,,	−·17	+·07
5173 Oct. 21	+·01	+·04
5174 ,,	+·05	+·16
5177 ,,	−·36	+·17
5178 ,,	−·19	+·12
5179 ,,	−·33	+·26
Mean	−·15	+·12
Red^n. to L.	−·02	·00
Deduced.....	$2^h\ 35^m\ 21^s\cdot688$	52° 0′ 20″·98

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 51° 618.		
Provisional.....	2h 35m 38s·84	51° 28′ 31″·2
1900.		
5169 Oct. 20	+·19	+·07
5170 ,,	+·34	+·20
5172 ,,	+·29	−·08
5173 Oct. 21	+·06	−·07
5174 ,,	+·16	+·10
5177 ,,	+·14	+·02
5178 ,,	+·39	−·04
Mean	+·23	+·03
Redn. to L.	−·02	·00
Deduced.....	2h 35m 38s·818	51° 28′ 31″·17
+ 52° 617.		
Provisional.....	2h 36m 19s·72	52° 19′ 47″·7
1900.		
5173 Oct. 21	+·09	+·02
5174 ,,	+·06	−·08
5177 ,,	+·01	−·08
5178 ,,	+·16	+·17
5179 ,,	+·12	+·01
Mean	+·09	+·01
Redn. to L.	−·02	·00
Deduced.....	2h 36m 19s·712	52° 19′ 47″·69
+ 33° 493.		
Provisional.....	2h 36m 31s·09	33° 20′ 25″·3
1901.		
5359 Jan. 13	+·09	·00
Redn. to L.	+·03	−·03
Deduced.....	2h 36m 31s·080	33° 20′ 25″·33
+ 51° 620.		
Provisional.....	2h 36m 38s·16	51° 59′ 17″·1
1900.		
5169 Oct. 20	+·43	+·01
5170 ,,	+·64	+·13
5172 ,,	+·30	−·01

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 51° 620—*contd.*		
1900.		
5173 Oct. 21	+·52	−·03
5174 ,,	+·31	+·17
5177 ,,	+·36	+·14
5178 ,,	+·54	+·15
5179 ,,	+·51	+·29
Mean	+·45	+·10
Redn. to L.	−·02	·00
Deduced.....	2h 36m 38s·114	51° 59′ 17″·00
+ 32° 490.		
Provisional.....	2h 36m 38s·53	32° 28′ 32″·4
1901.		
5359 Jan. 13	−·47	−·27
5365 Jan. 14	+·48†	−·18†
5366 ,,	−·21†	+·02†
5367 ,,	−·22†	−·04†
Mean	−·47	−·27
Redn. to L.	+·03	−·03
Deduced.....	2h 36m 38s·565	32° 28′ 32″·70
+ 50° 613.		
Provisional.....	2h 36m 40s·18	51° 6′ 29″·1
1900.		
5169 Oct. 20	+·15	+·05
5170 ,,	+·29	−·19
5172 ,,	+·24	·00
5173 Oct. 21	+·44	−·07
5174 ,,	+·28	−·14
5177 ,,	+·30	−·09
5178 ,,	+·33	−·38
5179 ,,	+·22	−·29
Mean	+·27	−·12
Redn. to L.	−·02	·00
Deduced.....	2h 36m 40s·154	51° 6′ 29″·22

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 49° 752.		
Provisional.....	2h 36m 45s·91	49° 57′ 33″·9
1900.		
5160 Oct. 14	−·28	−·09
5161 ,,	−·31	−·19
5162 Oct. 15	−·29	−·32
Mean	−·30	−·21
Redn. to L.	+·01	+·02
Deduced.....	2h 36m 45s·940	49° 57′ 34″·09
+ 49° 753.		
Provisional.....	2h 36m 47s·84	50° 10′ 19″·1
1900.		
5160 Oct. 14	+·05	+·03
5161 ,,	+·03	+·10
5162 Oct. 15	+·11	+·04
Mean	+·07	+·06
Redn. to L.	+·01	+·02
Deduced.....	2h 36m 47s·832	50° 10′ 19″·02
+ 33° 494.		
Provisional.....	2h 37m 16s·74	33° 44′ 52″·6
1901.		
5359 Jan. 13	−·23	−·06
Redn. to L.	+·03	−·03
Deduced.....	2h 37m 16s·754	33° 44′ 52″·69
+ 50° 617.		
Provisional.....	2h 37m 24s·19	50° 47′ 57″·4
1900.		
5162 Oct. 15	+·09*	(+·76)
5169 Oct. 20	+·31	−·22
5170 ,,	+·33	−·17
5172 ,,	+·24	−·36
5173 Oct. 21	+·21†	−·12†
5174 ,,	+·23†	−·18†

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 50° 617—*contd.*		
1900.		
5177 Oct. 21	+″·56†	−″·59†
5178 ,,	+·70†	−·71†
5179 ,,	+1·00†	−·84†
Mean	+·25	−·25
Red^{n}. to L.	−·02	+·01
Deduced.....	2^{h} 37^{m} 24^{s}·166	50° 47′ 57″·64
+ 50° 620.		
Provisional.....	2^{h} 38^{m} 4^{s}·86	50° 18′ 13″·1
1900.		
5160 Oct. 14	−″·15	−″·16
5161 ,,	·00	−·24
5162 Oct. 15	·00	−·07
Mean	−·05	−·15
Red^{n}. to L.	+·01	+·02
Deduced.....	2^{h} 38^{m} 4^{s}·864	50° 18′ 13″·23
+ 50° 623.		
Provisional.....	2^{h} 38^{m} 32^{s}·88	51° 9′ 45″·4
1900.		
5169 Oct. 20	−″·29	−″·04
5170 ,,	−·15	−·21
5172 ,,	−·08	−·05
Mean	−·17	−·10
Red^{n}. to L.	−·02	·00
Deduced.....	2^{h} 38^{m} 32^{s}·900	51° 9′ 45″·50
+ 48° 750.		
Provisional.....	2^{h} 38^{m} 56^{s}·25	48° 32′ 8″·4
1900.		
5154 Oct. 10	−″·04	+″·35
5160 Oct. 14	−·13*	−·08*
5161 ,,	−·29*	+·01*
Mean	−·12	+·16
Red^{n}. to L.	−·01	+·02
Deduced.....	2^{h} 38^{m} 56^{s}·263	48° 32′ 8″·22

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 47° 692.		
Provisional.....	2^{h} 38^{m} 58^{s}·54	47° 43′ 15″·9
1900.		
5142 Oct. 7	+″·38*	−″·24*
5143 ,,	+·37*	−·15*
5145 ,,	+·56*	−·17*
5146 ,,	+·16*	−·21*
5148 Oct. 8	+·66	−·39
5150 ,,	+·30	−·26
5152 ,,	+·29	−·20
5154 Oct. 10	+·31	−·09
Mean	+·38	−·21
Red^{n}. to L.	−·02	+·01
Deduced.....	2^{h} 38^{m} 58^{s}·505	47° 43′ 16″·10
+ 32° 498.		
Provisional.....	2^{h} 39^{m} 4^{s}·31	32° 19′ 51″·0
1901.		
5359 Jan. 13	+″·15	−″·10
5365 Jan. 14	+·61	−·03
5366 ,,	+·61	−·10
5367 ,,	+·40	−·15
Mean	+·41	−·09
Red^{n}. to L.	+·02	−·04
Deduced.....	2^{h} 39^{m} 4^{s}·276	32° 19′ 51″·13
+ 46° 628.		
Provisional.....	2^{h} 39^{m} 23^{s}·00	46° 48′ 42″·5
1900.		
5138 Oct. 4	−″·65†	+″·77†
5139 ,,	−·48†	+·83†
5142 Oct. 7	−·23	−·03
5143 ,,	−·06	−·16
5145 ,,	+·17	−·15
5146 ,,	−·01	+·02
5148 Oct. 8	−·20*	−·25*
5150 ,,	−·16*	−·07*
5152 ,,	+·15*	+·24*
Mean	−·04	−·07
Red^{n}. to L.	−·02	+·01
Deduced.....	2^{h} 39^{m} 23^{s}·006	46° 48′ 42″·56

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 50° 627.		
Provisional.....	2^{h} 39^{m} 29^{s}·41	50° 11′ 44″·4
1900.		
5160 Oct. 14	−″·18	−″·07
5161 ,,	−·05	+·05
5162 Oct. 15	+·09	−·36
Mean	−·04	−·15
Red^{n}. to L.	+·01	+·02
Deduced.....	2^{h} 39^{m} 29^{s}·413	50° 11′ 44″·53
+ 48° 752.		
Provisional.....	2^{h} 39^{m} 35^{s}·56	48° 56′ 22″·4
1900.		
5154 Oct. 10	+″·03*	−″·09*
5160 Oct. 14	−·11	+·11
5161 ,,	−·06	+·03
5162 Oct. 15	−·26*	+·02*
Mean	−·10	+·03
Red^{n}. to L.	·00	+·02
Deduced.....	2^{h} 39^{m} 35^{s}·570	48° 56′ 22″·35
+ 44° 573.		
Provisional.....	2^{h} 39^{m} 44^{s}·37	45° 1′ 45″·2
1900.		
5126 Oct. 1	+″·05	−″·21
5129 Oct. 2	+·07	−·09
5130 ,,	−·14	−·04
5131 ,,	(+·24)	(−·05)
5133 ,,	+·08	−·42
5134 Oct. 3	−·04*	−·13*
Mean	+·01	−·18
Red^{n}. to L.	−·01	+·01
Deduced.....	2^{h} 39^{m} 44^{s}·370	45° 1′ 45″·37

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 31° 477.		
Provisional.....	2h 40m 19s·08	31° 34′ 27″·4
1901.		
5365 Jan. 14	−″·13	+″·61
5366 ,,	+·02	+·44
5367 ,,	+·07	+·39
5368 Jan. 15	−·24*	−·08*
5369 ,,	−·13*	+·14*
5371 ,,	+·17*	+·39*
5372 ,,	−·08*	+·10*
Mean	−·04	+·33
Redn. to L.	+·01	−·04
Deduced.....	2h 40m 19s·082	31° 34′ 27″·11
+ 45° 660.		
Provisional.....	2h 40m 33s·93	45° 29′ 46″·8
1900.		
5126 Oct. 1	+″·35	−″·16
5129 Oct. 2	+·37	−·45
5130 ,,	+·29	−·40
5131 ,,	(+·75)	(−·57)
5133 ,,	+·28	−·55
5134 Oct. 3	+·16	−·65
5138 Oct. 4	+·44	−·28
5139 ,,	+·17	−·45
5141 Oct. 5	(+·13)	(−1·13)
Mean	+·29	−·42
Redn. to L.	+·01	+·01
Deduced.....	2h 40m 33s·901	45° 29′ 47″·21
+ 44° 577.		
Provisional.....	2h 41m 0s·69	44° 50′ 44″·6
1900.		
5126 Oct. 1	+″·04	−″·21
5129 Oct. 2	+·27	−·11
5130 ,,	−·03	−·28
5131 ,,	(+·41)	(−·15)
5133 ,,	+·04	−·35
5134 Oct. 3	+·02*	−·18*
Mean	+·07	−·23
Redn. to L.	+·01	+·01
Deduced.....	2h 41m 0s·682	44° 50′ 44″·82

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 49° 773.		
Provisional.....	2h 41m 5s·09	49° 39′ 34″·3
1900.		
5160 Oct. 14	−″·08	+″·16
5161 ,,	+·03	+·27
5162 Oct. 15	−·08	+·30
Mean	−·05	+·25
Redn. to L.	+·01	+·02
Deduced.....	2h 41m 5s·094	49° 39′ 34″·03
+ 47° 698.		
Provisional.....	2h 41m 20s·23	47° 46′ 43″·2
1900.		
5142 Oct. 7	+″·06	−″·18
5143 ,,	+·16	+·03
5145 ,,	+·05	−·26
5146 ,,	−·02	−·34
5148 Oct. 8	+·08	−·45
5150 ,,	+·14	−·32
5152 ,,	+·13	−·15
5154 Oct. 10	+·17	−·25
Mean	+·10	−·24
Redn. to L.	−·02	+·01
Deduced.....	2h 41m 20s·222	47° 46′ 43″·43
+ 48° 760.		
Provisional.....	2h 41m 25s·43	48° 48′ 6″·4
1900.		
5160 Oct. 14	−″·13	−″·02
5161 ,,	−·21	+·04
Mean	−·17	+·01
Redn. to L.	+·02	+·02
Deduced.....	2h 41m 25s·445	48° 48′ 6″·37
+ 33° 512.		
Provisional.....	2h 41m 27s·41	33° 13′ 1″·7
1901.		
5359 Jan. 13	−″·04	+″·04
5365 Jan. 14	+·05	−·55

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 33° 512—*contd.*		
1901.		
5366 Jan. 14	+″·17	−″·11
5367 ,,	+·02	−·01
Mean	+·04	−·13
Redn. to L.	+·02	−·04
Deduced.....	2h 41m 27s·405	33° 13′ 1″·87
+ 50° 636.		
Provisional.....	2h 41m 35s·77	50° 28′ 43″·6
1900.		
5162 Oct. 15	+″·25	−″·08
Redn. to L.	·00	+·01
Deduced.....	2h 41m 35s·744	50° 28′ 43″·67
+ 47° 700.		
Provisional.....	2h 41m 43s·82	48° 2′ 10″·0
1900.		
5148 Oct. 8	+″·15	−″·07
5150 ,,	+·16	+·10
5152 ,,	+·04	−·15
5154 Oct. 10	−·09	·00
Mean	+·05	−·03
Redn. to L.	−·04	+·01
Deduced.....	2h 41m 43s·819	48° 2′ 10″·02
+ 46° 638.		
Provisional.....	2h 41m 50s·63	46° 32′ 46″·7
1900.		
5134 Oct. 3	(−″·09)	(+″·60)
5138 Oct. 4	−·07	−·25
5139 ,,	+·23	−·20
5141 Oct. 5	(−·10)	(−·16)
5142 Oct. 7	+·20	−·29
5143 ,,	+·39	−·33
5145 ,,	+·26	−·01
5146 ,,	+·26	−·16
Mean	+·21	−·21
Redn. to L.	+·02	+·01
Deduced.....	2h 41m 50s·608	46° 32′ 46″·90

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 47° 702.		
Provisional.....	2h 42m 19s·25	47° 12′ 30″·8
1900.		
5141 Oct. 5	(−·35)	(+1·25)
5142 Oct. 7	+·19	+·14
5143 ,,	−·01	+·12
5145 ,,	−·10	−·06
5146 ,,	−·11	+·18
5148 Oct. 8	−·04	+·38
5150 ,,	+·03	+·01
5152 ,,	−·34	+·21
Mean	−·06	+·14
Redn. to L.	−·02	+·01
Deduced.....	2h 42m 19s·258	47° 12′ 30″·65
+ 46° 641.		
Provisional.....	2h 42m 28s·24	46° 48′ 4″·6
1900.		
5138 Oct. 4	−·31	+·18
5139 ,,	−·20	+·22
5141 Oct. 5	(−·34)	(+·58)
5142 Oct. 7	−·20	+·28
5143	−·44	+·15
5145	−·46	+·21
5146 ,,	−·07	+·27
5148 Oct. 8	−·25	+·23
5150 ,,	−·28	+·12
5152 ,,	−·38	−·09
Mean	−·29	+·18
Redn. to L.	·00	·00
Deduced.....	2h 42m 28s·268	46° 48′ 4″·42
+ 48° 764.		
Provisional.....	2h 42m 43s·28	48° 27′ 49″·4
1900.		
5154 Oct. 10	+·16	+·01
Redn. to L.	−·03	+·01
Deduced.....	2h 42m 43s·267	48° 27′ 49″·38

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 45° 662.		
Provisional.....	2h 42m 54s·97	45° 59′ 10″·8
1900.		
5129 Oct. 2	+·12	+·34
5130 ,,	+·35	+·21
5131 ,,	(+·40)	(−·13)
5133 ,,	+·40	+·24
5134 Oct. 3	+·25	+·02
5138 Oct. 4	+·43	−·33
5139 ,,	+·23	−·08
5141 Oct. 5	(+·23)	(−·34)
Mean	+·30	+·05
Redn. to L.	+·02	·00
Deduced.....	2h 42m 54s·940	45° 59′ 10″·75
+ 49° 782.		
Provisional.....	2h 42m 58s·89	49° 35′ 54″·4
1900.		
5160 Oct. 14	+·53	+·18
5161 ,,	+·40	+·34
5162 Oct. 15	+·23	+·18
Mean	+·37	+·23
Redn. to L.	+·01	+·02
Deduced.....	2h 42m 58s·851	49° 35′ 54″·15
+ 32° 508.		
Provisional.....	2h 43m 1s·13	32° 25′ 41″·2
1901.		
5359 Jan. 13	−·16†	−·07†
5365 Jan. 14	−·40	+·32
5366 ,,	−·30	+·24
5367 ,,	−·22	+·23
5368 Jan. 15	−·06	+·15
5369 ,,	−·06	+·28
5371 ,,	−·42	+·05
5372 ,,	−·25	−·13
Mean	−·25	+·17
Redn. to L.	·00	−·05
Deduced.....	2h 43m 1s·150	32° 25′ 41″·08

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 32° 507.		
Provisional.....	2h 43m 1s·16	32° 45′ 32″·6
1901.		
5359 Jan. 13	+·60*	−·14*
5365 Jan. 14	−·16	−·14
5366 ,,	−·09	·00
5367 ,,	−·11	+·12
5368 Jan. 15	−·26	+·40
5369 ,,	−·32	+·25
5371 ,,	−·14	+·45
5372 ,,	+·22	+·55
Mean	−·05	+·19
Redn. to L.	+·01	−·04
Deduced.....	2h 43m 1s·163	32° 45′ 32″·45
+ 44° 582.		
Provisional.....	2h 43m 4s·76	44° 59′ 17″·8
1900.		
5126 Oct. 1	+·16	+·25
5129 Oct. 2	+·23	+·05
5130 ,,	+·12	+·08
5131 ,,	(+·27)	(+·10)
5133 ,,	+·17	+·02
5134 Oct. 3	·00	+·20
Mean	+·13	+·14
Redn. to L.	+·01	+·01
Deduced.....	2h 43m 4s·747	44° 59′ 17″·65
+ 31° 483.		
Provisional.....	2h 43m 9s·58	31° 41′ 46″·5
1901.		
5365 Jan. 14	−·35	+·16
5366 ,,	−·09	+·08
5367 ,,	−·14	+·08
5368 Jan. 15	+·30	+·01
5369 ,,	+·19	−·02
5371 ,,	+·01	+·03
5372 ,,	+·17	−·19
Mean	+·01	+·03
Redn. to L.	·00	−·05
Deduced.....	2h 43m 9s·579	31° 41′ 46″·52

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 47° 709.		
Provisional.....	2h 43m 21s·24	47° 43′ 50″·9
1900.		
5142 Oct. 7	−·12	−·17
5143 ,,	−·07	+·03
5145 ,,	+·13	−·16
5146 ,,	+·26	+·06
5148 Oct. 8	+·10	−·37
5150 ,,	+·10	−·19
5152 ,,	−·05	−·14
5154 Oct. 10	−·08	−·09
Mean	+·03	−·13
Redn. to L.	−·02	+·01
Deduced.....	2h 43m 21s·239	47° 43′ 51″·02
+ 46° 644.		
Provisional.....	2h 43m 34s·64	46° 59′ 53″·0
1900.		
5138 Oct. 4	+·68†	+·14†
5139 ,,	+·63†	(+·66)†
5141 Oct. 5	(+·32)	(+·48)
5142 Oct. 7	+·57	−·22
5143 ,,	+·58	−·29
5145 ,,	+·59	+·04
5146 ,,	+·67	−·17
5148 Oct. 8	+·59	+·28
5150 ,,	+·59	+·08
5152 ,,	+·51	+·06
Mean	+·58	−·03
Redn. to L.	−·02	+·01
Deduced.....	2h 43m 34s·585	46° 59′ 53″·02
+ 47° 711.		
Provisional.....	2h 43m 53s·24	47° 52′ 34″·0
1900.		
5142 Oct. 7	−·38	+·09
5143 ,,	−·08	+·19
5145 ,,	−·21	−·15
5146 ,,	−·11	−·17

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 47° 711—*contd.*		
1900.		
5148 Oct. 8	−·23	+·24
5150 ,,	+·03	+·11
5152 ,,	−·31	−·03
5154 Oct. 10	−·28	+·20
Mean	−·20	+·07
Redn. to L.	−·02	·00
Deduced.....	2h 43m 53s·262	47° 52′ 33″·93
+ 45° 665.		
Provisional.....	2h 44m 0s·43	45° 25′ 21″·2
1900.		
5126 Oct. 1	+·15	+·12
5129 Oct. 2	+·27	−·25
5130 ,,	+·27	−·03
5131 ,,	(+·53)	(−·11)
5133 ,,	+·49	−·16
5134 Oct. 3	+·34	+·09
5138 Oct. 4	+·28	+·38
5139 ,,	+·30	−·21
5141 Oct. 5	(+·25)	(−·53)
Mean	+·29	+·01
Redn. to L.	+·01	+·01
Deduced.....	2h 44m 0s·402	45° 25′ 21″·18
+ 43° 586.		
Provisional.....	2h 44m 6s·80	43° 56′ 39″·1
1900.		
5126 Oct. 1	+·49	+·12
Redn. to L.	−·02	·00
Deduced.....	2h 44m 6s·757	43° 56′ 38″·98
+ 45° 667.		
Provisional.....	2h 44m 9s·50	45° 39′ 30″·6
1900.		
5126 Oct. 1	−·05	+·08
5129 Oct. 2	+·22	−·05
5130 ,,	−·12	+·05

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 45° 667—*contd.*		
1900.		
5131 Oct. 2	(+·26)	(+·13)
5133 ,,	+·32	+·13
5134 Oct. 3	+·27	+·05
5138 Oct. 4	·00	−·05
5139 ,,	−·08	−·13
5141 Oct. 5	(+·08)	(−·41)
Mean	+·08	+·01
Redn. to L.	+·01	+·01
Deduced.....	2h 44m 9s·492	45° 39′ 30″·58
+ 48° 770.		
Provisional.....	2h 44m 19s·67	48° 56′ 9″·9
1900.		
5154 Oct. 10	+·08	−·35
5160 Oct. 14	−·33*	−·32*
5161 ,,	−·25*	−·47*
5162 Oct. 15	−·15†	−·29†
Mean	−·10	−·37
Redn. to L.	−·01	+·01
Deduced.....	2h 44m 19s·681	48° 56′ 10″·26
+ 31° 490.		
Provisional.....	2h 44m 23s·26	31° 33′ 33″·6
1901.		
5365 Jan. 14	−·43†	−·33†
5366 ,,	−·76†	−·22†
5367 ,,	−·50†	−·42†
5368 Jan. 15	·00	−·06
5369 ,,	−·17	−·23
5371 ,,	−·45	−·40
5372 ,,	−·92	−·60
Mean	−·39	−·32
Redn. to L.	·00	−·05
Deduced.....	2h 44m 23s·290	31° 33′ 33″·97

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 45° 669.		
Provisional.....	$2^h\ 44^m\ 55^s\cdot64$	45° 34′ 26″·3
1900.		
5126 Oct. 1	−·11	−·02
5129 Oct. 2	−·21	−·19
5130 ,,	−·01	−·08
5131 ,,	(−·10)	(−·35)
5133 ,,	+·09	−·15
5134 Oct. 3	−·15	−·15
5138 Oct. 4	−·09	−·35
5139 ,,	+·04	−·36
5141 Oct. 5	(−·12)	(−·60)
Mean	−·07	−·18
Redn. to L.	+·01	+·01
Deduced.....	$2^h\ 44^m\ 55^s\cdot646$	45° 34′ 26″·47
+ 31° 493.		
Provisional.....	$2^h\ 44^m\ 56^s\cdot05$	31° 57′ 1″·5
1901.		
5365 Jan. 14	+·14	+·25
5366 ,,	+·55	−·06
5367 ,,	+·33	−·03
5368 Jan. 15	+·13	+·10
5369 ,,	−·07	−·06
5371 ,,	−·05	−·03
5372 ,,	+·55	+·22
Mean	+·23	+·06
Redn. to L.	·00	−·05
Deduced.....	$2^h\ 44^m\ 56^s\cdot032$	31° 57′ 1″·49
+ 46° 648.		
Provisional.....	$2^h\ 44^m\ 59^s\cdot87$	46° 25′ 46″·2
1900.		
5134 Oct. 3	−·23	+·36
5138 Oct. 4	−·11	+·17
5139 ,,	−·19	+·45
5141 Oct. 5	(−·21)	(+·26)
5142 Oct. 7	−·30	+·39
5143 ,,	−·36	+·17
5145 ,,	−·33	+·50
5146 ,,	−·30	+·42
Mean	−·25	+·35
Redn. to L.	+·02	−·01
Deduced.....	$2^h\ 44^m\ 59^s\cdot892$	46° 25′ 45″·86

Plate No. and Date.	R.A. 1900 o.	Dec. N. 1900·0.
+ 44° 591.		
Provisional.....	$2^h\ 45^m\ 6^s\cdot74$	44° 38′ 47″·6
1900.		
5126 Oct. 1	−·25	−·11
5129 Oct. 2	−·21	+·21
5130 ,,	−·22	+·07
5131 ,,	(−·22)	(+·41)
5133 ,,	−·05	+·02
5134 Oct. 3	−·24*	−·02*
Mean	−·20	+·02
Redn. to L.	+·01	+·01
Deduced.....	$2^h\ 45^m\ 6^s\cdot758$	44° 38′ 47″·57
+ 44° 593.		
Provisional.....	$2^h\ 45^m\ 16^s\cdot84$	44° 28′ 54″·3
1900.		
5126 Oct. 1	−·23	+·22
5129 Oct. 2	−·44	+·40
5130 ,,	−·17	+·34
5131 ,,	(−·70)	(+·72)
5133 ,,	−·66	+·51
Mean	−·36	+·35
Redn. to L.	−·01	+·01
Deduced.....	$2^h\ 45^m\ 16^s\cdot874$	44° 28′ 53″·94
+ 48° 777.		
Provisional.....	$2^h\ 45^m\ 20^s\cdot15$	48° 28′ 14″·1
1900.		
5154 Oct. 10	−·26	−·08
Redn. to L.	−·04	+·01
Deduced.....	$2^h\ 45^m\ 20^s\cdot180$	48° 28′ 14″·17
+ 47° 720.		
Provisional.....	$2^h\ 45^m\ 37^s\cdot34$	47° 30′ 3″·5
1900.		
5142 Oct. 7	+·30	−·08
5143 ,,	+·11	−·30
5145 ,,	+·14	−·23

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 47° 720—*contd.*		
1900.		
5146 Oct. 7	+·11	−·27
5148 Oct. 8	−·27	−·03
5150 ,,	+·03	−·45
5152 ,,	+·49	−·10
5154 Oct. 10	−·11	+·29
Mean	+·10	−·12
Redn. to L.	−·02	+·01
Deduced.....	$2^h\ 45^m\ 37^s\cdot332$	47° 30′ 3″·61
+ 47° 721.		
Provisional.....	$2^h\ 45^m\ 50^s\cdot91$	48° 0′ 31″·5
1900.		
5148 Oct. 8	−·16	+·07
5150 ,,	−·19	+·26
5152 ,,	+·06	+·20
5154 Oct. 10	+·11	+·10
Mean	−·03	+·15
Redn. to L.	−·04	·00
Deduced.....	$2^h\ 45^m\ 50^s\cdot917$	48° 0′ 31″·35
+ 32° 517.		
Provisional.....	$2^h\ 45^m\ 56^s\cdot84$	32° 19′ 47″·8
1901.		
5365 Jan. 14	+·16*	−·13*
5366 ,,	+·15*	−·24*
5367 ,,	+·35*	−·18*
5368 Jan. 15	+·17	−·28
5369 ,,	+·25	−·17
5371 ,,	+·05	−·25
5372 ,,	−·06	−·02
Mean	+·13	−·18
Redn. to L.	·00	−·05
Deduced.....	$2^h\ 45^m\ 56^s\cdot830$	32° 19′ 48″·03

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 46° 652.		
Provisional.....	2h 47m 16s·62	46° 45′ 6″·8
1900.		
5138 Oct. 4	−·40	−·30
5139 ,,	−·52	−·18
5141 Oct. 5	(+·09)	(+·57)
5142 Oct. 7	−·51	+·33
5143 ,,	−·56	+·49
5145 ,,	−·79	+·45
5146 ,,	−·87	+·33
5148 Oct. 8	−·48	+·36
5150 ,,	−·75	+·61
5152 ,,	−·64	+·16
Mean	−·61	+·23
Redn. to L.	−·01	·00
Deduced.....	2h 47m 16s·679	46° 45′ 6″·57
+ 31° 497.		
Provisional.....	2h 47m 21s·93	31° 14′ 7″·3
1901.		
5368 Jan. 15	−·01	+·01
5369 ,,	+·31	·00
5371 ,,	+·21	−·17
5372 ,,	+·07	−·09
5379 Jan. 17	−·38	+·07
Mean	·00	−·02
Redn. to L.	·00	−·04
Deduced.....	2h 47m 21s·930	31° 14′ 7″·36
+ 32° 522.		
Provisional.....	2h 47m 34s·79	32° 30′ 33″·7
1901.		
5368 Jan. 15	−·27	−·19
5369 ,,	−·22	−·10
5371 ,,	+·12	−·10
5372 ,,	−·23	+·13
Mean	−·15	−·07
Redn. to L.	·00	−·05
Deduced.....	2h 47m 34s·8c2	32° 30′ 33″·82

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 31° 500.		
Provisional.....	2h 48m 4s·41	31° 55′ 43″·3
1901.		
5368 Jan. 15	+·28	−·02
5369 ,,	+·18	−·09
5371 ,,	+·54	+·04
5372 ,,	+·49	·00
5379 Jan. 17	+·10†	−·04†
Mean	+·37	−·02
Redn. to L.	·00	−·05
Deduced.....	2h 48m 4s·381	31° 55′ 43″·37
+ 45° 679.		
Provisional.....	2h 49m 14s·98	45° 26′ 1″·2
1900.		
5126 Oct. 1	−·35†	−·39†
5129 Oct. 2	−·31*	−·31*
5130 ,,	−·30*	−·38*
5131 ,,	(−·85)	(−·62)
5133 ,,	−·25*	−·26*
5134 Oct. 3	−·35*	−·14*
5138 Oct. 4	−·20†	−·13†
5139 ,,	−·18†	−·55†
Mean	−·31	−·26
Redn. to L.	+·01	+·01
Deduced.....	2h 49m 15s·008	45° 26′ 1″·45
+ 44° 598.		
Provisional.....	2h 49m 28s·86	44° 34′ 38″·0
1900.		
5126 Oct. 1	−·26	+·31
5129 Oct. 2	−·42	+·55
5130 ,,	−·06	+·58
5131 ,,	(−·94)	(+·85)
5133 ,,	(−·94)	(+·99)
Mean	−·25	+·47
Redn. to L.	·00	+·01
Deduced.....	2h 49m 28s·883	44° 34′ 37″·52

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 30° 464.		
Provisional.....	2h 49m 39s·35	30° 38′ 14″·3
1901.		
5379 Jan. 17	−·63	−·06
Redn. to L.	·00	−·01
Deduced.....	2h 49m 39s·399	30° 38′ 14″·37
+ 30° 465.		
Provisional.....	2h 49m 50s·62	31° 10′ 29″·9
1901.		
5379 Jan. 17	−·36	−·03
Redn. to L.	·00	−·01
Deduced.....	2h 49m 50s·648	31° 10′ 29″·94
+ 30° 466.		
Provisional.....	2h 50m 30s·13	30° 28′ 33″·8
1901.		
5379 Jan. 17	−·15	−·15
Redn. to L.	·00	−·01
Deduced.....	2h 50m 30s·142	30° 28′ 33″·96
+ 30° 469.		
Provisional.....	2h 51m 58s·20	31° 6′ 53″·1
1901.		
5379 Jan. 17	−·14	+·12
Redn. to L.	·00	−·01
Deduced.....	2h 51m 58s·211	31° 6′ 52″·99
+ 31° 511.		
Provisional.....	2h 52m 5s·70	31° 36′ 55″·1
1901.		
5379 Jan. 17	+·29	−·21
Redn. to L.	·00	−·01
Deduced.....	2h 52m 5s·677	31° 36′ 55″·32

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 30° 474.		
Provisional.....	$2^h\ 53^m\ 52^s{\cdot}66$	$30°\ 12'\ 27''{\cdot}7$
1901.		
5379 Jan. 17	+·42	−·41
Red^n. to L.	·00	−·01
Deduced.....	$2^h\ 53^m\ 52^s{\cdot}628$	$30°\ 12'\ 28''{\cdot}12$
+ 30° 477.		
Provisional.....	$2^h\ 54^m\ 13^s{\cdot}53$	$30°\ 43'\ 39''{\cdot}7$
1901.		
5379 Jan. 17	−·22	+·30
Red^n. to L.	·00	−·01
Deduced.....	$2^h\ 54^m\ 13^s{\cdot}547$	$30°\ 43'\ 39''{\cdot}41$
+ 29° 508.		
Provisional.....	$2^h\ 54^m\ 24^s{\cdot}98$	$30°\ 10'\ 18''{\cdot}1$
1901.		
5379 Jan 17	+·35	−·46
Red^n. to L.	·00	−·01
Deduced.....	$2^h\ 54^m\ 24^s{\cdot}953$	$30°\ 10'\ 18''{\cdot}57$
+ 31° 524.		
Provisional.....	$2^h\ 55^m\ 10^s{\cdot}50$	$31°\ 33'\ 29''{\cdot}9$
1901.		
5379 Jan. 17	+·67	+·39
Red^n. to L.	·00	−·01
Deduced.....	$2^h\ 55^m\ 10^s{\cdot}448$	$31°\ 33'\ 29''{\cdot}52$
+ 28° 507.		
Provisional.....	$3^h\ 7^m\ 35^s{\cdot}09$	$28°\ 51'\ 27''{\cdot}6$
1901.		
5387 Jan. 23	−·10	−·12
Red^n. to L.	+·08	·00
Deduced.....	$3^h\ 7^m\ 35^s{\cdot}002$	$28°\ 51'\ 27''{\cdot}72$

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 28° 511.		
Provisional.....	$3^h\ 11^m\ 1^s{\cdot}90$	$28°\ 23'\ 24''{\cdot}9$
1901.		
5387 Jan. 23	+·05	−·02
5390 Jan. 24	+·23†	−·24†
Mean	+·05	−·02
Red^n. to L.	+·08	·00
Deduced.....	$3^h\ 11^m\ 1^s{\cdot}890$	$28°\ 23'\ 24''{\cdot}92$
+ 27° 488.		
Provisional.....	$3^h\ 11^m\ 2^s{\cdot}12$	$28°\ 6'\ 59''{\cdot}8$
1901.		
5387 Jan. 23	−·39	−·01
5390 Jan. 24	−·53†	+·08†
Mean	−·39	−·01
Red^n. to L.	+·08	·00
Deduced.....	$3^h\ 11^m\ 2^s{\cdot}143$	$28°\ 6'\ 59''{\cdot}81$
+ 28° 514.		
Provisional.....	$3^h\ 12^m\ 24^s{\cdot}85$	$28°\ 20'\ 50''{\cdot}0$
1901.		
5387 Jan. 23	+·35	+·02
5390 Jan. 24	+·49	−·15
Mean	+·42	−·07
Red^n. to L.	+·07	+·03
Deduced.....	$3^h\ 12^m\ 24^s{\cdot}813$	$28°\ 20'\ 50''{\cdot}04$
+ 27° 492.		
Provisional.....	$3^h\ 13^m\ 38^s{\cdot}04$	$27°\ 10'\ 42''{\cdot}8$
1901.		
5390 Jan 24	+·13	+·18
Red^n. to L.	+·06	+·05
Deduced.....	$3^h\ 13^m\ 38^s{\cdot}026$	$27°\ 10'\ 42''{\cdot}57$

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 28° 516.		
Provisional.....	$3^h\ 14^m\ 17^s{\cdot}21$	$28°\ 41'\ 9''{\cdot}5$
1901.		
5387 Jan. 23	−·09	+·11*
5390 Jan. 24	−·18	−·13
Mean	−·14	−·01
Red^n. to L.	+·07	+·03
Deduced.....	$3^h\ 14^m\ 17^s{\cdot}215$	$28°\ 41'\ 9''{\cdot}48$
+ 28° 517		
Provisional.....	$3^h\ 14^m\ 37^s{\cdot}00$	$28°\ 27'\ 57''{\cdot}6$
1901.		
5387 Jan. 23	+·15	·00
5390 Jan. 24	+·16	−·52
Mean	+·16	−·26
Red^n. to L.	+·07	+·03
Deduced.....	$3^h\ 14^m\ 36^s{\cdot}983$	$28°\ 27'\ 57''{\cdot}83$
+ 27° 500.		
Provisional.....	$3^h\ 16^m\ 11^s{\cdot}58$	$27°\ 14'\ 54''{\cdot}7$
1901.		
5390 Jan. 24	−·14	+·38
Red^n. to L.	+·06	+·05
Deduced.....	$3^h\ 16^m\ 11^s{\cdot}586$	$27°\ 14'\ 54''{\cdot}27$
+ 27° 501.		
Provisional.....	$3^h\ 16^m\ 58^s{\cdot}05$	$27°\ 19'\ 44''{\cdot}6$
1901.		
5390 Jan. 24	−·09	−·09
Red^n. to L.	+·06	+·05
Deduced.....	$3^h\ 16^m\ 58^s{\cdot}052$	$27°\ 19'\ 44''{\cdot}64$

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
	+ 26° 550.	
Provisional.....	3h 17m 32s·47	27° 2′ 43″·7
1901.		
5390 Jan. 24	−″·07	−″·09
Redn. to L.	+·06	+·05
Deduced.....	3h 17m 32s·471	27° 2′ 43″·74
	+ 28° 526.	
Provisional.....	3h 18m 45s·56	28° 17′ 58″·7
1901.		
5390 Jan. 24	−″·16	+″·24
Redn. to L.	+·06	+·05
Deduced.....	3h 18m 45s·568	28° 17′ 58″·41
	+ 28° 532.	
Provisional.....	3h 20m 31s·35	28° 22′ 0″·0
1901.		
5390 Jan. 24	+″·21	+″·33
Redn. to L.	+·06	+·05
Deduced.....	3h 20m 31s·330	28° 21′ 59″·62
	+ 26° 572.	
Provisional.....	3h 28m 57s·17	26° 16′ 22″·7
1901.		
5393 Jan. 29	−″·08	−″·24
Redn. to L.	+·04	+·03
Deduced.....	3h 28m 57s·173	26° 16′ 22″·91
	+ 26° 574.	
Provisional.....	3h 29m 19s·20	26° 30′ 59′·2
1901.		
5393 Jan. 29	−″·70	−″·01
Redn. to L.	+·04	+·03
Deduced.....	3h 29m 19s·249	26° 30′ 59″·18

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
	+ 26° 579.	
Provisional.....	3h 30m 6s·05	27° 0′ 40″·9
1901.		
5393 Jan. 29	+″·17	+″·46
Redn. to L.	+·04	+·03
Deduced.....	3h 30m 6s·034	27° 0′ 40″·41
	+ 25° 580.	
Provisional.....	3h 31m 9s·98	25° 40′ 3″·5
1901.		
5393 Jan. 29	−″·22	+″·13
Redn. to L.	+·04	+·03
Deduced.....	3h 31m 9s·993	25° 40′ 3″·34
	+ 25° 584.	
Provisional.....	3h 33m 29s·12	25° 48′ 4″·6
1901.		
5393 Jan. 29	−″·19	−″·02
Redn. to L.	+·04	+·03
Deduced.....	3h 33m 29s·131	25° 48′ 4″·59
	+ 26° 590.	
Provisional.....	3h 33m 29s·70	26° 53′ 47″·0
1901.		
5393 Jan. 29	−″·22	+″·15
Redn. to L.	+·04	+·03
Deduced.....	3h 33m 29s·713	26° 53′ 46″·82
	+ 26° 596.	
Provisional.....	3h 34m 11s·99	26° 33′ 45″·7
1901.		
5393 Jan. 29	−″·48	−″·04
Redn. to L.	+·04	+·03
Deduced.....	3h 34m 12s·023	26° 33′ 45″·71

Plate No. and Date.	R.A. 1900 0.	Dec. N. 1900·0.
	+ 26° 601.	
Provisional.....	3h 36m 27s·69	26° 15′ 11″·2
1901.		
5393 Jan. 29	+″·26	+″·21
Redn. to L.	+·04	+·03
Deduced.....	3h 36m 27s·668	26° 15′ 10″·96
	+ 25° 593.	
Provisional.....	3h 37m 7s·25	25° 21′ 45″·4
1901.		
5393 Jan. 29	−″·23	+″·02
Redn. to L.	+·04	+·03
Deduced.....	3h 37m 7s·264	25° 21′ 45″·35
	+ 25° 598.	
Provisional.....	3h 37m 38s·66	25° 48′ 29″·0
1901.		
5393 Jan. 29	+″·77	−″·27
Redn. to L.	+·04	+·03
Deduced.....	3h 37m 38s·600	25° 48′ 29″·24
	+ 25° 597.	
Provisional.....	3h 37m 38s·95	25° 27′ 10″·3
1901.		
5393 Jan. 29	+″·38	−″·15
Redn. to L.	+·04	+·03
Deduced.....	3h 37m 38s·919	25° 27′ 10″·42
	+ 25° 599.	
Provisional.....	3h 37m 44s·83	26° 3′ 48″·5
1901.		
5393 Jan. 29	+″·48	−″·23
Redn. to L.	+·04	+·03
Deduced.....	3h 37m 44s·792	26° 3′ 48″·70

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 24° 568.		
Provisional.....	$3^h\ 41^m\ 47^s{\cdot}09$	25° 4′ 38″·0
1901.		
5394 Feb. 1	+″·08	−″·04
Red^n. to L.	−·01	−·01
Deduced.....	$3^h\ 41^m\ 47^s{\cdot}085$	25° 4′ 38″·05
+ 24° 571.		
Provisional.....	$3^h\ 42^m\ 8^s{\cdot}01$	24° 40′ 48″·2
1901.		
5394 Feb. 1	−″·11	−″·46
Red^n. to L.	−·01	−·01
Deduced	$3^h\ 42^m\ 8^s{\cdot}019$	24° 40′ 48″·67
+ 25° 620.		
Provisional.....	$3^h\ 42^m\ 41^s{\cdot}18$	25° 29′ 34″·6
1901.		
5394 Feb. 1	+″·21	−″·30
Red^n. to L.	−·01	−·01
Deduced.....	$3^h\ 42^m\ 41^s{\cdot}165$	25° 29′ 34″·91
+ 23° 561.		
Provisional.....	$3^h\ 43^m\ 24^s{\cdot}10$	24° 4′ 32″·5
1901.		
5394 Feb. 1	−″·18	+″·05
Red^n. to L.	−·01	−·01
Deduced.....	$3^h\ 43^m\ 24^s{\cdot}114$	24° 4′ 32″·46
+ 25° 624.		
Provisional.....	$3^h\ 44^m\ 18^s{\cdot}14$	25° 16′ 40″·1
1901.		
5394 Feb. 1	−″·32	+″·31
Red^n. to L.	−·01	−·01
Deduced.....	$3^h\ 44^m\ 18^s{\cdot}164$	25° 16′ 39″·80

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 24° 578.		
Provisional.....	$3^h\ 44^m\ 29^s{\cdot}97$	24° 11′ 30″·5
1901.		
5394 Feb. 1	−″·13	−″·04
Red^n. to L.	−·01	−·01
Deduced.....	$3^h\ 44^m\ 29^s{\cdot}980$	24° 11′ 30″·55
+ 24° 583.		
Provisional.....	$3^h\ 45^m\ 25^s{\cdot}71$	24° 51′ 39″·2
1901.		
5394 Feb. 1	−″·08	+″·10
Red^n. to L.	−·01	−·01
Deduced.....	$3^h\ 45^m\ 25^s{\cdot}717$	24° 51′ 39″·11
+ 24° 587.		
Provisional.....	$3^h\ 46^m\ 12^s{\cdot}51$	24° 52′ 0″·6
1901.		
5394 Feb. 1	+″·07	+″·24
Red^n. to L.	−·01	−·01
Deduced.....	$3^h\ 46^m\ 12^s{\cdot}506$	24° 52′ 0″·37
+ 24° 589.		
Provisional.....	$3^h\ 46^m\ 54^s{\cdot}53$	24° 25′ 3″·3
1901.		
5394 Feb. 1	−″·02	+″·07
Red^n. to L.	−·01	−·01
Deduced.....	$3^h\ 46^m\ 54^s{\cdot}532$	24° 25′ 3″·24
+ 25° 637.		
Provisional.....	$3^h\ 47^m\ 6^s{\cdot}66$	25° 14′ 12″·4
1901.		
5394 Feb. 1	+″·51	+″·09
Red^n. to L.	−·01	−·01
Deduced.....	$3^h\ 47^m\ 6^s{\cdot}623$	25° 14′ 12″·32

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 23° 584.		
Provisional.....	$3^h\ 49^m\ 4^s{\cdot}53$	23° 39′ 46″·1
1901.		
5397 Feb. 3	+″·10	+″·05
5398 ,,	+·10	+·22
Mean	+·10	+·14
Red^n. to L.	+·01	−·02
Deduced.....	$3^h\ 49^m\ 4^s{\cdot}522$	23° 39′ 45″·98
+ 24° 595.		
Provisional.....	$3^h\ 49^m\ 7^s{\cdot}58$	24° 48′ 40″·7
1901.		
5397 Feb. 3	+″·41	−″·52
5398 ,,	+·15	−·25
Mean	+·28	−·39
Red^n. to L.	+·01	−·02
Deduced.....	$3^h\ 49^m\ 7^s{\cdot}559$	24° 48′ 41″·11
+ 23° 586.		
Provisional.....	$3^h\ 49^m\ 50^s{\cdot}84$	23° 32′ 9″·5
1901.		
5397 Feb. 3	+″·23	+″·44
Red^n. to L.	+·01	−·02
Deduced.....	$3^h\ 49^m\ 50^s{\cdot}823$	23° 32′ 9″·08
+ 23° 589.		
Provisional.....	$3^h\ 50^m\ 40^s{\cdot}79$	23° 18′ 14″·6
1901.		
5397 Feb. 3	+″·06	″·00
5398 ,,	−·02	−·26
Mean	+·02	−·13
Red^n to L.	+·01	−·02
Deduced.....	$3^h\ 50^m\ 40^s{\cdot}788$	23° 18′ 14″·75

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 24° 598.		
Provisional.....	3h 51m 11s·02	24° 59′ 31″·5
1901.		
5397 Feb. 3	−·02	−·21
5398 „	−·18	+·17
Mean	−·10	−·02
Redn. to L.	+·01	−·02
Deduced.....	3h 51m 11s·027	24° 59′ 31″·54
+ 24° 599.		
Provisional.....	3h 51m 27s·57	24° 10′ 19″·7
1901.		
5397 Feb. 3	−·40	−·13
5398 „	−·32	−·22
Mean	−·36	−·18
Redn. to L.	+·01	−·02
Deduced.....	3h 51m 27s·596	24° 10′ 19″·90
+ 23° 594.		
Provisional	3h 52m 22s·72	23° 47′ 39″·3
1901.		
5397 Feb. 3	−·39	−·03
5398 „	−·29	+·07
Mean	−·34	+·02
Redn. to L.	+·01	−·02
Deduced.....	3h 52m 22s·744	23° 47′ 39″·30
+ 23° 600.		
Provisional.....	3h 53m 6s·41	23° 20′ 29″·2
1901.		
5397 Feb. 3	−·46	−·12
5398 „	+·06	−·16
Mean	−·20	−·14
Redn. to L.	+·01	−·02
Deduced.....	3h 53m 6s·424	23° 20′ 29″·36

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 24° 602.		
Provisional.....	3h 53m 13s·13	24° 55′ 47″·2
1901.		
5397 Feb. 3	+·52	+·41
5398 „	+·71	+·37
Mean	+·62	+·39
Redn. to L.	+·01	−·02
Deduced.....	3h 53m 13s·084	24° 55′ 46″·83
+ 24° 605.		
Provisional.....	3h 53m 54s·51	24° 24′ 42″·5
1901.		
5397 Feb. 3	−·07	+·11
5398 „	−·07	+·03
Mean	−·07	+·07
Redn. to L.	+·01	−·02
Deduced.....	3h 53m 54s·515	24° 24′ 42″·45
+ 22° 613.		
Provisional.....	3h 54m 11s·41	23° 6′ 55″·9
1901.		
5404 Feb. 5	+·38	−·10
Redn. to L.	·00	+·01
Deduced.....	3h 54m 11s·383	23° 6′ 55″·99
+ 22° 617 (1st).		
Provisional.....	3h 55m 0s·38	22° 55′ 11″·3
1901.		
5404 Feb. 6	−·43	+·13
Redn. to L.	+·01	+·03
Deduced	3h 55m 0s·411	22° 55′ 11″·14

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 22° 617 (2nd).		
Provisional.....	3h 55m 0s·84	22° 55′ 6″·7
1901.		
5404 Feb. 5	−·27	+·16
Redn. to L.	·00	+·01
Deduced.....	3h 55m 0s·859	22° 55′ 6″·53
+ 23° 606.		
Provisional.....	3h 57m 48s·91	24° 7′ 32″·1
1901.		
5404 Feb. 5	−·15	+·40
Redn. to L.	·00	+·01
Deduced.....	3h 57m 48s·921	24° 7′ 31″·69
+ 23° 609.		
Provisional.....	3h 58m 22s·76	23° 49′ 50″·8
1901.		
5404 Feb. 5	−·31	−·13
Redn. to L.	·00	+·01
Deduced.....	3h 58m 22s·782	23° 49′ 50″·92
+ 23° 611.		
Provisional.....	3h 58m 52s·39	23° 14′ 5″·2
1901.		
5407 Feb. 6	+·11	+·03
Redn. to L.	+·01	+·03
Deduced.....	3h 58m 52s·381	23° 14′ 5″·14
+ 23° 613.		
Provisional.....	3h 59m 17s·12	23° 31′ 26″·1
1901.		
5404 Feb. 5	−·05	−·25
5407 Feb. 6	+·25*	+·05*
Mean	+·05	−·15
Redn. to L.	·00	+·02
Deduced.....	3h 59m 17s·116	23° 31′ 26″·23

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 22° 629.		
Provisional.....	3h 59m 27s·22	22° 53′ 44″·6
1901.		
5404 Feb. 5	+″·12	−″·03
5407 Feb. 6	+·02	+·12
Mean	+·07	+·05
Redn. to L.	+·01	+·02
Deduced.....	3h 59m 27s·214	22° 53′ 44″·53
+ 23° 617.		
Provisional.....	4h 0m 39s·62	23° 14′ 51″·5
1901.		
5404 Feb. 5	+″·01	+″·13
5407 Feb. 6	+·11	+·08
Mean	+·06	+·11
Redn. to L.	+·01	+·02
Deduced.....	4h 0m 39s·615	23° 14′ 51″·37
+ 23° 624.		
Provisional.....	4h 2m 52s·46	23° 36′ 19″·7
1901.		
5404 Feb. 5	+″·34†	+″·30†
5407 Feb. 6	+·04	+·07
Mean	+·04	+·07
Redn. to L.	+·01	+·03
Deduced.....	4h 2m 52s·456	23° 36′ 19″·60
+ 22° 637 (1st).		
Provisional.....	4h 2m 56s·33	22° 49′ 54″·5
1901.		
5404 Feb. 5	+″·25†	−″·31†
5407 Feb. 6	+·01	−·05
Mean	+·01	−·05
Redn. to L.	+·01	+·03
Deduced.....	4h 2m 56s·329	22° 49′ 54″·52

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 22° 637 (2nd).		
Provisional.....	4h 2m 56s·39	22° 49′ 59″·9
1901.		
5404 Feb. 5	+″·06†	−″·32†
5407 Feb. 6	+·01	−·29
Mean	+·01	−·29
Redn. to L.	+·01	+·03
Deduced.....	4h 2m 56s·389	22° 50′ 0″·16
+ 23° 632.		
Provisional.....	4h 4m 17s·50	23° 43′ 6″·0
1901.		
5407 Feb. 6	−″·30	+″·02
Redn. to L.	+·01	+·03
Deduced.....	4h 4m 17s·521	23° 43′ 5″·95
+ 23° 642.		
Provisional.....	4h 6m 26s·49	23° 19′ 1″·1
1901.		
5407 Feb. 6	−″·29	−″·15
Redn. to L.	+·01	+·03
Deduced.....	4h 6m 26s·510	23° 19′ 1″·22
+ 23° 645.		
Provisional.....	4h 6m 48s·04	23° 15′ 48″·9
1901.		
5407 Feb. 6	+″·40	−″·09
Redn. to L.	+·01	+·03
Deduced.....	4h 6m 48s·010	23° 15′ 48″·96

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 22° 649.		
Provisional.....	4h 6m 55s·41	22° 9′ 23″·0
1901.		
5407 Feb. 6	−″·36	+″·16
Redn. to L.	+·01	+·03
Deduced.....	4h 6m 55s·435	22° 9′ 22″·81
+ 21° 635.		
Provisional.....	4h 17m 27s·20	21° 8′ 44″·4
1901.		
5408 Feb. 11	+″·60	−″·01
5409 ,,	+·14	−·02
5412 ,,	+·68	−·22
5413 ,,	+·36	−·08
Mean	+·45	−·08
Redn. to L.	−·01	+·01
Deduced.....	4h 17m 27s·169	21° 8′ 44″·47
+ 20° 751.		
Provisional.....	4h 17m 38s·74	20° 44′ 56″·5
1901.	″	″
5408 Feb. 11	−·25	+·15
5409 ,,	−·52	+·30
5412 ,,	−·21	+·45
5413 ,,	−·47	+·25
Mean	−·36	+·29
Redn. to L.	−·01	+·01
Deduced.....	4h 17m 38s·766	20° 44′ 56″·20
+ 21° 639.		
Provisional.....	4h 18m 6s·03	21° 18′ 28″·3
1901.		
5408 Feb. 11	+″·28	+″·01
5409 ,,	+·23	+·09
5412 ,,	+·35	−·22
5413 ,,	+·21	+·16
Mean	+·27	+·01
Redn. to L.	−·01	+·01
Deduced.....	4h 18m 6s·012	21° 18′ 28″·28

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 21° 641.		
Provisional.....	4h 18m 18s·31	21° 30′ 17″·9
1901.		
5408 Feb. 11	−″·49	+″·06
5409 „	−·36	+·26
5412 „	−·26	−·10
5413 „	−·35	+·10
Mean	−·37	+·08
Redn. to L.	−·01	+·01
Deduced.....	4h 18m 18s·337	21° 30′ 17″·81
+ 20° 754.		
Provisional.....	4h 19m 53s·55	20° 54′ 30″·2
1901.		
5408 Feb. 11	−″·05	−″·15
5409 „	+·25	−·13
5412 „	−·13	−·21
5413 „	+·17	−·09
Mean	+·06	−·15
Redn. to L.	−·01	+·01
Deduced.....	4h 19m 53s·546	20° 54′ 30″·34
+ 21° 644.		
Provisional.....	4h 20m 22s·81	21° 14′ 36″·8
1901.		
5408 Feb. 11	+″·12	+″·05
5409 „	+·08	+·02
5412 „	+·10	+·01
5413 „	+·06	+·03
Mean	+·09	+·03
Redn. to L.	−·01	+·01
Deduced.....	4h 20m 22s·804	21° 14′ 36″·76
+ 20° 756.		
Provisional.....	4h 21m 13s·49	20° 45′ 58″·2
1901.		
5408 Feb. 11	+″·31	″·00
5409 „	+·30	−·05
5412 „	+·20	+·10
5413 Feb. 11	+″·18	−″·11
5414 Feb. 12	+·48	+·17
5415 „	+·05	+·06
5416 „	+·46	+·06
Mean	+·29	+·03
Redn. to L.	−·01	·00
Deduced.....	4h 21m 13s·470	20° 45′ 58″·17
+ 21° 647.		
Provisional.....	4h 22m 4s·57	21° 23′ 49″·1
1901.		
5408 Feb. 11	−″·52	+″·27
5409 „	−·42	+·03
5412 „	−·59	+·09
5413 „	−·52	+·28
5414 Feb. 12	−·79*	+·40*
5415 „	−·83*	+·52*
5416 „	−·40*	+·33*
Mean	−·56	+·24
Redn. to L.	−·01	·00
Deduced.....	4h 22m 4s·610	21° 23′ 48″·86
+ 20° 760.		
Provisional.....	4h 22m 44s·32	20° 36′ 35″·5
1901.		
5408 Feb. 11	+″·17	−″·21
5409 „	+·45	−·33
5412 „	+·03	−·01
5413 „	+·34	−·15
5414 Feb. 12	+·23	−·09
5415 „	+·08	−·06
5416 „	+·35	−·20
Mean	+·24	−·15
Redn. to L.	−·01	·00
Deduced.....	4h 22m 44s·304	20° 36′ 35″·65
+ 20° 761.		
Provisional.....	4h 22m 48s·89	20° 27′ 18″·2
1901.		
5408 Feb. 11	−″·20	−″·13
5409 „	−·12	−·16
5412 „	−·15	+·11
5413 „	−·01	−·36
5414 Feb. 12	·00	−·09
5415 „	−·05	−·04
5416 „	−·03	−·18
Mean	−·08	−·12
Redn. to L.	−·01	·00
Deduced.....	4h 22m 48s·896	20° 27′ 18″·32
+ 19° 731.		
Provisional.....	4h 24m 25s·94	19° 37′ 21″·0
1901.		
5414 Feb. 12	+″·01	−″·04
5415 „	−·02	−·11
5416 „	−·13	+·13
5420 Feb. 13	−·18	+·05
5421 „	−·14	+·29
5422 „	−·43	+·19
5426 „	−·46	+·16
5427 „	−·50	−·22
Mean	−·22	+·05
Redn. to L.	−·03	−·01
Deduced.....	4h 24m 25s·957	19° 37′ 20″·96
+ 19° 733.		
Provisional.....	4h 25m 22s·82	19° 55′ 2″·6
1901.		
5414 Feb. 12	−″·03	−″·07
5415 „	+·22	+·15
5416 „	+·01	+·11
5420 Feb. 13	+·10	+·06
5421 „	+·26	−·06
5422 „	+·05	+·28
5426 „	+·34	+·08
5427 „	+·09	+·15
Mean	+·13	+·08
Redn. to L.	−·03	−·01
Deduced.....	4h 25m 22s·813	19° 55′ 2″·53

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 20° 772.		
Provisional.....	4h 25m 45s·61	20° 34′ 3″·8
1901.		
5415 Feb. 12	+″·41	−″·20
5420 Feb. 13	+·12	+·29
5421 ,,	+·71	+·17
5422 ,,	+·31	+·21
5426 ,,	+·45	+·04
5427 ,,	+·32	+·38
Mean	+·39	+·10
Redn. to L.	−·04	−·01
Deduced.....	4h 25m 45s·585	20° 34′ 3″·71
+ 21° 657.		
Provisional.....	4h 26m 11s·99	21° 25′ 3″·1
1901.		
5414 Feb. 12	−″·38	+″·36
5415 ,,	−·41	+·04
5416 ,,	−·42	+·17
Mean	−·40	+·19
Redn. to L.	−·01	−·01
Deduced.....	4h 26m 12s·019	21° 25′ 2″·92
+ 19° 736.		
Provisional.....	4h 27m 31s·75	19° 36′ 7″·1
1901.		
5414 Feb. 12	+″·12†	−″·51†
5416 ,,	−·01†	−·44†
5420 Feb. 13	+·37	−·18
5421 ,,	+·31	−·17
5422 ,,	+·32	−·06
5426 ,,	+·31	−·18
5427 ,,	+·21	−·15
Mean	+·30	−·15
Redn. to L.	−·05	−·01
Deduced.....	4h 27m 31s·733	19° 36′ 7″·26

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 20° 778.		
Provisional.....	4h 28m 51s·80	20° 53′ 43″·5
1901.		
5414 Feb. 12	+″·40†	−″·09†
5415 ,,	+·57†	−·39†
5416 ,,	+·17†	+·01†
5420 Feb. 13	−·16	−·01
5421 ,,	+·02	−·18
5422 ,,	·00	−·16
5426 ,,	−·08	−·19
5427 ,,	+·11	+·16
Mean	−·02	−·08
Redn. to L.	−·05	−·01
Deduced.....	4h 28m 51s·805	20° 53′ 43″·59
+ 19° 740.		
Provisional.....	4h 29m 47s·94	19° 45′ 47″·9
1901.		
5420 Feb. 13	−″·24	+″·18
5421 ,,	−·50	+·22
5422 ,,	−·27	+·18
5426 ,,	−·29	+·14
5427 ,,	−·16	+·13
5428 Feb. 14	−·35	+·25
Mean	−·31	+·19
Redn. to L.	−·05	−·01
Deduced.....	4h 29m 47s·965	19° 45′ 47″·72
+ 19° 742.		
Provisional.....	4h 29m 50s·78	19° 40′ 31″·3
1901.		
5420 Feb. 13	−″·17	−″·09
5421 ,,	−·30	+·06
5422 ,,	−·08	−·21
5426 ,,	−·18	−·08
5427 ,,	−·26	−·15
5428 Feb. 14	−·54	−·23
Mean	−·30	−·13
Redn. to L.	−·05	−·01
Deduced.....	4h 29m 50s·804	19° 40′ 31″·44

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 19° 744.		
Provisional.....	4h 30m 43s·10	19° 33′ 18″·5
1901.		
5420 Feb. 13	−″·05	″·00
5421 ,,	−·01	+·04
5422 ,,	·00	−·06
5426 ,,	−·04	+·08
5427 ,,	+·15	−·12
5428 Feb. 14	−·17	−·01
Mean	−·04	−·01
Redn. to L.	−·05	−·01
Deduced.....	4h 30m 43s·106	19° 33′ 18″·52
+ 19° 745.		
Provisional.....	4h 30m 51s·32	19° 17′ 21″·9
1901.		
5420 Feb. 13	+″·17†	−″·20†
5421 ,,	+·14†	−·45†
5422 ,,	+·53†	−·42†
5426 ,,	+·31†	−·34†
5427 ,,	+·62†	−·27†
5428 Feb. 14	+·22	−·04
Mean	+·22	−·04
Redn. to L.	−·06	·00
Deduced.....	4h 30m 51s·309	19° 17′ 21″·94
+ 20° 785.		
Provisional.....	4h 32m 21s·83	20° 29′ 1″·9
1901.		
5420 Feb. 13	+″·06†	−″·09†
5421 ,,	−·44†	+·08†
5422 ,,	−·38†	+·02†
5426 ,,	−·38†	+·25†
5427 ,,	−·54†	+·09†
5428 Feb. 14	−·34	+·08
Mean	−·34	+·08
Redn. to L.	−·06	·00
Deduced.....	4h 32m 21s·858	20° 29′ 1″·82

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 18° 666.		
Provisional.....	4h 32m 41s·75	18° 31′ 59″·9
1901.		
5429 Feb. 15	−″·37	−″·26
5430 ,,	+·03	−·09
5431 ,,	+·13	+·07
Mean	−·07	−·09
Redn. to L.	−·02	·00
Deduced.....	4h 32m 41s·756	18° 31′ 59″·99
+ 19° 755.		
Provisional.....	4h 35m 42s·51	20° 4′ 13″·6
1901.		
5428 Feb. 14	+″·42*	+″·06*
5429 Feb. 15	−·34	+·27
5430 ,,	−·32	+·24
5431 ,,	−·20	−·07
Mean	−·15	+·13
Redn. to L.	−·03	·00
Deduced.....	4h 35m 42s·523	20° 4′ 13″·47
+ 19° 759.		
Provisional.....	4h 35m 51s·30	19° 53′ 43″·9
1901.		
5428 Feb. 14	+″·75*	−″·10*
5429 Feb. 15	+·32	−·04
5430 ,,	+·16	−·11
5431 ,,	+·10	−·22
Mean	+·30	−·12
Redn. to L.	−·03	·00
Deduced.....	4h 35m 51s·281	19° 53′ 44″·02
+ 18° 684.		
Provisional.....	4h 37m 1s·38	18° 31′ 56″·5
1901.		
5429 Feb. 15	−″·07	+″·16
5430 ,,	−·13	+·19
5431 ,,	−·14	+·37
Mean	−·11	+·24
Redn. to L.	−·02	·00
Deduced.....	4h 37m 1s·389	18° 31′ 56″·26

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 19° 774.		
Provisional.....	4h 39m 43s·44	19° 8′ 38″·1
1901.		
5429 Feb. 15	+″·45	−″·14
5430 ,,	+·27	−·22
5431 ,,	+·12	−·15
5434 Feb. 17	+·27	−·68
Mean	+·28	−·34
Redn. to L.	−·02	·00
Deduced.....	4h 39m 43s·422	19° 8′ 38″·44
+ 18° 717.		
Provisional.....	4h 40m 15s·07	18° 37′ 3″·4
1901.		
5434 Feb. 17	−″·20	−″·06
Redn. to L.	−·02	+·03
Deduced.....	4h 40m 15s·085	18° 37′ 3″·43
+ 18° 719.		
Provisional.....	4h 40m 26s·42	18° 33′ 13″·9
1901.		
5434 Feb. 17	−″·39	−″·19
Redn. to L.	−·02	+·03
Deduced.....	4h 40m 26s·449	18° 33′ 14″·06
+ 19° 777.		
Provisional.....	4h 40m 44s·16	19° 18′ 44″·0
1901.		
5434 Feb. 17	−″·20	−″·19
Redn. to L.	−·02	+·03
Deduced.....	4h 40m 44s·176	19° 18′ 44″·16
+ 18° 725		
Provisional.....	4h 41m 4s·00	18° 53′ 56″·2
1901.		
5434 Feb. 17	+″·41	−″·15
Redn. to L.	−·02	+·03
Deduced.....	4h 41m 3s·973	18° 53′ 56″·32

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 18° 727.		
Provisional.....	4h 41m 17s·83	18° 18′ 27″·7
1901.		
5434 Feb. 17	+″·21	−″·15
Redn. to L.	−·02	+·03
Deduced.....	4h 41m 17s·817	18° 18′ 27″·82
+ 19° 782.		
Provisional.....	4h 41m 51s·38	19° 8′ 22″·6
1901.		
5434 Feb. 17	+″·39	″·00
Redn. to L.	−·02	+·03
Deduced.....	4h 41m 51s·354	19° 8′ 22″·57
+ 18° 734.		
Provisional.....	4h 42m 50s·80	18° 32′ 33″·9
1901.		
5434 Feb. 17	−″·16	+″·24
Redn. to L.	−·02	+·03
Deduced.....	4h 42m 50s·813	18° 32′ 33″·63
+ 18° 738.		
Provisional.....	4h 44m 27s·34	19° 1′ 10″·9
1901.		
5434 Feb. 17	+″·29	+″·50
Redn. to L.	−·02	+·03
Deduced.....	4h 44m 27s·321	19° 1′ 10″·37
+ 18° 743.		
Provisional.....	4h 45m 31s·41	18° 40′ 11″·0
1901.		
5434 Feb. 17	−″·58	+″·73
Redn. to L.	−·02	+·03
Deduced.....	4h 45m 31s·452	18° 40′ 10″·24

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VI.—Residuals from Photographs and Deduced Places of Reference Stars.

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 17° 814.		
Provisional.....	$4^h\ 50^m\ 41^s{\cdot}32$	17° 50′ 43″·6
1901.		
5436 Feb. 20	−″·03	+″·12
5438 ,,	+·01	+·02
5441 ,,	−·08	+·10
Mean	−·03	+·08
Redn. to L.	·00	+·02
Deduced.....	$4^h\ 50^m\ 41^s{\cdot}322$	17° 50′ 43″·50
+ 16° 671.		
Provisional.....	$4^h\ 51^m\ 1^s{\cdot}87$	16° 34′ 36″·2
1901.		
5436 Feb. 20	−″·53	−″·09
5438 ,,	−·51	·00
5441 ,,	−·47	+·13
Mean	−·50	+·01
Redn. to L.	·00	+·02
Deduced.....	$4^h\ 51^m\ 1^s{\cdot}905$	16° 34′ 36″·17
+ 16° 672.		
Provisional.....	$4^h\ 51^m\ 35^s{\cdot}73$	16° 59′ 48″·4
1901.		
5436 Feb. 20	−″·80	+″·18
5438 ,,	−·84	+·12
5441 ,,	−·91	+·15
Mean	−·85	+·15
Redn. to L.	·00	+·02
Deduced.....	$4^h\ 51^m\ 35^s{\cdot}789$	16° 59′ 48″·23
+ 16° 679.		
Provisional.....	$4^h\ 54^m\ 6^s{\cdot}94$	16° 40′ 41″·3
1901.		
5436 Feb. 20	+″·41	−″·12
5438 ,,	+·37	−·10
5441 ,,	+·29	−·15
Mean	+·36	−·12
Redn. to L.	·00	+·02
Deduced.....	$4^h\ 54^m\ 6^s{\cdot}915$	16° 40′ 41″·40

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 16° 685.		
Provisional.....	$4^h\ 56^m\ 8^s{\cdot}53$	16° 41′ 13′·1
1901.		
5436 Feb. 20	+″·46	−″·08
5438 ,,	+·52	+·01
5441 ,,	+·55	−·26
Mean	+·51	−·11
Redn. to L.	·00	+·02
Deduced.....	$4^h\ 56^m\ 8^s{\cdot}495$	16° 41′ 13″·19
+ 16° 688.		
Provisional.....	$4^h\ 58^m\ 17^s{\cdot}84$	16° 59′ 5″·8
1901.		
5436 Feb. 20	+″·50	−″·03
5438 ,,	+·44	−·03
5441 ,,	+·60	+·06
Mean	+·51	·00
Redn. to L.	·00	+·02
Deduced.....	$4^h\ 58^m\ 17^s{\cdot}805$	16° 59′ 5″·78
+ 16° 742.		
Provisional.....	$5^h\ 11^m\ 20^s{\cdot}02$	16° 14′ 30″·6
1901.		
5452 Feb. 25	−″·10	+″·17
Redn. to L.	−·02	−·02
Deduced.....	$5^h\ 11^m\ 20^s{\cdot}028$	16° 14′ 30″·45
+ 15° 779.		
Provisional.....	$5^h\ 11^m\ 25^s{\cdot}00$	15° 9′ 14″·0
1901.		
5452 Feb. 25	−″·22	−″·29
Redn. to L.	−·02	−·02
Deduced.....	$5^h\ 11^m\ 25^s{\cdot}017$	15° 9′ 14″·31

Plate No. and Date.	R.A. 1900·0.	Dec. N. 1900·0.
+ 15° 789.		
Provisional.....	$5^h\ 14^m\ 18^s{\cdot}57$	16° 1′ 7″·2
1901.		
5452 Feb. 25	+″·47	−″·30
Redn. to L.	−·02	−·02
Deduced.....	$5^h\ 14^m\ 18^s{\cdot}539$	16° 1′ 7″·52
+ 14° 881.		
Provisional.....	$5^h\ 14^m\ 53^s{\cdot}28$	14° 57′ 26″·8
1901.		
5452 Feb. 25	−″·05	+″·10
Redn. to L.	−·02	−·02
Deduced.....	$5^h\ 14^m\ 53^s{\cdot}285$	14° 57′ 26″·72
+ 15° 790.		
Provisional.....	$5^h\ 14^m\ 59^s{\cdot}32$	15° 32′ 6″·9
1901.		
5452 Feb. 25	+″·08	+″·18
Redn. to L.	−·02	−·02
Deduced.....	$5^h\ 14^m\ 59^s{\cdot}316$	15° 32′ 6″·74
+ 15° 795.		
Provisional.....	$5^h\ 15^m\ 54^s{\cdot}85$	15° 44′ 55′·5
1901.		
5452 Feb. 25	−″·17	+″·16
Redn. to L.	−·02	−·02
Deduced.....	$5^h\ 15^m\ 54^s{\cdot}863$	15° 44′ 55″·36

* Weight ½ has been given to these results, the star being between 55′ and 60′ from the centre of the plate.
† Not used in forming the mean, the star being more than 60′ from the centre of the plate.

TABLE VII.—Mean Places of Reference Stars, 1900·0.

Number in B.D.	Right Ascension. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.	Declination. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.
°	h m s	s	s	° ′ ″	″	″
+ 49 399	1 24 0·477	0·472	0·47	+ 49 25 30·86	30·78	30·8
46 370	24 6·150	6·082	6·10	46 29 29·40	29·19	29·3
51 317	24 26·123	26·145	26·15	51 34 41·92	41·68	41·5
47 429	24 33·544	33·509	33·51	47 22 50·04	50·37	50·3
46 373	24 47·948	47·933	47·93	47 3 4·57	4·58	4·5
47 434	24 51·675	51·700	51·71	47 54 4·40	4·42	4·4
48 453	24 54·367	54·310	54·32	48 49 42·30	42·44	42·4
48 454	25 25·831	25·859	25·86	48 31 27·59	27·56	27·5
48 455	25 26·346	26·349	26·34	48 16 17·76	17·61	17·5
51 323	25 46·522	46·488	46·48	51 57 17·07	17·30	17·2
50 298	26 12·654	12·690	12·70	50 38 51·82	52·43	52·1
47 442	26 16·890	16·905	16·90	47 54 13·10	12·92	12·9
50 299	26 22·589	22·589	22·59	50 18 34·43	34·43	34·4
50 300	26 48·651	48·703	48·72	50 58 5·12	5·11	5·0
50 301	26 59·896	59·896	59·90	50 22 1·08	1·08	1·1
48 463	27 16·204	16·216	16·21	48 30 18·73	18·85	18·9
51 331	27 58·689	58·689	58·69	51 19 13·34	13·53	13·4
45 376	28 0·372	0·363	0·36	45 27 47·45	47·48	47·3
47 450	28 5·321	5·319	5·32	47 54 30·33	30·50	30·5
48 470	28 20·347	20·299	20·31	49 3 4·23	3·86	3·7
45 379	28 33·208	33·246	33·25	46 0 46·16	46·19	46·0
51 334	28 33·781	33·787	33·79	51 38 29·01	28·96	28·9
44 326	28 37·800	37·801	37·80	45 4 58·14	57·97	57·8
45 383	29 15·826	15·862	15·87	45 19 0·32	0·34	0·2
44 329	29 20·376	20·359	20·36	44 24 51·71	51·81	51·6
51 338	29 22·545	22·498	22·51	51 39 7·99	7·74	7·7
46 389	29 30·426	30·465	30·47	46 22 51·56	51·83	51·8
46 393	29 59·337	59·272	59·28	46 36 11·74	11·59	11·5
48 477	30 3·137	3·173	3·17	48 41 35·87	35·87	35·7
46 397	30 18·722	18·724	18·73	46 48 54·05	53·98	53·8
47 460	30 20·277	20·274	20·27	48 12 43·66	43·71	43·7
51 339	30 24·375	24·340	24·34	51 14 15·94	15·94	15·9
47 462	30 32·853	32·862	32·85	47 33 44·57	44·71	44·7
52 387	30 39·363	39·418	39·42	52 35 43·22	43·23	43·1
47 463	30 40·306	40·326	40·33	47 48 16·99	17·05	17·0
50 314	30 44·623	44·602	44·59	50 44 59·43	59·46	59·5
49 418	30 56·223	56·223	56·34	49 25 43·50	43·50	43·6
51 344	31 9·435	9·478	9·48	52 7 14·78	14·92	14·8
46 404	31 12·920	12·886	12·89	46 26 18·98	18·83	18·7
45 392	31 13·769	13·747	13·76	45 56 57·50	57·60	57·6
45 394	31 25·135	25·127	25·13	45 26 52·16	52·16	52·2
44 335	32 5·079	5·137	5·13	44 18 31·02	30·96	30·9
44 337	32 20·575	20·566	20·58	45 9 17·90	17·90	17·9
45 398	32 22·325	22·317	22·31	45 55 7·00	6·91	6·9
44 341	32 30·335	30·287	30·31	44 53 26·42	26·42	26·2
52 393	32 31·705	31·713	31·70	52 43 47·28	47·03	46·9
43 337	32 39·731	39·733	39·73	43 38 8·46	8·41	8·3
53 355	33 5·037	5·064	5·05	53 37 37·13	37·21	37·1
43 341	33 10·194	10·223	10·22	43 31 33·22	33·15	33·1
52 399	33 13·497	13·473	13·47	52 24 27·19	27·09	27·0
51 357	33 13·697	13·701	13·70	51 45 32·69	32·63	32·9
43 343	33 21·026	21·021	21·02	43 52 39·06	39·27	39·2
51 360	33 34·418	34·396	34·41	52 8 21·80	21·80	21·6
53 363	33 51·494	51·485	51·49	53 21 38·76	39·16	39·3
51 363	34 2·601	2·567	2·55	51 21 27·66	27·55	27·4
51 364	34 10·346	10·349	10·34	52 1 21·22	21·51	21·5
44 346	34 45·245	45·272	45·27	44 16 29·25	29·24	29·3
+ 44 347	1 34 48·018	48·002	48·01	+ 44 30 48·61	48·51	48·4

Number in B.D.	Right Ascension. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.	Declination. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.
°	h m s	s	s	° ′ ″	″	″
+ 45 416	1 35 22·657	22·670	22·66	+ 45 54 23·81	23·90	23·8
52 406	35 23·220	23·234	23·22	52 52 14·31	14·40	14·4
44 352	35 50·848	50·834	50·84	45 4 17·99	17·87	17·8
42 351	35 57·958	57·980	58·00	42 21 32·13	32·09	32·0
42 352	36 3·710	3·681	3·70	43 8 4·07	4·28	4·2
42 354	36 15·962	15·962	15·96	42 30 57·03	57·03	56·9
45 422	36 23·925	23·970	23·98	45 32 9·76	9·95	10·0
44 354	37 11·200	11·166	11·17	44 49 5·37	5·35	5·3
52 420	37 17·186	17·158	17·16	52 22 54·40	54·32	54·2
42 356	37 17·348	17·380	17·38	43 12 1·65	1·70	1·7
53 375	37 25·589	25·565	25·55	53 26 42·16	42·04	42·0
54 368	37 47·026	46·992	46·98	54 22 59·73	59·83	59·8
52 424	37 58·545	58·532	58·52	52 41 8·65	8·63	8·6
42 360	38 5·301	5·284	5·28	42 44 13·95	14·02	13·9
42 361	38 13·553	13·564	13·55	43 8 41·95	41·96	42·0
52 433	39 43·332	43·347	43·33	53 6 22·56	22·53	22·5
43 364	40 15·623	15·620	15·62	44 8 45·16	45·21	45·0
42 370	40 16·765	16·732	16·73	43 12 17·04	16·93	16·9
41 342	41 11·300	11·290	11·29	41 41 38·13	38·24	38·1
42 373	41 25·405	25·372	25·37	42 34 50·65	50·75	50·5
53 388	41 35·240	35·250	35·26	53 23 25·35	25·42	25·3
41 347	41 45·110	45·125	45·12	41 55 23·74	23·72	23·7
52 441	41 53·045	53·019	53·01	52 44 58·95	58·81	58·8
42 375	41 55·677	55·677	55·68	42 42 44·29	44·19	44·0
54 383	42 39·693	39·693	39·69	54 38 37·89	37·89	37·7
41 352	42 55·473	55·490	55·49	42 12 34·05	33·93	33·9
53 395	43 10·962	10·988	10·98	53 25 0·94	1·02	1·0
43 373	43 11·222	11·219	11·22	43 14 15·03	15·03	14·9
41 353	43 14·308	14·308	14·31	41 29 28·97	28·97	28·9
54 388	43 57·670	57·645	57·65	54 43 14·61	14·46	14·4
53 398	44 0·503	0·498	0·49	53 14 45·52	45·60	45·6
54 392	44 42·206	42·206	42·20	54 54 37·54	37·54	37·5
54 393	44 53·520	53·513	53·51	54 25 44·76	44·75	44·7
42 388	45 3·106	3·098	3·10	43 1 46·33	46·32	46·3
53 402	45 11·655	11·654	11·65	53 22 19·23	19·40	19·4
42 390	45 21·815	21·825	21·83	42 16 6·85	6·86	6·8
40 384	45 37·300	37·351	37·35	40 57 32·04	32·25	32·0
39 421	46 25·447	25·489	25·48	40 3 11·30	11·03	10·9
41 362	46 43·175	43·175	43·17	41 20 51·61	51·61	51·6
40 390	46 49·078	49·090	49·09	40 59 27·34	27·46	27·4
41 364	47 10·131	10·151	10·15	42 2 16·10	16·00	16·0
40 394	47 17·350	17·324	17·33	40 14 11·06	11·04	11·1
53 416	48 7·433	7·415	7·41	53 23 58·89	58·84	58·9
54 413	48 13·173	13·189	13·17	54 14 10·78	10·66	10·7
53 419	48 25·798	25·783	25·78	53 41 49·19	49·36	49·2
40 400	48 27·428	27·428	27·43	40 23 51·76	51·76	51·7
40 401	48 38·927	38·942	38·95	41 8 57·81	57·90	58·0
39 434	48 52·663	52·641	52·63	40 12 44·00	43·81	43·8
41 374	50 28·450	28·415	28·41	41 24 8·34	8·46	8·4
41 377	51 9·584	9·567	9·56	41 16 37·72	37·89	37·8
54 424	51 12·915	12·947	12·93	54 52 53·23	53·25	53·3
40 406	51 13·882	13·903	13·90	40 16 19·15	19·16	19·2
53 428	51 36·409	36·410	36·40	54 7 12·60	12·71	12·8
54 429	52 10·153	10·134	10·13	55 5 40·28	40·39	40·4
40 412	52 20·666	20·655	20·66	40 25 34·26	34·20	34·2
39 447	52 22·200	22·214	22·22	40 3 3·59	3·62	3·6
39 448	53 36·220	36·219	36·22	40 4 42·65	42·76	42·7
+ 40 415	1 53 39·238	39·199	39·20	+ 40 51 51·20	51·11	51·0

TABLE VII.—Mean Places of Reference Stars, 1900·0.

Number in B.D.	Right Ascension. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.	Declination. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.
°	h m s	s	s	° ′ ″	″	″
+ 37 452	1 54 18·538	18·538	18·52	+ 38 6 45·04	45·04	44·9
39 450	54 28·708	28·708	28·70	39 28 55·49	55·43	55·2
38 392	54 46·796	46·763	46·78	39 8 29·82	29·69	29·7
53 437	55 22·633	22·662	22·66	53 32 1·30	1·07	1·0
53 439	55 38·327	38·327	38·33	54 0 15·32	15·32	15·3
39 454	55 45·134	45·120	45·12	40 11 2·75	2·70	2·6
54 444	56 26·842	26·833	26·83	54 45 0·16	0·21	0·1
37 465	56 38·117	38·117	38·11	38 3 41·94	41·94	41·9
53 440	56 44·971	44·963	44·97	54 12 43·41	43·47	43·4
55 484	57 4·030	4·032	4·01	55 17 12·68	12·79	12·7
37 468	57 6·200	6·238	6·22	38 9 53·36	53·12	53·1
54 448	57 6·288	6·300	6·30	54 38 21·00	20·81	20·9
39 457	57 45·175	45·211	45·21	39 34 30·24	30·20	30·3
54 452	57 57·916	57·914	57·90	54 16 33·99	33·88	33·9
54 453	58 17·969	17·939	17·94	55 8 36·07	36·01	36·0
38 402	58 43·352	43·340	43·34	38 57 18·23	18·31	18·1
54 457	59 8·351	8·362	8·35	54 26 56·26	56·33	56·3
39 464	1 59 43·265	43·250	43·25	39 16 52·44	52·65	52·7
53 451	2 0 3·004	2·992	2·99	53 49 48·58	48·68	48·7
38 408	0 22·597	22·597	22·60	38 25 18·34	18·34	18·3
39 468	0 30·270	30·270	30·27	40 7 15·30	15·30	15·3
53 453	1 36·474	36·463	36·45	54 7 38·26	38·45	38·4
37 486	2 27·103	27·041	27·04	37 23 5·43	5·28	5·2
54 469	3 9·162	9·170	9·16	55 0 48·72	48·54	48·4
53 459	3 20·871	20·888	20·88	53 51 27·56	27·41	27·5
54 470	3 27·824	27·839	27·83	54 49 6·72	6·63	6·4
36 426	4 37·582	37·582	37·58	37 13 44·83	44·83	44·8
38 423	4 41·633	41·633	41·63	38 13 52·56	52·56	52·5
53 470	4 59·611	59·612	59·60	54 4 46·88	47·06	47·2
36 427	5 25·360	25·327	25·33	36 52 51·00	51·16	51·2
54 483	6 11·449	11·453	11·44	54 38 27·82	27·77	27·7
53 474	6 26·079	26·084	26·07	53 44 57·14	57·28	57·3
36 435	6 45·230	45·244	45·24	36 54 1·28	1·32	1·3
54 494	7 42·044	42·064	42·06	54 50 56·87	56·84	56·8
37 505	7 52·478	52·477	52·48	37 56 20·67	20·58	20·6
36 440	7 53·567	53·574	53·58	37 8 58·84	58·90	58·9
37 506	8 4·502	4·502	4·51	38 10 15·60	15·60	15·6
53 486	8 4·907	4·907	4·91	54 3 51·52	51·52	51·3
54 497	8 17·155	17·155	17·16	54 37 14·15	14·15	14·1
37 512	9 25·439	25·439	25·44	37 55 2·23	2·23	2·3
36 446	9 52·887	52·898	52·90	36 18 19·31	19·40	19·4
36 450	10 27·275	27·287	27·29	36 40 59·72	59·70	59·7
37 514	10 54·321	54·321	54·33	37 40 56·72	56·72	56·7
36 453	11 8·326	8·336	8·34	37 1 11·64	11·24	11·2
37 516	11 14·713	14·726	14·73	37 22 8·42	8·48	8·5
53 497	11 34·873	34·851	34·85	53 48 59·92	59·99	60·0
37 518	11 49·131	49·131	49·14	37 37 28·12	28·12	28·1
52 563	12 6·031	6·056	6·04	53 6 51·34	51·24	51·1
53 501	12 6·457	6·460	6·45	53 38 0·85	0·72	0·6
36 458	12 32·947	32·933	32·93	36 36 16·85	17·00	17·0
53 507	14 20·117	20·076	20·08	54 3 3·89	4·08	4·0
36 464	14 57·592	57·559	57·56	36 36 45·08	45·15	45·2
54 530	15 44·089	44·149	44·14	54 37 21·67	21·79	21·9
36 470	17 13·107	13·120	13·12	37 6 16·13	16·20	16·2
53 519	17 20·148	20·147	20·15	53 44 9·98	9·81	9·8
53 521	17 28·877	28·856	28·85	53 19 11·71	11·54	11·5
52 576	17 35·334	35·344	35·33	52 59 37·08	36·98	36·9
+ 36 473	2 17 36·757	36·751	36·76	+ 36 38 51·71	51·37	51·3

Number in B.D.	Right Ascension. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.	Declination. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.
°	h m s	s	s	° ′ ″	″	″
+ 52 580	2 19 3·159	3·154	3·14	+ 52 55 1·69	1·67	1·6
36 478	19 9·912	9·892	9·89	36 39 59·87	59·82	59·7
35 470	19 20·760	20·770	20·77	35 31 8·59	8·51	8·5
34 432	19 25·339	25·322	25·32	34 35 21·26	21·55	21·5
53 525	19 30·313	30·270	30·26	53 40 26·90	27·13	27·0
36 482	19 44·326	44·326	44·32	36 33 40·08	40·08	40·1
34 435	20 8·276	8·276	8·27	34 24 7·25	7·40	7·3
52 581	20 30·538	30·537	30·52	53 2 59·16	59·14	59·0
34 437	20 45·260	45·208	45·21	35 9 50·33	50·35	50·4
54 554	21 46·728	46·728	46·72	54 31 35·73	35·73	35·8
52 585	21 54·771	54·803	54·80	53 5 37·24	37·15	37·0
35 477	22 1·259	1·264	1·27	35 29 1·82	1·84	1·8
34 442	22 26·925	26·922	26·92	34 51 0·70	0·52	0·5
35 480	22 51·135	51·166	51·17	35 13 12·34	12·19	12·2
52 587	22 52·559	52·550	52·54	52 36 52·85	52·93	52·8
53 532	23 5·278	5·277	5·27	53 24 20·31	20·49	20·5
35 490	24 41·795	41·795	41·80	35 40 21·35	21·26	21·3
33 447	24 57·998	58·017	58·02	33 54 55·14	55·08	55·1
52 592	25 3·161	3·161	3·16	52 23 27·87	27·76	27·7
34 448	25 4·160	4·156	4·16	34 29 14·62	14·80	14·8
35 494	25 5·008	5·049	5·05	35 18 44·78	44·86	44·8
34 449	25 6·738	6·752	6·75	34 57 20·50	20·18	20·6
53 539	25 29·962	29·979	29·98	53 52 0·13	59·94	59 8
53 540	25 49·254	49·260	49·24	53 32 5·54	5·66	5·6
34 454	26 3·366	3·342	3·34	34 14 9·38	9·64	9·7
34 457	26 29·234	29·237	29·24	34 50 17·94	17·83	17·8
33 454	26 50·267	50·253	50·25	34 6 3·82	3·82	3·8
52 595	27 16·863	16·867	16·86	52 23 26·02	26·06	26·0
52 597	27 22·976	23·012	23·00	52 57 54·13	54·08	54·1
34 462	28 12·913	12·893	12·89	34 42 40·92	41·12	41·2
50 587	28 23·843	23·843	23·84	50 45 2·40	2·40	2·4
53 546	28 31·869	31·862	31·85	53 14 57·74	57·55	57·6
53 547	28 34·658	34·658	34·66	53 52 42·61	42·61	42·6
51 598	29 15·639	15·639	15·62	52 2 59·35	59·35	59·3
34 469	29 42·585	42·577	42·58	34 15 4·80	4·88	5·0
34 471	29 45·993	45·980	45·98	34 17 17·70	17·75	17·7
51 599	29 55·836	55·797	55·79	51 31 28·80	28·66	28·6
52 602	30 52·497	52·491	52·48	52 22 39·59	39·75	39·6
50 589	31 23·095	23·095	23·08	50 26 0·99	0·99	0·8
51 604	31 37·424	37·434	37·44	51 38 37·71	37·67	37·5
50 601	33 42·672	42·639	42·64	51 11 33·59	33·96	34·0
32 483	33 45·701	45·701	45·70	33 3 52·73	52·73	52·7
33 481	33 46·984	46·984	46·99	33 31 5·90	5·90	5·9
32 484	33 49·616	49·616	49·62	32 23 1·38	1·38	1·4
49 741	34 18·263	18·296	18·30	49 34 56·04	56·10	56·1
49 743	34 24·984	24·984	24·98	49 41 21·08	21·08	21·1
51 616	35 21·688	21·670	21·67	52 0 20·98	21·04	21·1
51 618	35 38·818	38·846	38·84	51 28 31·17	31·18	31·2
52 617	36 19·710	19·723	19·72	52 19 47·69	47·73	47·7
33 493	36 31·065	31·082	31·09	33 20 25·33	25·28	25·3
51 620	36 38·114	38·155	38·16	51 59 17·00	16·97	17·1
32 490	36 38·565	38·526	38·53	32 28 32·40	32·37	32·4
50 613	36 40·154	40·172	40·18	51 6 29·22	29·06	29·1
49 752	36 45·940	45·912	45·91	49 57 34·09	33·93	33·9
49 753	36 47·832	47·836	47·84	50 10 19·02	19·14	19·1
33 494	37 16 736	16·736	16·74	33 44 52·60	52·60	52·6
50 617	37 24·166	24·189	24·19	50 47 57·64	57·37	57·4
+ 50 620	2 38 4·864	4·863	4·86	+ 50 18 13·23	13·13	13·1

TABLE VII.—Mean Places of Reference Stars, 1900·0.

Number in B.D.	Right Ascension. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.	Declination. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.
°	h m s	s	s	° ′ ″	″	″
+ 50 623	2 38 32·900	32·875	32·88	+ 51 9 45·50	45·30	45·4
48 750	38 56·239	56·239	56·25	48 32 8·30	8·30	8·4
47 692	38 58·505	58·531	58·54	47 43 16·10	15·91	15·9
32 498	39 4·276	4·304	4·31	32 19 51·13	50·98	51·0
46 628	39 23·006	22·997	23·00	46 48 42·56	42·49	42·5
50 627	39 29·413	29·418	29·41	50 11 44·53	44·40	44·4
48 752	39 35·570	35·558	35·56	48 56 22·35	22·41	22·4
44 573	39 44·370	44·371	44·37	45 1 45·37	45·24	45·2
31 477	40 19·082	19·066	19·08	31 34 27·11	27·36	27·4
45 660	40 33·901	33·929	33·93	45 29 47·21	46·85	46·8
44 577	41 0·682	0·691	0·69	44 50 44·82	44·60	44·6
49 773	41 5·094	5·108	5·09	49 39 34·03	34·25	34·3
47 698	41 20·222	20·232	20·23	47 46 43·43	43·21	43·2
48 760	41 25·424	25·424	25·43	48 48 6·33	6·33	6·4
33 512	41 27·405	27·409	27·41	33 13 1·87	1·66	1·7
50 636	41 35·766	35·766	35·77	50 28 43·55	43·55	43·6
47 700	41 43·819	43·820	43·82	48 2 10·02	10·02	10·0
46 638	41 50·608	50·622	50·63	46 32 46·90	46·70	46·7
47 702	42 19·258	19·256	19·25	47 12 30·65	30·72	30·8
46 641	42 28·268	28·245	28·24	46 48 4·42	4·62	4·6
48 764	42 43·279	43·279	43·28	48 27 49·43	49·43	49·4
45 662	42 54·940	54·964	54·97	45 59 10·75	10·74	10·8
49 782	42 58·851	58·881	58·89	49 35 54·15	54·29	54·4
32 508	43 1·150	1·136	1·13	32 25 41·08	41·13	41·2
32 507	43 1·163	1·168	1·16	32 45 32·45	33·02	32·6
44 582	43 4·747	4·756	4·76	44 59 17·65	17·73	17·8
31 483	43 9·579	9·579	9·58	31 41 46·52	46·41	46·5
47 709	43 21·239	21·264	21·24	47 43 51·02	50·87	50·9
46 644	43 34·585	34·643	34·64	46 59 53·02	53·11	53·0
47 711	43 53·262	53·239	53·24	47 52 33·93	33·89	34·0
45 665	44 0·402	0·425	0·43	45 25 21·18	21·13	21·2
43 586	44 6·799	6·799	6·80	43 56 39·12	39·12	39·1
45 667	44 9·492	9·497	9·50	45 39 30·58	30·67	30·6
48 770	44 19·678	19·670	19·67	48 56 10·26	9·90	9·9
31 490	44 23·290	23·260	23·26	31 33 33·97	33·58	33·6
45 669	44 55·646	55·645	55·64	45 34 26·47	26·26	26·3
31 493	44 56·032	56·051	56·05	31 57 1·49	1·51	1·5
46 648	44 59·892	59·853	59·87	46 25 45·86	46·11	46·2
44 591	45 6·758	6·746	6·74	44 38 47·57	47·63	47·6
44 593	45 16·874	16·841	16·84	44 28 53·94	54·27	54·3
48 777	45 20·158	20·158	20·15	48 28 14·14	14·14	14·1
47 720	45 37·332	37·346	37·34	47 30 3·61	3·56	3·5
47 721	45 50·914	50·914	50·91	48 0 31·35	31·48	31·5
32 517	45 56·830	56·846	56·84	32 19 48·03	47·71	47·8
46 652	47 16·679	16·622	16·62	46 45 6·57	6·79	6·8
31 497	47 21·930	21·924	21·93	31 14 7·36	7·34	7·3
32 522	47 34·802	34·792	34·79	32 30 33·82	33·61	33·7
31 500	48 4·381	4·410	4·41	31 55 43·37	43·33	43·3
45 679	49 15·008	14·982	14·98	45 26 1·45	1·16	1·2
44 598	49 28·870	28·870	28·86	44 34 38·06	38·06	38·0
30 464	49 39·381	39·352	39·35	30 38 14·37	14·31	14·3
30 465	49 50·629	50·618	50·62	31 10 29·94	29·87	29·9
30 466	50 30·126	30·126	30·13	30 28 33·81	33·81	33·8
30 469	51 58·204	58·204	58·20	31 6 53·09	53·09	53·1
31 511	52 5·700	5·700	5·70	31 36 55·17	55·17	55·1
30 474	53 52·659	52·659	52·66	30 12 27·65	27·65	27·7
30 477	54 13·528	13·528	13·53	30 43 39·65	39·65	39·7
+ 29 508	2 54 24·978	24·978	24·98	+ 30 10 18·16	18·16	18·1
+ 31 524	2 55 10·502	10·502	10·50	+ 31 33 29·91	29·91	29·9
28 507	3 7 34·999	34·999	35·00	28 51 27·58	27·58	27·6
28 511	11 1·893	1·893	1·90	28 23 24·94	24·94	24·9
27 488	11 2·104	2·104	2·12	28 6 59·76	59·86	59·8
28 514	12 24·813	24·847	24·85	28 20 50·04	49·90	50·0
27 492	13 38·040	38·040	38·04	27 10 42·72	42·72	42·8
28 516	14 17·212	17·212	17·21	28 41 9·48	9·48	9·5
28 517	14 36·993	36·993	37·00	28 27 57·62	57·62	57·6
27 500	16 11·570	11·570	11·58	27 14 54·75	54·65	54·7
27 501	16 58·055	58·055	58·05	27 19 44·53	44·53	44·6
26 550	17 32·466	32·466	32·47	27 2 43·72	43·72	43·7
28 526	18 45·558	45·558	45·56	28 17 58·59	58·59	58·7
28 532	20 31·344	31·344	31·35	28 21 59·90	59·90	0·0
26 572	28 57·164	57·164	57·17	26 16 22·75	22·75	22·7
26 574	29 19·189	19·189	19·20	26 30 59·13	59·13	59·2
26 579	30 6·048	6·048	6·05	27 0 40·82	40·82	40·9
25 580	31 9·976	9·976	9·98	25 40 3·52	3·52	3·5
25 584	33 29·118	29·118	29·12	25 48 4·57	4·57	4·6
26 590	33 29·697	29·697	29·70	26 53 46·97	46·97	47·0
26 596	34 11·991	11·991	11·99	26 33 45·80	45·80	45·7
26 601	36 27·693	27·693	27·69	26 15 11·13	11·13	11·2
25 593	37 7·252	7·252	7·25	25 21 45·39	45·39	45·4
25 598	37 38·662	38·662	38·66	25 48 28·96	28·96	29·0
25 597	37 38·947	38·947	38·95	25 27 10·20	10·20	10·3
25 599	37 44·819	44·819	44·83	26 3 48·43	48·43	48·5
24 568	41 47·084	47·084	47·09	25 4 38·07	38·07	38·0
24 571	42 8·014	8·014	8·01	24 40 48·16	48·16	48·2
25 620	42 41·173	41·173	41·18	25 29 34·59	34·59	34·6
23 561	43 24·106	24·106	24·10	24 4 32·45	32·45	32·5
25 624	44 18·138	18·138	18·14	25 16 40·13	40·13	40·1
24 578	44 29·971	29·971	29·97	24 11 30·48	30·48	30·5
24 583	45 25·712	25·712	25·71	24 51 39·26	39·26	39·2
24 587	46 12·515	12·515	12·51	24 52 0·50	0·50	0·6
24 589	46 54·530	54·536	54·53	24 25 3·37	3·37	3·3
25 637	47 6·659	6·659	6·66	25 14 12·43	12·43	12·4
23 584	49 4·542	4·542	4·53	23 39 46·12	46·12	46·1
24 595	49 7·579	7·579	7·58	24 48 40·69	40·69	40·7
23 586	49 50·835	50·835	50·84	23 32 9·43	9·43	9·5
23 589	50 40·784	40·784	40·79	23 18 14·63	14·63	14·6
24 598	51 11·018	11·018	11·02	24 59 31·49	31·49	31·5
24 599	51 27·572	27·572	27·57	24 10 19·73	19·73	19·7
23 594	52 22·717	22·717	22·72	23 47 39·35	39·35	39·3
23 600	53 6·408	6·408	6·41	23 20 29·40	29·40	29·2
24 602	53 13·131	13·131	13·13	24 55 47·22	47·22	47·2
24 605	53 54·505	54·505	54·51	24 24 42·44	42·44	42·5
22 613	54 11·409	11·409	11·41	23 6 55·88	55·88	55·9
22 617(1)	55 0·386	0·386	0·38	22 55 11·28	11·28	11·3
22 617(2)	55 0·848	0·848	0·84	22 55 6·63	6·63	6·7
23 606	57 48·909	48·909	48·91	24 7 32·23	32·23	32·1
23 609	58 22·755	22·755	22·76	23 49 50·79	50·79	50·8
23 611	58 52·397	52·397	52·39	23 14 5·14	5·14	5·2
23 613	59 17·119	17·119	17·12	23 31 26·03	26·03	26·1
22 629	3 59 27·220	27·227	27·22	22 53 44·61	44·61	44·6
23 617	4 0 39·619	39·619	39·62	23 14 51·48	51·48	51·5
23 624	2 52·458	52·458	52·46	23 36 19·68	19·68	19·7
22 637(1)	2 56·330	56·330	56·33	22 49 54·48	54·48	54·5
22 637(2)	2 56·390	56·390	56·39	22 49 59·90	59·90	59·9
+ 23 632	4 4 17·500	17·500	17·50	+ 23 43 6·00	6·00	6·0

TABLE VII.—Mean Places of Reference Stars, 1900·0.

Number in B.D.	Right Ascension. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.	Declination. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.	Number in B.D.	Right Ascension. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.	Declination. Finally Adopted.	Seconds from Loewy.	Seconds provisionally used.
°	h m s	s	s	° ′ ″	″	″	°	h m s	s	s	° ′ ″	″	″
+ 23 642	4 6 26·486	26·486	26·49	+ 23 19 1·03	1·03	1·1	+ 19 755	4 35 42·523	42·516	42·51	+ 20 4 13·47	13·64	13·6
23 645	6 48·042	48·042	48·04	23 15 48·89	48·89	48·9	19 759	35 51·281	51·298	51·30	19 53 44·02	43·92	43·9
22 649	6 55·403	55·403	55·41	22 9 23·04	23·04	23·0	18 684	37 1·381	1·381	1·38	18 31 56·51	56·51	56·5
21 635	17 27·169	27·204	27·20	21 8 44·47	44·33	44·4	19 774	39 43·439	43·439	43·44	19 8 38·03	38·03	38·1
20 751	17 38·766	38·739	38·74	20 44 56·20	46·55	56·5	18 717	40 15·073	15·073	15·07	18 37 3·41	3·41	3·4
21 639	18 6·012	6·032	6·03	21 18 28·28	28·29	28·3	18 719	40 26·429	26·429	26·42	18 33 13·79	13·79	13·9
21 641	18 18·337	18·311	18·31	21 30 17·81	17·78	17·9	19 777	40 44·156	44·156	44·16	19 18 43·94	43·94	44·0
20 754	19 53·546	53·556	53·55	20 54 30·34	30·21	30·2	18 725	41 4·006	4·006	4·00	18 53 56·31	56·31	56·2
21 644	20 22·804	22·814	22·81	21 14 36·76	36·82	36·8	18 727	41 17·825	17·825	17·83	18 18 27·67	27·67	27·7
20 756	21 13·470	13·491	13·49	20 45 58·17	58·20	58·2	19 782	41 51·383	51·383	51·38	19 8 22·65	22·65	22·6
21 647	22 4·610	4·568	4·57	21 23 48·86	49·06	49·1	18 734	42 50·804	50·804	50·80	18 32 33·85	33·85	33·9
20 760	22 44·304	44·323	44·32	20 36 35·65	35·53	35·5	18 738	44 27·341	27·341	27·34	19 1 10·87	10·87	10·9
20 761	22 48·896	48·882	48·89	20 27 18·32	18·20	18·2	18 743	45 31·411	31·411	31·41	18 40 10·91	10·91	11·0
19 731	24 25·957	25·938	25·94	19 37 20·96	21·00	21·0	17 814	50 41·325	41·325	41·32	17 50 43·55	43·55	43·6
19 733	25 22·813	22·815	22·82	19 55 2·53	2·66	2·6	16 671	51 1·871	1·871	1·87	16 34 36·18	36·18	36·2
20 772	25 45·585	45·610	45·61	20 34 3·71	3·88	3·8	16 672	51 35·768	35·729	35·73	16 59 48·57	48·39	48·4
21 657	26 12·019	11·991	11·99	21 25 2·92	3·14	3·1	16 679	54 6·943	6·942	6·94	16 40 41·35	41·35	41·3
19 736	27 31·733	31·765	31·75	19 36 7·26	7·14	7·1	16 685	56 8·495	8·526	8·53	16 41 13·19	13·05	13·1
20 778	28 51·805	51·805	51·80	20 53 43·59	43·52	43·5	16 688	4 58 17·836	17·836	17·84	16 59 5·79	5·79	5·8
19 740	29 47·965	47·943	47·94	19 45 47·72	47·94	47·9	16 742	5 11 20·026	20·026	20·02	16 14 30·58	30·62	30·6
19 742	29 50·804	50·789	50·78	19 40 31·44	31·32	31·3	15 779	11 25·004	25·004	25·00	15 9 14·00	14·00	14·0
19 744	30 43·106	43·105	43·10	19 33 18·52	18·45	18·5	15 789	14 18·567	18·568	18·57	16 1 7·25	7·15	7·2
19 745	30 51·329	51·329	51·32	19 17 21·87	21·87	21·9	14 881	14 53·281	53·281	53·28	14 57 26·80	26·80	26·8
20 785	32 21·858	21·828	21·83	20 29 1·82	1·89	1·9	15 790	14 59·319	59·319	59·32	15 32 6·83	6·97	6·9
+ 18 666	4 32 41·751	41·751	41·75	+ 18 31 59·91	59·91	59·9	+ 15 795	5 15 54·851	54·851	54·85	+ 15 44 55·43	55·57	55·5

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
1	5279 Dec. 7	1 24 4·481	+48 3 1·14
	5280 ,,	4·480	1·24
	5283 ,,	4·489	0·96
	5285 Dec. 9	4·485	1·47
	5286 ,,	4·492	1·44
		1 24 4·485	+48 3 1·25
2	5276 Dec. 6	1 24 48·388	+48 46 25·09
	5277 ,,	48·393	25·29
	5278 ,,	48·399	24·72
	5279 Dec. 7	48·393	25·17
	5280 ,,	48·399	25·01
	5283 ,,	48·440	24·92
		1 24 48·402	+48 46 25·03
3	5276 Dec. 6	1 24 53·554	+47 54 12·85
	5277 ,,	53·587	12·49
	5278 ,,	53·568	12·79
	5279 Dec. 7	53·549	12·56
	5280 ,,	53·549	12·82
	5283 ,,	53·560	12·77
	5285 Dec. 9	53·550	13·07
	5286 ,,	53·553	12·98
		1 24 53·559	+47 54 12·79
4	5287 Dec. 10	1 25 9·786	+47 2 42·93
5	5276 Dec. 6	1 25 26·357	+48 16 17·69
	5277 ,,	26·353	17·72
	5278 ,,	26·340	17·71
		1 25 26·350	+48 16 17·71
6	5285 Dec. 9	1 26 7·357	+47 12 36·00
	5286 ,,	7·366	36·03
	5287 Dec. 10	7·356	36·07
		1 26 7·359	+47 12 36·03
7	5276 Dec. 6	1 26 30·209	+48 9 24·93
	5277 ,,	30·244	24·64
	5278 ,,	30·227	24·81
	5279 Dec. 7	30·219	24·43
	5280 ,,	30·223	24·77
	5283 ,,	30·225	24·83
		1 26 30·225	+48 9 24·74
8	5276 Dec. 6	1 26 40·642	+48 59 53·03
	5277 ,,	40·664	52·67
	5278 ,,	40·656	53·05
		1 26 40·654	+48 59 52·92
9	5270 Nov. 27	1 27 31·761	+51 17 33·07
	5271 ,,	31·753	33·03
	5272 ,,	31·769	33·15
	5273 ,,	31·744	33·15
	5274 ,,	31·748	33·13
	5275 Nov. 29	31·766	33·26
		1 27 31·757	+51 17 33·13
10	5285 Dec. 9	1 28 8·028	+47 25 6·16
	5286 ,,	8·051	5·98
	5287 Dec. 10	8·035	6·18
		1 28 8·038	+47 25 6·11
11	5267 Nov. 25	1 28 30·856	+52 2 4·34
	5268 ,,	30·835	4·16
	5269 ,,	30·839	4·02
	5270 Nov. 27	30·855	4·41
	5271 ,,	30·867	4·24
	5272 ,,	30·870	4·09
	5273 ,,	30·874	4·39
	5274 ,,	30·877	4·58
		1 28 30·859	+52 2 4·28
12	5288 Dec. 13	1 28 35·702	+45 33 1·53
	5289 ,,	35·716	1·62
	5290 ,,	35·707	1·83
	5294 ,,	35·698	1·79
	5297 ,,	35·683	1·45
	5299 Dec. 15	35·711	1·54
	5300 ,,	35·744	1·42
	5304 ,,	35·711	1·79
	5306 ,,	35·716	1·59
	5307 ,,	35·712	1·81
		1 28 35·710	+45 33 1·64
13	5270 Nov. 27	1 28 56·078	+51 19 30·92
	5271 ,,	56·082	30·92
	5272 ,,	56·077	31·13
	5273 ,,	56·077	31·14
	5274 ,,	56·069	31·11
	5275 Nov. 29	56·095	31·24
		1 28 56·080	+51 19 31·08
14	5276 Dec. 6	1 28 56·706	+48 43 0·59
	5277 ,,	56·683	0·57
	5278 ,,	56·688	0·58
	5279 Dec. 7	56·686	0·90
	5280 ,,	56·698	0·84
	5283 ,,	56·698	0·78
		1 28 56·693	+48 43 0·71
15	5288 Dec. 13	1 29 14·164	+46 15 23·67
	5289 ,,	14·161	23·67
	5290 ,,	14·170	23·82
	5294 ,,	14·158	23·90
		1 29 14·163	+46 15 23·77
16	5287 Dec. 10	1 29 28·105	+46 51 44·53
17	5276 Dec. 6	1 29 28·840	+48 30 56·06
	5277 ,,	28·831	56·11
	5278 ,,	28·844	56·06
	5279 Dec. 7	28·842	56·10
	5280 ,,	28·836	56·03
	5283 ,,	28·842	56·01
		1 29 28·839	+48 30 56·06
18	5288 Dec. 13	1 29 44·583	+45 31 56·36
	5289 ,,	44·598	56·74
	5290 ,,	44·598	56·79
	5294 ,,	44·550	56·80
	5299 Dec. 15	44·589	56·45
	5300 ,,	44·593	56·67
	5304 ,,	44·578	56·87
	5306 ,,	44·564	56·65
	5307 ,,	44·551	56·85
		1 29 44·577	+45 31 56·69
19	5288 Dec. 13	1 29 52·480	+45 8 18·08
	5289 ,,	52·502	18·06
	5290 ,,	52·508	18·16
	5294 ,,	52·478	18·18
	5297 ,,	52·498	18·39
	5299 Dec. 15	52·499	18·16
	5300 ,,	52·529	18·13
	5304 ,,	52·508	18·00
	5306 ,,	52·523	18·05
	5307 ,,	52·500	18·01
	5308 Dec. 16	52·496	18·13
		1 29 52·502	+45 8 18·12

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
20	5288 Dec. 13	1 30 26·815	+46 11 11·24
	5289 ,,	26·830	11·28
	5290 ,,	26·827	11·26
	5294 ,,	26·842	11·20
	5297 ,,	26·834	11·34
		1 30 26·830	+46 11 11·26
21	5267 Nov. 25	1 30 59·194	+51 56 43·89
	5268 ,,	59·180	43·65
	5269 ,,	59·181	43·56
	5270 Nov. 27	59·213	43·71
	5271 ,,	59·183	43·79
	5272 ,,	59·191	43·59
	5273 ,,	59·184	43·84
	5274 ,,	59·190	43·70
		1 30 59·189	+51 56 43·72
22	5288 Dec. 13	1 32 7·742	+45 59 28·54
	5289 ,,	7·717	28·62
	5290 ,,	7·726	28·66
	5294 ,,	7·728	28·44
	5297 ,,	7·747	28·94
		1 32 7·732	+45 59 28·64
23	5261 Nov. 23	1 32 10·253	+52 45 41·77
	5262 ,,	10·237	41·82
	5263 ,,	10·252	41·50
	5264 ,,	10·260	41·49
	5267 Nov. 25	10·238	41·61
	5268 ,,	10·269	41·70
	5269 ,,	10·270	41·50
		1 32 10·254	+52 45 41·63
24	5288 Dec. 13	1 32 30·344	+45 50 40·16
	5289 ,,	30·329	40·11
	5290 ,,	30·349	40·04
	5294 ,,	30·326	40·00
	5297 ,,	30·374	40·11
	5299 Dec. 15	30·364	40·23
	5300 ,,	30·361	40·14
	5304 ,,	30·382	40·25
	5306 ,,	30·364	40·20
	5307 ,,	30·364	40·33
		1 32 30·356	+45 50 40·16
25	5299 Dec. 15	1 32 44·902	+44 40 23·18
	5300 ,,	44·900	23·29
	5304 ,,	44·890	23·40
	5306 ,,	44·900	23·48
	5307 ,,	44·898	23·51
	5308 Dec. 16	44·883	23·60
	5309 Dec. 17	44·904	23·73
	5310 ,,	44·902	23·59
	5313 ,,	44·879	23·63
		1 32 44·895	+44 40 23·49
26	5270 Nov. 27	1 32 52·458	+51 30 58·35
	5271 ,,	52·452	58·50
	5272 ,,	52·453	58·57
	5273 ,,	52·444	58·44
	5274 ,,	52·447	58·31
		1 32 52·451	+51 30 58·43
27	5267 Nov. 25	1 32 56·421	+51 46 48·02
	5268 ,,	56·378	48·19
	5269 ,,	56·400	48·14
	5270 Nov. 27	56·432	48·14
	5271 ,,	56·427	48·20
	5272 ,,	56·414	48·01
	5273 ,,	56·409	48·24
	5274 ,,	56·410	48·07
		1 32 56·411	+51 46 48·13
28	5261 Nov. 23	1 33 30·761	+52 23 43·07
	5262 ,,	30·762	43·08
	5263 ,,	30·751	43·05
	5264 ,,	30·766	42·98
	5267 Nov. 25	30·767	43·30
	5268 ,,	30·759	43·16
	5269 ,,	30·776	43·16
		1 33 30·763	+52 23 43·11
29	5309 Dec. 17	1 33 47·417	+43 59 22·27
	5310 ,,	47·414	22·33
	5313 ,,	47·403	21·98
	5314 Dec. 19	47·434	22·31
	5315 ,,	47·418	22·25
	5318 ,,	47·434	22·16
	5319 ,,	47·435	22·44
	5322 ,,	47·462	22·10
	5324 ,,	47·418	22·55
		1 33 47 426	+43 59 22·27
30	5253 Nov. 22	1 33 47·642	+52 55 58 94
	5254 ,,	47·640	59·00
	5256 ,,	47·651	58·71
	5257 ,,	47·632	58·72
	5258 ,,	47·631	58·83
	5259 ,,	47·641	58·73
	5260 ,,	47·639	58·76
	5261 Nov. 23	47·627	58·86
	5262 ,,	47·611	58·96
	5263 ,,	47·628	58·75
	5264 ,,	47·629	58·66
		1 33 47·634	+52 55 58·81
31	5288 Dec. 13	1 34 4·059	+45 35 10·91
	5289 ,,	4·058	11·02
	5290 ,,	4·065	11·16
	5294 ,,	4·041	11·02
	5297 ,,	4·088	11·29
	5299 Dec. 15	4·098	11·15
	5300 ,,	4·083	10·91
	5304 ,,	4·085	10·95
	5306 ,,	4·074	11·04
	5307 ,,	4·062	11·06
		1 34 4·071	+45 35 11·05
32	5253 Nov. 22	1 34 16·478	+52 53 15·78
	5254 ,,	16·489	15·58
	5256 ,,	16·498	15·57
	5257 ,,	16·506	15·48
	5258 ,,	16·500	15·55
	5259 ,,	16·520	15·53
	5260 ,,	16·502	15·55
	5261 Nov. 23	16·492	15·63
	5262 ,,	16·503	15·70
	5263 ,,	16·483	15·55
	5264 ,,	16·480	15·59
		1 34 16·496	+52 53 15·59
33	5299 Dec. 15	1 34 28·930	+45 20 42·75
	5300 ,,	28·915	42·68
	5304 ,,	28·926	42·47
	5306 ,,	28·923	42·58
	5307 ,,	28·912	42·66
	5308 Dec. 16	28·915	42·67
		1 34 28·920	+45 20 42·64
34	5299 Dec. 15	1 34 33·794	+44 51 18·78
	5300 ,,	33·768	18·78
	5304 ,,	33·774	18·53
	5306 ,,	33·776	18 73
	5307 ,,	33·775	18 85
	5308 Dec. 16	33·762	18·93
	5309 Dec. 17	33·760	19·05
	5310 ,,	33·735	18 98
	5313 ,,	33·769	18·99
		1 34 33·768	+44 51 18·85
35	5309 Dec. 17	1 35 13·897	+44 48 35·65
	5310 ,,	13·892	35·58
	5313 ,,	13·893	35·62
		1 35 13·894	+44 48 35·62

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
36	5314 Dec. 19	1 35 27·807	+43 38 21·97
	5315 ,,	27·805	21·93
	5318 ,,	27·792	21·72
	5319 ,,	27·799	21·76
	5322 ,,	27·806	21·79
	5324 ,,	27·794	22·00
		1 35 27·801	+43 38 21·86
37	5253 Nov.22	1 35 42·450	+52 44 52·79
	5254 ,,	42·439	52·87
	5256 ,,	42·450	52·80
	5257 ,,	42·467	52·68
	5258 ,,	42·485	52·50
	5259 ,,	42·477	52·60
	5260 ,,	42·466	52·71
	5261 Nov.23	42·488	52·91
	5262 ,,	42·472	52·77
	5263 ,,	42·446	52·74
	5264 ,,	42·448	52·76
		1 35 42·463	+52 44 52·74
38	5253 Nov.22	1 35 47·553	+52 59 46·00
	5254 ,,	47·544	46·14
	5256 ,,	47·539	46·14
	5257 ,,	47·553	46·04
	5258 ,,	47·558	45·95
	5259 ,,	47·555	45·96
	5260 ,,	47·560	46·04
		1 35 47·552	+52 59 46·04
39	5314 Dec. 19	1 35 49·483	+43 21 19·67
	5315 ,,	49·511	19·62
	5318 ,,	49·516	19·34
	5319 ,,	49·496	19·34
	5322 ,,	49·513	19·49
	5324 ,,	49·511	19·42
		1 35 49·505	+43 21 19·48
40	5261 Nov.23	1 35 50·011	+52 25 17·13
	5262 ,,	50·006	17·13
	5263 ,,	49·986	17·20
	5264 ,,	49·987	17·03
	5267 Nov.25	50·005	17·32
	5268 ,,	49·994	17·17
	5269 ,,	49·998	17·09
		1 35 49·998	+52 25 17·15
41	5309 Dec. 17	1 36 32·054	+44 4 32·29
	5310 ,,	32·042	32·46
	5313 ,,	32·047	32·15
	5314 Dec. 19	32·045	32·21
	5315 ,,	(32·014)	32·24
	5318 ,,	32·038	32·43
	5319 ,,	32·050	32·66
	5322 ,,	32·037	32·46
	5324 ,,	32·055	32·73
		1 36 32·046	+44 4 32·40
42	5308 Dec. 16	1 36 55·144	+44 30 12·56
	5309 Dec. 17	55·139	12·55
	5310 ,,	55·141	12·71
	5313 ,,	55·117	12·49
		1 36 55·135	+44 30 12·58
43	5253 Nov.22	1 37 10·044	+52 47 16·43
	5254 ,,	10·043	16·46
	5256 ,,	10·050	16·41
	5257 ,,	10·035	16·42
	5258 ,,	10·069	16·31
	5259 ,,	10·063	16·48
	5260 ,,	10·049	16·53
		1 37 10·050	+52 47 16·43
44	5253 Nov.22	1 37 13·077	+53 3 28·63
	5254 ,,	13·059	28·46
	5256 ,,	13·041	28·43
	5257 ,,	13·032	28·42
	5258 ,,	13·077	28·30
	5259 ,,	13·066	28·43
	5260 ,,	13·078	28·30
		1 37 13·061	+53 3 28·42
45	5314 Dec. 19	1 37 34·704	+43 50 52·95
	5315 ,,	34·700	53·12
	5318 ,,	34·750	53·15
	5319 ,,	34·737	53·47
	5322 ,,	34·732	53·07
	5324 ,,	34·735	53·36
		1 37 34·726	+43 50 53·19
46	5314 Dec. 19	1 38 31·058	+43 12 24·44
	5315 ,,	31·068	24·36
	5318 ,,	31·039	24·14
	5319 ,,	31·057	24·24
	5322 ,,	31·051	24·49
	5324 ,,	31·061	24·32
		1 38 31·056	+43 12 24·33
47	5314 Dec. 19	1 38 56·680	+43 43 9·84
	5315 ,,	56·662	9·69
	5318 ,,	56·677	9·59
	5319 ,,	56·664	9·72
	5322 ,,	56·678	9·62
	5324 ,,	56·680	9·75
		1 38 56·673	+43 43 9·70
48	5314 Dec. 19	1 39 47·344	+43 22 29·78
	5315 ,,	47·331	29·91
	5318 ,,	47·337	29·66
	5319 ,,	47·348	29·75
	5322 ,,	47·336	30·07
	5324 ,,	47·361	29·63
		1 39 47·343	+43 22 29·80
49	5248 Nov.18	1 39 54·734	+53 31 10·82
	5249 ,,	54·750	10·65
	5250 ,,	54·734	10·80
		1 39 54·739	+53 31 10·76
50	5327 Dec. 21	1 40 5·938	+42 21 15·78
	5328 ,,	5·931	15·85
	5329 ,,	5·931	15·90
		1 40 5·933	+42 21 15·84
51	5248 Nov.18	1 40 13·921	+53 49 19·67
	5249 ,,	13·892	19·80
	5250 ,,	13·903	19·78
		1 40 13·905	+53 49 19·75
52	5327 Dec. 21	1 40 29·976	+43 4 50·30
	5328 ,,	29·965	50·20
	5329 ,,	29·975	50·14
		1 40 29·972	+43 4 50·21
53	5248 Nov.18	1 41 12·895	+53 19 32·63
	5249 ,,	12·901	32·56
	5250 ,,	12·905	32·67
		1 41 12·900	+53 19 32·62
54	5248 Nov.18	1 41 39·132	+53 32 57·26
	5249 ,,	39·117	57·39
	5250 ,,	39·101	57·29
		1 41 39·117	+53 32 57·31

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
55	5248 Nov.18	1 42 4·141	+53 48 23·24
	5249 „	4·138	23·27
	5250 „	4·124	23·43
		1 42 4·134	+53 48 23·31
56	5327 Dec. 21	1 42 10·047	+42 49 25·34
	5328 „	10·070	25·28
	5329 „	10·047	25·29
		1 42 10·055	+42 49 25·30
57	5327 Dec. 21	1 42 14·241	+42 17 1·59
	5328 „	14·256	1·65
	5329 „	14·243	1·76
		1 42 14·247	+42 17 1·67
58	5327 Dec. 21	1 43 15·461	+42 32 14·00
	5328 „	15·443	13·91
	5329 „	15·454	14·06
		1 43 15·453	+42 32 13·99
59	5248 Nov.18	1 43 47·147	+53 40 13·34
	5249 „	47·138	13·51
	5250 „	47·123	13·51
		1 43 47·136	+53 40 13·45
60	5237 Nov.14	1 44 33·017	+54 14 5·13
	5238 „	33·023	5·28
	5239 Nov.15	33·037	5·57
	5240 „	33·012	5·67
	5241 „	33·015	5·50
	5242 „	33·009	5·39
	5243 „	33·012	5·22
		1 44 33·018	+54 14 5·39
61	5237 Nov.14	1 45 19·245	+54 14 28·56
	5238 „	19·266	28·65
	5239 Nov.15	19·273	29·03
	5240 „	19·260	28·92
	5241 „	19·266	28·98
	5242 „	19·259	28·67
	5243 „	19·257	28·70
		1 45 19·261	+54 14 28·79
62	5237 Nov.14	1 46 58·034	+54 15 6·94
	5238 „	58·009	7·21
	5239 Nov.15	58·021	7·11
	5240 „	58·031	7·11
	5241 „	58·024	7·29
	5242 „	58·016	6·95
	5243 „	58·031	7·01
		1 46 58·024	+54 15 7·09
63	5237 Nov.14	1 46 58·971	+53 54 18·99
	5238 „	58·993	19·13
	5239 Nov.15	58·995	19·36
	5240 „	58·994	19·17
	5241 „	59·000	19·13
	5242 „	58·998	19·01
	5243 „	58·998	19·07
		1 46 58·993	+53 54 19·12
64	5237 Nov.14	1 47 16·105	+53 45 15·27
	5238 „	16·073	15·26
	5239 Nov.15	16·115	15·44
	5240 „	16·098	15·42
	5241 „	16·104	15·30
	5242 „	16·104	15·25
	5243 „	16·136	15·19
		1 47 16·105	+53 45 15·30
65	5331 Dec. 26	1 48 4·182	+40 41 54·03
66	5331 Dec. 26	1 48 20·141	+40 12 19·59
67	5230 Nov.13	1 48 43·398	+54 20 2·38
	5231 „	43·420	2·63
	5232 „	43·408	2·50
	5234 „	43·391	2·33
	5235 „	43·402	2·44
	5236 „	43·401	2·42
	5237 Nov.14	43·424	2·42
	5238 „	43·397	2·44
	5239 Nov.15	43·402	2·51
	5240 „	43·388	2·59
	5241 „	43·397	2·46
	5242 „	43·414	2·35
	5243 „	43·390	2·16
		1 48 43·402	+54 20 2·43
68	5331 Dec. 26	1 49 2·195	+40 6 32·81
69	5331 Dec. 26	1 49 20·414	+40 51 8·75
70	5230 Nov.13	1 49 37·266	+54 8 17·77
	5231 „	37·279	17·90
	5232 „	37·281	17·86
	5234 „	37·295	17·62
	5235 „	37·282	17·84
	5236 „	37·274	17·76
	5237 Nov.14	37·315	17·54
	5238 „	37·302	17·62
	5239 Nov.15	37·282	18·12
	5240 „	37·298	17·92
	5241 „	37·285	17·82
	5242 „	37·274	17·66
	5243 „	37·296	17·64
		1 49 37·287	+54 8 17·77
71	5230 Nov.13	1 50 54·205	+53 52 16·21
	5231 „	54·198	16·21
	5232 „	54·203	16·22
	5234 „	54·204	16·19
	5235 „	54·222	16·17
	5236 „	54·205	16·19
	5237 Nov.14	54·226	16·00
	5238 „	54·221	16·05
		1 50 54·211	+53 52 16·16
72	5226 Nov.11	1 51 19·326	+54 26 36·72
	5227 „	19·328	36·80
	5228 „	19·326	36·66
	5229 „	19·313	36·54
	5230 Nov.13	19·299	36·72
	5231 „	19·309	36·64
	5232 „	19·336	36·75
	5234 „	19·349	36·64
	5235 „	19·352	36·70
	5236 „	19·330	36·77
		1 51 19·327	+54 26 36·69
73	5331 Dec. 26	1 51 55·548	+40 20 4·08
	5333 Dec. 28	55·538	4·33
	5334 „	55·542	4·22
	5335 „	55·547	4·26
	5336 „	55·542	4·08
		1 51 55·543	+40 20 4·19
74	5226 Nov.11	1 51 58·490	+54 3 30·95
	5227 „	58·511	30·98
	5228 „	58·490	31·09
	5229 „	58·497	30·58
	5230 Nov.13	58·498	31·05
	5231 „	58·481	30·92
	5232 „	58·504	30·94
	5234 „	58·518	30·73
	5235 „	58·523	30·89
	5236 „	58·515	30·95
		1 51 58·503	+54 3 30·91

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
75	5333 Dec. 28	1 52 16·206	+39 34 45·68
	5334 ,,	16·211	45·74
	5335 ,,	16·174	45·90
	5336 ,,	16·174	45·78
	5337 Dec. 29	16·192	45·87
		1 52 16·191	+39 34 45·79
76	5331 Dec. 26	1 52 30·221	+40 35 35·46
77	5218 Nov.10	1 52 31·369	+54 26 27·06
	5219 ,,	31·351	27·06
	5220 ,,	31·376	27·03
	5222 ,,	31·342	26·55
	5223 ,,	31·367	26·62
	5226 Nov.11	31·347	27·03
	5227 ,,	31·363	27·05
	5228 ,,	31·362	26·99
	5229 ,,	31·373	26·78
	5230 Nov.13	31·371	26·97
	5231 ,,	31·371	26·92
	5232 ,,	31·381	26·99
	5234 ,,	31·371	26·98
	5235 ,,	31·374	26·97
	5236 ,,	31·352	27·16
		1 52 31·365	+54 26 26·94
78	5333 Dec. 28	1 53 13·830	+39 56 24·26
	5334 ,,	13·808	24·03
	5335 ,,	13·819	24·23
	5336 ,,	13·850	24·32
		1 53 13·827	+39 56 24·21
79	5333 Dec. 28	1 53 47·063	+39 20 30·96
	5334 ,,	47·076	30·97
	5335 ,,	47·054	31·20
	5336 ,,	47·071	31·13
	5337 Dec. 29	47·050	31·12
	5338 ,,	47·042	31·13
		1 53 47·059	+39 20 31·09
80	5218 Nov.10	1 54 2·276	+53 59 38·21
	5219 ,,	2·259	38·30
	5220 ,,	2·263	38·29
	5222 ,,	2·306	38·22
	5223 ,,	2·273	37·98
	5226 Nov.11	2·269	38·10
	5227 ,,	2·264	38·34
	5228 ,,	2·246	38·24
	5229 ,,	2·281	38·05
	5230 Nov.13	2·279	38·30
	5231 ,,	2·286	38·16
	5232 ,,	2·295	38·30
	5234 ,,	2·275	38·08
	5235 ,,	2·301	38·16
	5236 ,,	2·289	38·34
		1 54 2·277	+53 59 38·20
81	5213 Nov. 9	1 54 21·491	+54 32 6·99
	5214 ,,	21·488	6·70
	5215 ,,	21·507	7·04
	5216 ,,	21·514	7·18
	5217 ,,	21·508	7·04
	5218 Nov.10	21·511	7·06
	5219 ,,	21·499	7·24
	5220 ,,	21·525	7·12
	5222 ,,	21·492	6·93
	5223 ,,	21·511	6·96
	5226 Nov.11	21·479	7·02
	5227 ,,	21·496	7·12
	5228 ,,	21·483	7·01
	5229 ,,	21·528	6·97
	5230 Nov.13	21·547	7·11
	5231 ,,	21·518	7·15
	5232 ,,	21·529	7·12
	5234 ,,	21·505	7·06
	5235 ,,	21·525	7·11
	5236 ,,	21·516	7·16
		1 54 21·509	+54 32 7·05
82	5333 Dec. 28	1 54 48·468	+39 7 21·60
	5334 ,,	48·463	21·63
	5335 ,,	48·445	21·66
	5336 ,,	48·451	21·80
	5337 Dec. 29	48·452	21·72
	5338 ,,	48·447	21·49
		1 54 48·454	+39 7 21·65
83	5333 Dec. 28	1 54 57·351	+38 52 37·26
	5334 ,,	·364	37·23
	5335 ,,	·304	37·44
	5337 Dec. 29	·343	37·53
	5338 ,,	·329	37·16
		1 54 57·338	+38 52 37·32
84	533 Dec. 28	1 55 41·703	+40 4 14·46
	5334 ,,	41·682	14·55
	5335 ,,	41·693	14·35
	5336 ,,	41·702	14·33
		1 55 41·695	+40 4 14·42
85	5333 Dec. 28	1 55 49·510	+39 38 17·59
	5334 ,,	49·498	17·65
	5337 Dec. 29	49·522	17·62
	5338 ,,	49·479	17·77
		1 55 49·502	+39 38 17·66
86	5212 Nov. 9	1 56 2·452	+54 1 36·45
	5213 ,,	2·441	36·46
	5214 ,,	2·444	36·29
	5215 ,,	2·464	36·49
	5216 ,,	2·446	36·49
	5217 ,,	2·457	36·46
	5218 Nov.10	2·435	36·43
	5219 ,,	2·415	36·52
	5220 ,,	2·426	36·32
	5222 ,,	2·443	36·25
	5223 ,,	2·459	36·36
	5226 Nov.11	2·450	36·41
	5227 ,,	2·438	36·61
	5228 ,,	2·441	36·54
	5229 ,,	2·441	36·31
		1 56 2·444	+54 1 36·43
87	5212 Nov. 9	1 56 34·691	+54 34 52·29
	5213 ,,	34·683	52·28
	5214 ,,	34·675	52·11
	5215 ,,	34·687	52·44
	5216 ,,	34·707	52·33
	5217 ,,	34·715	52·41
	5218 Nov.10	34·689	52·19
	5219 ,,	34·684	52·46
	5220 ,,	34·672	52·27
	5222 ,,	34·696	52·19
	5223 ,,	34·694	52·16
	5226 Nov.11	34·684	52·36
	5227 ,,	34·685	52·27
	5228 ,,	34·699	52·13
	5229 ,,	34·699	52·16
		1 56 34·691	+54 34 52·27
88	5210 Nov. 7	1 57 12·782	+54 20 9·82
	5211 ,,	12·815	9·99
	5212 Nov. 9	12·806	10·15
	5213 ,,	12·816	10·16
	5214 ,,	12·805	9·90
	5215 ,,	12·816	10·09
	5216 ,,	12·822	10·31
	5217 ,,	12·822	10·08
	5218 Nov.10	12·833	10·18
	5219 ,,	12·795	10·05
	5220 ,,	12·803	10·36
	5222 ,,	12·829	9·95
	5223 ,,	12·820	10·16
	5226 Nov.11	12·807	9·99
	5227 ,,	12·800	10·04
	5228 ,,	12·811	10·01
	5229 ,,	12·795	9·93
		1 57 12·810	+54 20 10·07
89	5337 Dec. 29	1 58 10·704	+38 49 34·50
	5338 ,,	10·718	34·36
		1 58 10·711	+38 49 34·43

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
90	5210 Nov. 7	1 58 15·270	+53 57 45·50
	5211 „	15·307	45·39
	5212 Nov. 9	15·308	45·61
	5213 „	15·308	45·42
	5214 „	15·308	45·39
	5215 „	15·306	45·66
	5216 „	15·313	45·83
	5217 „	15·321	45·54
	5218 Nov.10	15·293	45·43
	5219 „	15·313	45·62
	5220 „	15·304	45·43
	5222 „	15·313	45·49
	5223 „	15·298	45·56
		1 58 15·305	+53 57 45·53
91	5337 Dec. 29	1 58 44·476	+39 3 35·07
	5338 „	44·484	35·01
		1 58 44·480	+39 3 35·04
92	5210 Nov. 7	1 59 26·022	+54 14 57·53
	5211 „	26·059	57·38
	5212 Nov. 9	26·036	57·47
	5213 „	26·032	57·40
	5214 „	26·035	57·17
	5215 „	26·059	57·33
	5216 „	26·065	57·49
	5217 „	26·066	57·59
	5218 Nov.10	26·042	57·33
	5219 „	26·037	57·58
	5220 „	26·035	57·46
	5222 „	26·039	57·14
	5223 „	26·018	57·24
		1 59 26·042	+54 14 57·39
93	5210 Nov. 7	1 59 33·639	+54 25 37·78
	5211 „	33·669	38·06
	5212 Nov. 9	33·680	37·92
	5213 „	33·663	37·93
	5214 „	33·681	37·61
	5215 „	33·697	38·05
	5216 „	33·689	37·67
	5217 „	33·694	37·85
	5218 Nov.10	33·660	37·76
	5219 „	33·681	37·95
	5220 „	33·665	37·79
	5222 „	33·649	37·73
	5223 „	33·656	37·94
		1 59 33·671	+54 25 37·85
94	5210 Nov. 7	2 1 11·631	+54 32 35·69
	5211 „	11·604	35·80
	5212 Nov. 9	11·629	35·78
	5213 „	11·621	35·78
	5214 „	11·615	35·67
	5215 „	11·652	35·77
	5216 „	11·635	35·71
	5217 „	11·646	35·71
	5218 Nov.10	11·634	35·62
	5219 „	11·636	35·97
	5220 „	11·630	35·68
	5222 „	11·628	35·61
	5223 „	11·610	35·64
		2 1 11·629	+54 32 35·73
95	5209 Nov. 6	2 3 12·181	+53 59 13·06
	5210 Nov. 7	12·171	12·97
	5211 „	12·195	13·13
		2 3 12·182	+53 59 13·05
96	5209 Nov. 6	2 4 32·528	+54 31 36·91
	5210 Nov. 7	32·582	36·88
	5211 „	32·544	37·24
		2 4 32·551	+54 31 37·01
	1901.		
97	5339 Jan. 2	2 4 35·231	+37 30 7·98
	1900.		
98	5210 Nov. 7	2 4 52·458	+54 9 37·19
	5211 „	52·427	37·18
		2 4 52·443	+54 9 37·19
99	5209 Nov. 6	2 4 52·656	+53 34 38·67
	1901.		
100	5339 Jan. 2	2 5 31·369	+37 43 7·39
101	5339 Jan. 2	2 8 39·928	+37 37 23·07
102	5341 Jan. 4	2 10 3·688	+36 12 51·66
	5342 „	3·664	51·70
	5343 „	3·669	51·53
	5344 Jan. 5	(3·722)	(51·86)
	5345 „	3·700	51·68
	5346 „	3·695	51·73
	5347 „	3·682	51·51
	5348 „	3·722	51·60
		2 10 3·689	+36 12 51·63
103	5341 Jan. 4	2 11 8·714	+37 1 22·36
	5342 „	8·717	22·52
	5343 „	8·713	22·59
		2 11 8·715	+37 1 22·49
104	5341 Jan. 4	2 12 46·745	+36 13 36·61
	5342 „	46·771	36·28
	5343 „	46·776	36·23
	5344 Jan. 5	(46·754)	(36·75)
	5345 „	46·761	36·39
	5346 „	46·758	36·94
	5347 „	46·764	36·61
	5348 „	46·783	36·61
		2 12 46·765	+36 13 36·52
105	5341 Jan. 4	2 13 48·695	+36 54 33·68
	5342 „	48·721	33·62
	5343 „	48·715	33·69
	5344 Jan. 5	(48·709)	(33·55)
	5345 „	48·691	33·48
	5346 „	48·708	33·58
	5347 „	48·701	33·44
	5348 „	48·684	33·71
		2 13 48·702	+36 54 33·60
106	5344 Jan. 5	2 14 (41·819)	+35 45 (45·90)
	5345 „	41·858	45·36
	5346 „	41·841	45·65
	5347 „	41·853	45·56
	5348 „	41·870	45·90
		2 14 41·856	+35 45 45·62
107	5444 Jan. 5	2 14 (50·640)	+36 18 (44·26)
	5345 „	50·651	43·97
	5346 „	50·641	44·14
	5347 „	50·674	44·19
	5348 „	50·655	44·18
		2 14 50·655	+36 18 44·12
	1900.		
108	5205 Oct. 29	2 15 35·357	+53 36 34·93
	5206 „	35·340	35·00
	5207 Oct. 31	35·320	34·96
	5208 „	35·310	34·97
		2 15 35·332	+53 36 34·96
	1901.		
109	5344 Jan. 5	2 16 (26·703)	+35 54 (34·19)
	5345 „	26·725	33·65
	5346 „	26·707	33·91
	5347 „	26·739	34·16
	5348 „	26·746	34·37
		2 16 26·729	+35 54 34·02

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1901.	h m s	° ′ ″
110	5344 Jan. 5	2 16 (49·919)	+36 18 (45·12)
	5345 ,,	49·935	44·69
	5346 ,,	49·914	44·83
	5347 ,,	49·930	45·12
	5348 ,,	49·937	45·26
		2 16 49·929	+36 18 44·98
	1900.		
111	5205 Oct. 29	2 17 32·430	+53 59 0·57
	5206 ,,	32·425	0·61
	5207 Oct. 31	32·406	0·74
	5208 ,,	32·427	0·75
		2 17 32·422	+53 59 0·67
112	5205 Oct. 29	2 17 50·213	+53 27 35·80
	5206 ,,	50·211	35·86
	5207 Oct. 31	50·199	35·63
	5208 ,,	50·217	35·73
		2 17 50·210	+53 27 35·76
113	5205 Oct. 29	2 19 5·842	+53 28 35·26
	5206 ,,	5·834	35·29
	5207 Oct. 31	5·860	35·12
	5208 ,,	5·848	35·25
		2 19 5·846	+53 28 35·23
114	5204 Oct. 28	2 20 36·209	+53 8 34·66
	5205 Oct. 29	36·205	34·70
	5206 ,,	36·208	34·51
	5207 Oct. 31	36·224	34·82
	5208 ,,	36·224	34·79
		2 20 36·214	+53 8 34·69
115	5204 Oct. 28	2 21 34·121	+53 38 40·25
	5205 Oct. 29	34·151	40·37
	5206 ,,	34·163	40·16
	5207 Oct. 31	34·146	40·25
	5208 ,,	34·147	40·38
		2 21 34·146	+53 38 40·28
116	5191 Oct. 27	2 21 50·963	+53 6 14·87
	5192 ,,	50·967	14·73
	5193 ,,	50·955	14·90
	5200 ,,	50·960	14·71
	5201 ,,	50·974	14·82
	5202 ,,	50·978	14·88
	5203 ,,	50·987	14·84
	5204 Oct. 28	50·968	14·73
	5205 Oct. 29	50·975	14·80
	5206 ,,	50·976	14·84
		2 21 50·970	+53 6 14·81
	1900.		
117	5204 Oct. 28	2 21 52·870	+53 39 36·31
	5205 Oct. 29	52·878	36·28
	5206 ,,	52·873	36·26
	5207 Oct. 31	52·881	36·24
	5208 ,,	52·869	36·49
		2 21 52·874	+53 39 36 32
	1901.		
118	5349 Jan. 8	2 22 21·322	+34 56 29·62
	5350 ,,	21·336	29·86
	5352 ,,	21·332	29·96
	5353 Jan. 9	21·313	30·07
	5354 ,,	21·291	30·04
	5355 ,,	21·301	29·81
		2 22 21·316	+34 56 29·89
119	5349 Jan. 8	2 22 22·002	+35 2 27·58
	5350 ,,	21·992	27·16
	5351 ,,	22·000	27·47
	5352 ,,	21·987	27·58
	5353 Jan. 9	22·001	27·30
	5354 ,,	21·991	27·30
	5355 ,,	21·988	27·28
	5356 ,,	21·998	27·16
		2 22 21·995	+35 2 27·35
	1900.		
120	5183 Oct. 26	2 22 49·568	+53 1 46·64
	5184 ,,	49·581	46·68
	5185 ,,	49·558	46·65
	5186 ,,	49·545	46·45
	5187 ,,	49·549	46·55
	5189 ,,	49·549	46·68
	5190 ,,	49·576	46·61
	5191 Oct. 27	49·564	46·43
	5192 ,,	49·571	46·41
	5193 ,,	49·562	46·65
	5200 ,,	49·578	46·26
	5201 ,,	49·583	46·55
	5202 ,,	49·583	46·31
	5203 ,,	49·577	46·40
	5204 Oct. 28	49·583	46·49
	5205 Oct. 29	49·573	46·36
	5206 ,,	49·580	46·31
		2 22 49·569	+53 1 46·50
	1901.		
121	5349 Jan. 8	2 23 6·732	+34 28 34·13
	5350 ,,	6·712	34·22
	5351 ,,	6·728	34·32
	5352 ,,	6·745	33·97
	5353 Jan. 9	6·727	34·39
	5354 ,,	6·682	34·03
	5355 ,,	6·697	33·80
	5356 ,,	6·703	33·81
		2 23 6·716	+34 28 34·08
	1901.		
122	5349 Jan. 8	2 23 13·925	+34 26 41·29
	5350 ,,	13·921	41·25
	5351 ,,	13·964	41·30
	5352 ,,	13·931	41·34
	5353 Jan. 9	13·941	41·28
	5354 ,,	13·915	41·22
	5355 ,,	13·928	40·89
	5356 ,,	13·903	40·89
		2 23 13·929	+34 26 41·18
	1900.		
123	5183 Oct. 26	2 23 15·009	+52 45 16·50
	5184 ,,	15·042	16·58
	5185 ,,	15·011	16·48
	5186 ,,	15·019	16·15
	5187 ,,	15·017	16·11
	5189 ,,	15·041	16·18
	5190 ,,	15·036	16·13
		2 23 15·027	+52 45 16·30
	1901.		
124	5349 Jan. 8	2 23 33·873	+35 18 34·45
	5350 ,,	33·875	34·37
	5351 ,,	33·903	34·61
	5352 ,,	33·886	34·49
	5353 Jan. 9	33·884	34·20
	5354 ,,	33·873	34·26
	5355 ,,	33·857	34·48
	5356 ,,	33·887	34·02
		2 23 33·880	+35 18 34·36
125	5349 Jan. 8	2 23 34·072	+35 4 45·98
	5351 ,,	34·084	46·38
	5352 ,,	34·046	46·13
	5353 Jan. 9	34·074	46·28
	5354 ,,	34·034	46·41
	5355 ,,	34·026	46·42
	5356 ,,	34·072	46·41
		2 23 34·058	+35 4 46·29
126	5349 Jan. 8	2 23 35·856	+34 5 4·20
	5350 ,,	35·809	4·15
	5353 Jan. 9	35·847	4·50
	5354 ,,	35·810	4·06
	5355 ,,	35·822	3·86
	5356 ,,	35·850	3·85
		2 23 35·832	+34 5 4·10

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
127	5191 Oct. 27	2 23 47·747	+52 42 15·05
	5192 ,,	47·762	14·91
	5193 ,,	47·738	15·28
	5200 ,,	47·751	15·07
	5201 ,,	47·746	15·23
	5202 ,,	47·726	15·20
	5203 ,,	47·754	15·25
	5204 Oct. 28	47·766	15·16
		2 23 47·749	+52 42 15·14
	1901.		
128	5349 Jan. 8	2 24 9·214	+34 14 38·61
	5350 ,,	9·163	38·43
	5351 ,,	9·192	38·77
	5352 ,,	9·192	38·54
	5353 Jan. 9	9·229	38·33
	5354 ,,	9·184	38·49
	5355 ,,	9·210	38·32
	5356 ,,	9·245	38·45
		2 24 9·203	+34 14 38·49
	1900.		
129	5191 Oct. 27	2 24 11·387	+53 20 14·58
	5192 ,,	11·388	14·48
	5193 ,,	11·384	14·60
	5200 ,,	11·401	14·33
	5201 ,,	11·399	14·47
	5202 ,,	11·406	14·55
	5203 ,,	11·416	14·53
	5204 Oct. 28	11·394	14·50
	5205 Oct. 29	11·421	14·54
	5206 ,,	11·408	14·41
		2 24 11·400	+53 20 14·50
130	5183 Oct. 26	2 24 59·000	+52 47 48·28
	5184 ,,	59·028	48·35
	5185 ,,	59·005	48·28
	5186 ,,	59·033	47·99
	5187 ,,	59·011	47·86
	5189 ,,	59·032	47·84
	5190 ,,	59·037	47·96
	5191 Oct. 27	59·028	48·18
	5192 ,,	59·051	47·74
	5193 ,,	59·023	47·99
	5200 ,,	59·028	48·04
	5201 ,,	59·033	48·06
	5202 ,,	59·017	47·96
	5203 ,,	59·036	48·04
	5204 Oct. 28	59·039	48·19
		2 24 59·027	+52 47 48·05
131	5183 Oct. 26	2 25 4·943	+53 12 43·32
	5184 ,,	4·969	43·45
	5185 ,,	4·955	43·49
	5186 ,,	4·969	43·19
	5187 ,,	4·952	43·37
	5189 ,,	4·964	43·36
	5190 ,,	4·983	42·97
		2 25 4·962	+53 12 43·31
132	5183 Oct. 26	2 26 1·411	+53 14 28·56
	5184 ,,	1·427	28·42
	5185 ,,	1·412	28·22
	5186 ,,	1·422	28·05
	5187 ,,	1·413	28·14
	5189 ,,	1·437	28·31
	5190 ,,	1·451	28·11
	5191 Oct. 27	1·433	28·36
	5192 ,,	1·423	28·23
	5193 ,,	1·439	28·19
	5200 ,,	1·449	28·02
	5201 ,,	1·438	28·05
	5202 ,,	1·425	28·17
	5203 ,,	1·438	28·10
	5204 Oct. 28	1·419	28·16
		2 26 1·429	+53 14 28·21
	1901.		
133	5353 Jan. 9	2 26 57·379	+34 4 1·79
	5354 ,,	57·377	2·02
	5355 ,,	57·395	1·94
	5356 ,,	57·393	1·95
		2 26 57·386	+34 4 1·93
	1900.		
134	5183 Oct. 26	2 27 40·965	+52 38 51·91
	5184 ,,	40·997	52·05
	5185 ,,	40·966	51·82
	5186 ,,	40·968	51·45
	5187 ,,	40·960	51·75
	5189 ,,	40·981	51·74
	5190 ,,	40·975	51·58
		2 27 40·973	+52 38 51·76
	1901.		
135	5353 Jan. 9	2 28 17·180	+34 25 3·62
	5354 ,,	17·163	3·42
	5355 ,,	17·156	3·69
	5356 ,,	17·165	3·83
		2 28 17·166	+34 25 3·64
136	5183 Oct. 26	2 28 20·131	+52 38 57·57
	5184 ,,	20·141	57·83
	5185 ,,	20·102	57·46
	5186 ,,	20·106	57·37
	5187 ,,	20·096	57·46
	5189 ,,	20·116	57·42
	5190 ,,	20·075	57·20
		2 28 20·110	+52 38 57·47
137	5169 Oct. 20	2 30 51·104	+51 39 53·57
	5172 ,,	51·166	53·54
	5177 Oct. 21	51·088	53·33
	5179 ,,	51·122	53·46
		2 30 51·120	+51 39 53·48
138	5169 Oct. 20	2 31 27·013	+52 1 44·19
	5170 ,,	27·033	44·05
	5172 ,,	27·063	44·12
	5173 Oct. 21	27·020	44·40
	5174 ,,	26·998	44·28
	5177 ,,	27·028	44·19
	5178 ,,	27·045	44·12
	5179 ,,	27·003	44·02
		2 31 27·025	+52 1 44·17
139	5169 Oct. 20	2 32 11·271	+51 14 41·59
	5170 ,,	11·292	41·49
	5172 ,,	11·289	41·71
	5173 Oct. 21	11·288	41·59
	5174 ,,	11·277	41·50
	5177 ,,	11·297	41·59
	5178 ,,	11·325	41·75
	5179 ,,	11·287	41·62
		2 32 11·291	+51 14 41·61
140	5169 Oct. 20	2 32 11·282	+51 21 40·41
	5170 ,,	11·300	40·40
	5172 ,,	11·311	40·29
	5173 Oct. 21	11·278	40·60
	5174 ,,	11·280	40·55
	5177 ,,	11·304	40·28
	5178 ,,	11·312	40·41
	5179 ,,	11·328	40·35
		2 32 11·300	+51 21 40·41

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
141	5169 Oct. 20	2 32 30·677	+51 36 59·16
	5170 ,,	30·686	59·08
	5172 ,,	30·702	59·32
	5173 Oct. 21	30·680	59·38
	5174 ,,	30·672	59·05
	5177 ,,	30·682	59·17
	5178 ,,	30·714	58·94
	5179 ,,	30·691	58·86
		2 32 30·688	+51 36 59·12
142	5172 Oct. 20	2 34 1·310	+51 56 47·95
	5173 Oct. 21	1·283	48·10
	5174 ,,	1·278	48·13
	5177 ,,	1·276	47·94
	5178 ,,	1·291	47·81
	5179 ,,	1·292	47·81
		2 34 1·288	+51 56 47·96
143	5173 Oct. 21	2 34 15·976	+51 5 2·03
	5174 ,,	15·975	1·98
	5177 ,,	15·986	2·21
	5178 ,,	16·006	2·22
	5179 ,,	15·965	2·00
		2 34 15·982	+51 5 2·09
144	5169 Oct. 20	2 34 24·146	+51 7 17·47
	5170 ,,	24·136	17·32
	5172 ,,	24·155	17·23
		2 34 24·146	+51 7 17·34
145	5169 Oct. 20	2 35 26·936	+51 40 29·42
	5170 ,,	26·955	29·27
	5172 ,,	26·953	29·26
	5173 Oct. 21	26·949	29·31
	5174 ,,	26·928	29·39
	5177 ,,	26·948	29·15
	5179 ,,	26·936	29·04
		2 35 26·944	+51 40 29·26
146	5169 Oct. 20	2 35 39·050	+51 20 33·90
	5170 ,,	39·059	33·98
	5172 ,,	39·056	33·94
	5173 Oct. 21	39·064	33·87
	5174 ,,	39·050	33·85
	5177 ,,	39·043	33·95
	5178 ,,	39·055	33·58
	5179 ,,	39·048	34·05
		2 35 39·053	+51 20 33·89
	1901.		
147	5359 Jan. 13	2 36 40·471	+32 53 45·85
148	5365 Jan. 14	2 37 54·449	+32 38 9·51
	5366 ,,	54·487	9·36
	5367 ,,	54·499	9·32
		2 37 54·478	+32 38 9·40
149	5359 Jan. 13	2 37 57·064	+33 1 59·92
	1900.		
150	5160 Oct. 14	2 38 37·494	+49 49 56·84
	5161 ,,	37·482	56·93
	5162 Oct. 15	37·495	56·91
		2 38 37·490	+49 49 56·89
151	5160 Oct. 14	2 38 46·322	+49 31 49·17
	5161 ,,	46·320	49·37
		2 38 46·321	+49 31 49·27
152	5160 Oct. 14	2 39 7·501	+49 7 7·70
	5161 ,,	7·489	7·64
	5162 Oct. 15	7·514	7·79
		2 39 7·501	+49 7 7·71
	1901.		
153	5359 Jan. 13	2 39 20·769	+32 41 33·91
	5365 Jan. 14	20·736	34·06
	5366 ,,	20·768	33·87
	5367 ,,	20·779	33·88
		2 39 20·763	+32 41 33·93
	1900.		
154	5160 Oct. 14	2 40 1·635	+49 47 57·98
	5161 ,,	1·614	57·95
	5162 Oct. 15	1·630	58·06
		2 40 1·626	+49 47 58·00
	1901.		
155	5359 Jan. 13	2 40 15·836	+32 12 10·74
	5365 Jan. 14	15·823	10·67
	5367 ,,	15·831	10·84
	5368 Jan. 15	15·845	11·07
	5369 ,,	15·850	10·99
	5371 ,,	15·843	11·10
		2 40 15·838	+32 12 10·90
156	5142 Oct. 7	2 40 48·916	+47 28 47·79
	5143 ,,	48·947	47·97
	5145 ,,	48·912	47·92
	5146 ,,	48·912	48·00
	5148 Oct. 8	48·929	48·10
	5150 ,,	48·955	48·30
	5152 ,,	48·903	47·62
	5154 Oct. 10	48·909	47·65
		2 40 48·923	+47 28 47·92
157	5148 Oct. 8	2 40 50·996	+48 3 54·83
	5150 ,,	50·970	54·46
	5152 ,,	50·957	54·45
	5154 Oct. 10	50·963	54·87
		2 40 50·972	+48 3 54·65
158	5154 Oct. 10	2 40 52·107	+48 47 59·36
	5160 Oct. 14	52·140	59·63
	5161 ,,	52·128	59·45
		2 40 52·125	+48 47 59·48
	1901.		
159	5359 Jan. 13	2 40 55·336	+32 36 51·02
	5365 Jan. 14	55·324	51·30
	5366 ,,	55·329	51·20
	5367 ,,	55·327	51·13
	5368 Jan. 15	55·342	51·10
	5369 ,,	55·367	50·89
	5371 ,,	55·341	51·16
		2 40 55·338	+32 36 51·11
160	5359 Jan. 13	2 40 57·640	+32 7 29·77
	5365 Jan. 14	57·625	29·27
	5366 ,,	57·646	29·41
	5367 ,,	57·651	29·44
	5368 Jan. 15	57·635	29·72
	5369 ,,	57·637	29·69
	5371 ,,	57·622	29·87
		2 40 57·637	+32 7 29·60
	1900.		
161	5154 Oct. 10	2 41 8·051	+48 22 20·39
162	5160 Oct. 14	2 41 26·342	+48 51 22·85
163	5160 Oct. 14	2 41 31·909	+49 27 51·77
	5161 ,,	31·918	51·77
	5162 Oct. 15	31·931	51·57
		2 41 31·919	+49 27 51·70

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
164	5134 Oct. 3	2 41 35·928	+46 14 46·27
	5138 Oct. 4	35·933	46·73
	5139 ,,	35·909	46·45
	5141 Oct. 5	(35·979)	(46·63)
	5142 Oct. 7	35·912	46·34
	5143 ,,	35·940	46·30
	5145 ,,	35·949	46·42
	5146 ,,	35·954	46·18
		2 41 35·932	+46 14 46·38
165	5138 Oct. 4	2 41 58·797	+46 45 51·14
	5139 ,,	58·774	51·15
	5141 Oct. 5	(58·790)	(51·27)
	5142 Oct. 7	58·767	51·46
	5143 ,,	58·778	51·51
	5145 ,,	58·773	51·27
	5146 ,,	58·756	51·38
	5148 Oct. 8	58·789	51·19
	5150 ,,	58·784	51·15
	5152 ,,	58·769	51·22
		2 41 58·776	+46 45 51·27
166	5126 Oct. 1	2 41 59·308	+45 15 39·08
	5129 Oct. 2	59·317	39·07
	5130 ,,	59·315	39·09
	5131 ,,	59·319	39·05
	5133 ,,	59·308	39·19
	5134 Oct. 3	59·333	39·12
	5138 Oct. 4	59·303	(38·64)
	5139 ,,	59·330	39·10
		2 41 59·317	+45 15 39·10
	1901.		
167	5359 Jan. 13	2 42 2·198	+32 16 22·30
	5365 Jan. 14	2·207	22·15
	5366 ,,	2·214	22·09
	5367 ,,	2·221	22·07
	5368 Jan. 15	2·194	22·34
	5369 ,,	2·199	22·16
	5371 ,,	2·203	22·23
	5372 ,,	2·199	22·39
		2 42 2·204	+32 16 22·22
	1900.		
168	5160 Oct. 14	2 42 5·925	+49 43 56·08
	5161 ,,	5·908	56·13
	5162 Oct. 15	5·919	56·30
		2 42 5·917	+49 43 56·17
169	5134 Oct. 3	2 42 9·215	+45 55 1·27
	5138 Oct. 4	9·184	1·24
	5139 ,,	9·213	1·27
	5141 Oct. 5	(9·210)	(1·53)
		2 42 9·204	+45 55 1·26
170	1900.		
	5142 Oct. 7	2 42 16·889	+47 18 11·82
	5143 ,,	16·877	11·97
	5145 ,,	16·890	11·91
	5146 ,,	16·907	12·03
	5148 Oct. 8	16·884	11·97
	5150 ,,	16·882	11·79
	5152 ,,	16·910	(11·36)
		2 42 16·891	+47 18 11·92
171	5126 Oct. 1	2 42 27·297	+44 42 22·76
	5129 Oct. 2	27·289	22·57
	5130 ,,	27·298	22·46
	5131 ,,	27·282	22·42
	5133 ,,	27·309	22·86
		2 42 27·295	+44 42 22·61
172	5126 Oct. 1	2 42 30·147	+44 54 55·66
	5129 Oct. 2	30·164	55·48
	5130 ,,	30·167	55·46
	5131 ,,	30·150	55·41
	5133 ,,	30·139	55·49
	5134 Oct. 3	30·158	55·70
		2 42 30·154	+44 54 55·53
	1901.		
173	5359 Jan. 13	2 42 30·790	+32 41 35·26
	5365 Jan. 14	30·826	35·35
	5366 ,,	30·823	35·16
	5367 ,,	30·838	35·26
	5368 Jan. 15	30·816	35·09
	5369 ,,	30·812	35·32
	5371 ,,	30·810	35·35
	5372 ,,	30·788	34·99
		2 42 30·813	+32 41 35·22
	1900.		
174	5142 Oct. 7	2 42 35·090	+47 49 28·70
	5143 ,,	35·093	28·66
	5145 ,,	35·048	28·62
	5146 ,,	35·067	28·58
	5148 Oct. 8	35·083	28·53
	5150 ,,	35·076	28·69
	5152 ,,	35·071	28·49
	5154 Oct. 10	35·082	28·67
		2 42 35·076	+47 49 28·62
	1901.		
175	5365 Jan. 14	2 43 14·839	+31 35 27·06
	5366 ,,	14·822	27·03
	5367 ,,	14·815	27·16
	5368 Jan. 15	14·793	27·26
	5369 ,,	14·800	27·31
	5371 ,,	14·803	27·21
	5372 ,,	14·825	27·14
		2 43 14·814	+31 35 27·17
176	1900.		
	5160 Oct. 14	2 43 26·467	+49 19 19·70
	5161 ,,	26·465	19·81
	5162 Oct. 15	26·481	19·74
		2 43 26·471	+49 19 19·75
177	5126 Oct. 1	2 43 27·909	+45 35 15·51
	5129 Oct. 2	27·929	15·85
	5130 ,,	27·906	15·64
	5131 ,,	27·913	15·82
	5133 ,,	27·904	15·81
	5134 Oct. 3	27·912	15·68
	5138 Oct. 4	27·904	15·44
	5139 ,,	27·924	15·80
	5141 Oct. 5	(27·899)	(16·42)
		2 43 27·913	45 35 15·70
	1901.		
178	5365 Jan. 14	2 43 44·968	+31 33 40·11
	5366 ,,	44·977	40·17
	5367 ,,	44·965	40·44
	5368 Jan. 15	44·973	39·97
	5369 ,,	44·975	40·17
	5371 ,,	44·976	40·32
	5372 ,,	44·954	40·34
		2 43 44·970	+31 33 40·22
	1900.		
179	5142 Oct. 7	2 43 50·658	+47 45 38·28
	5143 ,,	50·649	38·13
	5145 ,,	50·626	38·27
	5146 ,,	50·665	38·27
	5148 Oct. 8	50·674	38·32
	5150 ,,	50·686	38·08
	5152 ,,	50·655	37·93
	5154 Oct. 10	50·673	38·24
		2 43 50·661	+47 45 38·19
	1901.		
180	5365 Jan. 14	2 44 6·309	+32 8 37·61
	5366 ,,	6·318	37·83
	5367 ,,	6·304	37·68
	5368 Jan. 15	6·298	37·80
	5369 ,,	6·300	37·91
	5372 ,,	6·322	37·49
		2 44 6·309	+32 8 37·72
	1900.		
181	5154 Oct. 10	2 44 29·149	+48 21 44·06

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1900.	h m s	° ′ ″
182	5126 Oct. 1	2 44 44·095	+45 32 32·23
	5129 Oct. 2	44·092	32·19
	5130 ,,	44·099	32·07
	5131 ,,	44·096	32·47
	5133 ,,	44·093	32·22
	5134 Oct. 3	44·096	32·06
	5138 Oct. 4	44·109	32·03
	5139 ,,	44·114	32·34
	5141 Oct. 5	(44·074)	(32·67)
		2 44 44·099	+45 32 32·20
183	5138 Oct. 4	2 44 45·495	+46 41 58·03
	5139 ,,	45·434	57·84
	5141 Oct. 5	(45·435)	(57·46)
	5142 Oct. 7	45·466	57·58
	5143 ,,	45·440	57·70
	5145 ,,	45·470	57·61
	5146 ,,	45·476	57·63
	5148 Oct. 8	45·452	57·32
	5150 ,,	45·484	57·41
	5152 ,,	45·462	57·37
		2 44 45·464	+46 41 57·61
184	5126 Oct. 1	2 44 54·867	+45 13 59·28
	5129 Oct. 2	54·856	59·09
	5130 ,,	54·861	59·23
	5131 ,,	54·865	59·37
	5133 ,,	54·851	59·23
	5134 Oct. 3	54·877	59·42
	5138 Oct. 4	54·880	58·99
	5139 ,,	54·863	59·28
		2 44 54·865	+45 13 59·24
185	5148 Oct. 8	2 44 58·803	+48 8 24·06
	5150 ,,	58·800	24·54
	5152 ,,	58·737	24·47
	5154 Oct. 10	58·754	24·50
		2 44 58·774	+48 8 24·39
186	5134 Oct. 3	2 45 35·456	+46 21 54·85
	5138 Oct. 4	35·452	55·30
	5139 ,,	35·438	55·24
	(5141) Oct. 5	(35·433)	(55·47)
	5142 Oct. 7	35·454	54·98
	5143 ,,	35·438	55·33
	5145 ,,	35·457	54·95
	5146 ,,	35·448	55·06
		2 45 35·449	+46 21 55·10
187	1900. (5141) Oct. 5	h m s 2 45 (36·597)	° ′ ″ +46 59 (32·74)
	5142 Oct. 7	36 641	33·31
	5143 ,,	36·650	33 41
	5145 ,,	36·650	33·49
	5146 ,,	36·654	33·30
	5148 Oct. 8	36·675	33·10
	5150 ,,	36·662	33·03
	5152 ,,	36·664	33·19
		2 45 36·657	+46 59 33·26
188	5126 Oct. 1	2 45 37·845	+45 4 58·28
	5129 Oct. 2	37·828	58·26
	5130 ,,	37 845	58·11
	5131 ,,	37·883	58·12
	5133 ,,	37·877	57·87
	5134 Oct. 3	37·827	58·02
		2 45 37·851	+45 4 58·11
189	1901. 5365 Jan. 14	2 45 52·162	+31 55 55·72
	5366 ,,	52·153	55·64
	5367 ,,	52·129	55·82
	5368 Jan. 15	52·163	55·62
	5369 ,,	52·168	55·64
	5371 ,,	52·157	55·80
	5372 ,,	52·182	55·97
		2 45 52·159	+31 55 55·74
190	5367 Jan. 14	2 46 7·458	+32 3 6·26
	5368 Jan. 15	7·492	6·49
	5369 ,,	7·505	6·54
	5371 ,,	7·495	6·59
		2 46 7·488	+32 3 6·47
191	1900. 5134 Oct. 3	2 46 23·460	+46 2 4·79
	5138 Oct. 4	23·430	5·11
	5139 ,,	23·426	5·04
	5141 Oct. 5	(23·439)	(5·15)
		2 46 23·439	+46 2 4·98
192	1901. 5379 Jan. 17	2 50 29·477	+31 32 48·68
193	5379 Jan. 17	2 52 3·815	+30 38 43·63
194	5379 Jan. 17	2 52 27·816	+30 57 20·95
195	5379 Jan. 17	2 54 5·408	+31 1 38·11
196	5387 Jan. 23	3 9 9·005	+28 40 38·37
197	1901. 5387 Jan. 23	h m s 3 10 26·466	° ′ ″ +28 55 29·78
198	5390 Jan. 24	3 13 18·800	+28 21 17·30
199	5390 Jan. 24	3 14 10·659	+27 57 38·67
200	5390 Jan. 24	3 14 43·739	+27 52 1·95
201	5390 Jan. 24	3 16 21·078	+28 25 11·17
202	5390 Jan. 24	3 16 22·538	+27 59 47·85
203	5393 Jan. 29	3 31 23·426	+26 12 32·00
204	5393 Jan. 29	3 32 34·984	+26 23 16·07
205	5393 Jan. 29	3 34 56·021	+26 0 4·92
206	5394 Feb. 1	3 43 52·219	+25 20 35·42
207	5394 Feb. 1	3 44 35·784	+24 29 15·98
208	5394 Feb. 1	3 45 7·258	+25 6 21·39
209	5394 Feb. 1	3 45 51·606	+24 47 49·32
210	5397 Feb. 3	3 49 57·896	+24 4 12·38
	5398 ,,	57·888	12·65
		3 49 57·892	+24 4 12·52
211	5397 Feb. 3	3 50 6·874	+24 30 7·34
	5398 ,,	6·911	7·43
		3 50 6·893	+24 30 7·38
212	5397 Feb. 3	3 52 27·457	+24 24 17·96
	5398 ,,	27·451	18·21
		3 52 27·454	+24 24 18·09
213	5397 Feb. 3	3 52 37·293	+24 4 28·92
	5398 ,,	37·298	29·52
		3 52 37·296	+24 4 29·22

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1901.	h m s	° ′ ″
214	5397 Feb. 3	3 52 38·965	+23 24 16·69
	5398 „	38·926	16·86
		3 52 38·946	+23 24 16·78
215	5404 Feb. 5	3 57 47·128	+23 20 39·70
216	5404 Feb. 5	3 58 13·153	+23 8 5·62
217	5407 Feb. 6	4 0 21·989	+22 34 1·90
218	5407 Feb. 6	4 2 3·600	+22 40 3·49
219	5407 Feb. 6	4 2 26·337	+23 7 58·50
220	5407 Feb. 6	4 3 31·582	+23 1 47·03
221	5407 Feb. 6	4 4 26·355	+22 34 19·56
222	5408 Feb. 11	4 18 (52·095)	+21 11 (26·16)
	5409 „	52·064	26·08
	5412 „	52·074	26·00
	5413 „	(52·076)	(25·95)
		4 18 52·069	+21 11 26·04
223	5408 Feb. 11	4 18 (54·702)	+20 52 (29·65)
	5409 „	54·700	29·81
	5412 „	54·690	29·77
	5413 „	(54·675)	(29·74)
		4 18 54·695	+20 52 29·79
224	5408 Feb. 11	4 20 (53·276)	+20 41 (25·53)
	5409 „	53·249	25·52
	5412 „	53·257	25·49
	5413 „	(53·264)	(25·71)
	5414 Feb. 12	53·241	25·49
	5415 „	53·237	25·48
	5416 „	53·265	25·49
		4 20 53·249	+20 41 25·49
225	5408 Feb. 11	4 22 (30·572)	+20 39 (13·08)
	5409 „	30·566	13·23
	5412 „	30·569	13·05
	5413 „	(30·533)	(13·38)
	5414 Feb. 12	30·576	13·04
	5415 „	30·561	13·11
	5416 „	30·574	13·03
		4 22 30·569	+20 39 13·09
226	5408 Feb. 11	4 22 (31·915)	+20 49 (7·23)
	5409 „	31·855	7·39
	5412 „	31·863	7·22
	5413 „	(31·834)	(7·33)
	5414 Feb. 12	31·873	7·10
	5415 „	31·867	7·20
	5416 „	31·861	7·19
		4 22 31·864	+20 49 7·22
227	5408 Feb. 11	4 23 (14·165)	+20 28 (44·07)
	5409 „	14·107	44·20
	5412 „	14·123	43·92
	5413 „	(14·081)	(44·50)
	5414 Feb. 12	14·089	44·00
	5415 „	14·130	43·97
		4 23 14·112	+20 28 44·02
228	5408 Feb. 11	4 24 (27·879)	+20 46 (42·06)
	5412 „	27·851	41·86
	5413 „	(27·800)	(43·33)
	5414 Feb. 12	27·800	42·24
	5415 „	27·859	42·01
	5416 „	27·834	42·19
		4 24 27·836	+20 46 42·07
229	5408 Feb. 11	4 24 (33·319)	+20 19 (47·13)
	5409 „	33·295	47·39
	5412 „	33·297	47·03
	5413 „	(33·250)	(47·66)
	5414 Feb. 12	33·304	46·96
	5415 „	33·331	46·93
	5416 „	33·324	46·95
	5420 Feb. 13	33·328	46·84
	5421 „	33·302	46·77
	5422 „	33·324	46·80
	5426 „	33·287	46·96
	5427 „	33·331	46·60
		4 24 33·312	+20 19 46·92
230	5414 Feb. 12	4 26 49·811	+19 55 22·23
	5415 „	49·831	22·06
	5416 „	49·828	22·27
	5420 Feb. 13	49·840	21·91
	5421 „	49 837	21·77
	5422 „	49·829	21·79
	5426 „	49·838	21·92
	5427 „	49·849	21·67
		4 26 49·833	+19 55 21·95
231	5421 Feb. 13	4 27 34·226	+20 20 37·34
	5426 „	34·228	37·53
	5427 „	34·243	37·34
		4 27 34·232	+20 20 37·40
232	5416 Feb. 12	4 28 22·950	+20 17 42·07
	5420 Feb. 13	22 971	41·65
	5421 „	22·986	41·59
	5422 „	22·989	41·48
	5426 „	22·975	41·66
	5427 „	22·965	41·60
	5428 Feb. 14	23·007	41·56
		4 28 22·978	+20 17 41·66
233	5420 Feb. 13	4 28 40·992	+20 7 5·14
	5421 „	40·991	4·97
	5422 „	40·992	4·72
	5426 „	41·008	4·96
	5427 „	40·994	5·02
	5428 Feb. 14	41·021	4·77
		4 28 41·000	+20 7 4·93
234	5421 Feb. 13	4 29 49·427	+20 16 19·29
	5422 „	49·444	18·92
	5427 „	49·425	18·90
	5428 Feb. 14	49·442	18·68
		4 29 49·435	+20 16 18·95
235	5428 Feb. 14	4 31 18·285	+20 19 20·69
236	5428 Feb. 14	4 32 12·683	+19 19 52·95
	5429 Feb. 15	12·686	52·95
	5430 „	12·683	52·94
	5431 „	12·696	52·92
		4 32 12·687	+19 19 52·94
237	5428 Feb. 14	4 33 10·059	+20 2 51·95
	5429 Feb. 15	10·085	51·42
	5430 „	10·062	51·79
		4 33 10·069	+20 2 51·72

TABLE VIII.—Mean Places of Comparison Stars Deduced from Photographs.

No.	Plate No. and Date.	R.A. 1900·0.	Dec. 1900·0.
	1901.	h m s	° ′ ″
238	5429 Feb. 15	4 33 35·632	+19 22 15·33
	5430 ,,	35·632	15·31
	5431 ,,	35·619	15·12
		4 33 35·628	+19 22 15·25
239	5428 Feb. 14	4 34 58·907	+19 51 34·19
	5429 Feb. 15	58·936	33·94
	5430 ,,	58·914	33·87
	5431 ,,	58·913	33·95
		4 34 58·918	+19 51 33·99
240	1901. 5434 Feb. 17	h m s 4 44 57·237	° ′ ″ +18 9 8·01
241	5436 Feb. 20	4 52 39·232	+17 22 55·81
	5438 ,,	39·212	55·68
	5441 ,,	39·232	55·59
		4 52 39·225	+17 22 55·69
242	5436 Feb. 20	4 52 56·399	+17 50 6·11
	5438 ,,	56·416	6·02
	5441 ,,	56 399	6·11
		4 52 56·405	+17 50 6·08
243	1901. 5436 Feb. 20	h m s 4 54 7·185	° ′ ″ +18 2 33·61
	5438 ,,	7·183	33·65
	5441 ,,	7·202	33·63
		4 54 7·190	+18 2 33·63
244	5436 Feb. 20	4 55 11·432	+ 17 22 19·60
	5438 ,,	11·454	19·57
	5441 ,,	11·452	19·31
		4 55 11·446	+17 22 19·49

TABLE IX.—Adopted Places of Comparison Stars.

No.	R.A. 1900·0.	Dec. 1900·0.	No.	R.A. 1900·0.	Dec. 1900·0.	No.	R.A. 1900·0.	Dec. 1900·0.
	h m s	° ′ ″		h m s	° ′ ″		h m s	° ′ ″
1	1 24 4·485	+ 48 3 1·25	55	1 42 4·134	+ 53 48 23·31	105	2 13 48·702	+ 36 54 33·60
47° 429	1 24 33·544	47 22 50·04	56	1 42 10·055	42 49 25·30	106	2 14 41·856	35 45 45·62
46° 373	1 24 47·948	47 3 4·57	57	1 42 14·247	42 17 1·67	107	2 14 50·655	36 18 44·12
2	1 24 48·402	48 46 25·03	58	1 43 15·453	42 32 13·99	36° 464	2 14 57·592	36 36 45·08
3	1 24 53·559	47 54 12·79	59	1 43 47·136	53 40 13·45	108	2 15 35·332	53 36 34·96
4	1 25 9·786	47 2 42·93	60	1 44 33·018	54 14 5·39	109	2 16 26·729	35 54 34·02
5	1 25 26·350	48 16 17·71	61	1 45 19·261	54 14 28·79	110	2 16 49 929	36 18 44·98
6	1 26 7·359	47 12 36·03	62	1 46 58·024	54 15 7·09	111	2 17 32·422	53 59 0·67
47° 442	1 26 16·890	47 54 13·10	63	1 46 58·993	53 54 19·12	112	2 17 50·210	53 27 35·76
7	1 26 30·225	48 9 24·74	64	1 47 16·105	53 45 15·30	113	2 19 5·846	53 28 35·23
8	1 26 40·654	48 59 52·92	65	1 48 4·182	40 41 54·03	114	2 20 36·214	53 8 34·69
9	1 27 31·757	51 17 33·13	66	1 48 20·141	40 12 19·59	115	2 21 34·146	53 38 40·28
47° 450	1 28 5·321	47 54 30·33	67	1 48 43·402	54 20 2·43	116	2 21 50·970	53 6 14·81
10	1 28 8·038	47 25 6·11	68	1 49 2·195	40 6 32·81	117	2 21 52·874	53 39 36·32
11	1 28 30·859	52 2 4·28	69	1 49 20·414	40 51 8·75	118	2 22 21·316	34 56 29·89
12	1 28 35·710	45 33 1·64	70	1 49 37·287	54 8 17·77	119	2 22 21·996	35 2 27·27
13	1 28 56·080	51 19 31·08	71	1 50 54·211	53 52 16·16	120	2 22 49·569	53 1 46·50
14	1 28 56·693	48 43 0·71	72	1 51 19·327	54 26 36·69	52° 587	2 22 52·559	52 36 52·85
15	1 29 14·163	46 15 23·77	73	1 51 55·543	40 20 4·19	121	2 23 6·716	34 28 34·08
16	1 29 28·105	46 51 44·53	74	1 51 58·503	54 3 30·91	122	2 23 13·929	34 26 41·18
17	1 29 28·839	48 30 56·06	75	1 52 16·191	39 34 45·79	123	2 23 15·027	52 45 16·30
18	1 29 44·577	45 31 56·69	76	1 52 30·221	40 35 35·46	124	2 23 33·880	35 18 34·36
19	1 29 52·502	45 8 18·12	77	1 52 31·365	54 26 26·94	125	2 23 34·058	35 4 46·29
46° 397	1 30 18·722	46 48 54·05	78	1 53 13·827	39 56 24·21	126	2 23 35·832	34 5 4·10
20	1 30 26·830	46 11 11·26	79	1 53 47·059	39 20 31·09	127	2 23 47·749	52 42 15·14
47° 462	1 30 32·853	47 33 44·57	80	1 54 2·277	53 59 38·20	128	2 24 9·203	34 14 38·49
21	1 30 59·189	51 56 43·72	81	1 54 21·509	54 32 7·05	129	2 24 11·400	53 20 14·50
44° 335	1 32 5·079	44 18 31·02	82	1 54 48·454	39 7 21·65	130	2 24 59·027	52 47 48·05
22	1 32 7·732	45 59 28·64	83	1 54 57·338	38 52 37·32	52° 592	2 25 3·160	52 23 27·87
23	1 32 10·254	52 45 41·63	84	1 55 41·695	40 4 14·42	131	2 25 4·962	53 12 43·31
24	1 32 30·356	45 50 40·16	85	1 55 49·502	39 38 17·66	34° 449	2 25 6·738	34 57 20·50
25	1 32 44·895	44 40 23·49	86	1 56 2·444	54 1 36·43	132	2 26 1·429	53 14 28·21
26	1 32 52·451	51 30 58·43	87	1 56 34·691	54 34 52·27	34° 457	2 26 29·234	34 50 17·94
27	1 32 56·411	51 46 48·13	88	1 57 12·810	54 20 10·07	133	2 26 57·386	34 4 1·93
28	1 33 30·763	52 23 43·11	39° 457	1 57 45·175	39 34 30·24	52° 595	2 27 16·863	52 23 26·02
29	1 33 47·426	43 59 22·27	89	1 58 10·711	38 49 34·43	52° 597	2 27 22·976	52 57 54·13
30	1 33 47·634	52 55 58·81	90	1 58 15·305	53 57 45·53	134	2 27 40·973	52 38 51·76
31	1 34 4·071	45 35 11·05	91	1 58 44·480	39 3 35·04	135	2 28 17·166	34 25 3·64
32	1 34 16·496	52 53 15·59	92	1 59 26·042	54 14 57·39	136	2 28 20·110	52 38 57·47
33	1 34 28·920	45 20 42·64	93	1 59 33·671	54 25 37·85	53° 546	2 28 31·869	53 14 57·74
34	1 34 33·768	44 51 18·85	94	2 1 11·629	54 32 35·73	137	2 30 51·120	51 39 53·48
44° 346	1 34 45·245	44 16 29·25	53° 453	2 1 36·474	54 7 38·26	138	2 31 27·025	52 1 44·17
35	1 35 13·894	44 48 35·62	95	2 3 12·182	53 59 13·05	51° 604	2 31 37·424	51 38 37·71
36	1 35 27·801	43 38 21·86	53° 459	2 3 20·871	53 51 27·56	139	2 32 11·291	51 14 41·61
37	1 35 42·463	52 44 52·74	54° 470	2 3 27·824	54 49 6·72	140	2 32 11·300	51 21 40·41
38	1 35 47·552	52 59 46·04	96	2 4 32·551	54 31 37·01	141	2 32 30·688	51 36 59·12
39	1 35 49·505	43 21 19·48	97	2 4 35·231	37 30 7·98	50° 601	2 33 42·672	51 11 33·59
40	1 35 49·998	52 25 17·15	36° 426	2 4 37·582	37 13 44·83	142	2 34 1·288	51 56 47·96
41	1 36 32·046	44 4 32·40	98	2 4 52·443	54 9 37·19	143	2 34 15·982	51 5 2·09
42	1 36 55·135	44 30 12·58	99	2 4 52·656	53 34 38·67	144	2 34 24·146	51 7 17·34
43	1 37 10·050	52 47 16·43	53° 470	2 4 59·611	54 4 46·88	145	2 35 26·944	51 40 29·26
44	1 37 13·061	53 3 28·42	100	2 5 31·369	37 43 7·39	146	2 35 39·053	51 20 33·89
45	1 37 34·726	43 50 53·19	54° 483	2 6 11·449	54 38 27·82	147	2 36 40·471	32 53 45·85
42° 360	1 38 5·301	42 44 13·95	37° 505	2 7 52·478	37 56 20·67	148	2 37 54·478	32 38 9·40
46	1 38 31·056	43 12 24·33	36° 440	2 7 53·567	37 8 58·84	149	2 37 57·064	33 1 59·92
47	1 38 56·673	43 43 9·70	53° 486	2 8 4·907	54 3 51·52	150	2 38 37·490	49 49 56·89
48	1 39 47·343	43 22 29·80	54° 497	2 8 17·154	54 37 14·15	151	2 38 46·321	49 31 49·27
49	1 39 54·739	53 31 10·76	101	2 8 39·928	37 37 23·07	152	2 39 7·501	49 7 7·71
50	1 40 5·933	42 21 15·84	102	2 10 3·689	36 12 51·63	153	2 39 20·763	32 41 33·93
51	1 40 13·905	53 49 19·75	36° 450	2 10 27·275	36 40 59·72	154	2 40 1·626	49 47 58·00
52	1 40 29·972	43 4 50·21	103	2 11 8·715	37 1 22·49	155	2 40 15·838	32 12 10·90
53	1 41 12·900	53 19 32·62	36° 458	2 12 32·947	36 36 16·85	156	2 40 48·923	47 28 47·92
54	1 41 39·117	+ 53 32 57·31	104	2 12 46·765	+ 36 13 36·52	157	2 40 50·972	+ 48 3 54·65

TABLE IX.—Adopted Places of Comparison Stars.

No.	R.A. 1900·0.	Dec. 1900·0.	No.	R.A. 1900·0.	Dec. 1900·0.	No.	R.A. 1900·0.	Dec. 1900·0.
	h m s	° ′ ″		h m s	° ′ ″		h m s	° ′ ″
158	2 40 52·125	+ 48 47 59·48	194	2 52 27·816	+ 30 57 20·95	22° 629	3 59 27·220	+ 22 53 44·60
159	2 40 55·338	32 36 51·11	30° 474	2 53 52·659	30 12 27·65	217	4 0 21·989	22 34 1·90
160	2 40 57·637	32 7 29·60	195	2 54 5·408	31 1 38·11	23° 617	4 0 39·619	23 14 51·48
161	2 41 8·051	48 22 20·39	30° 477	2 54 13·528	30 43 39·66	218	4 2 3·600	22 40 3·49
162	2 41 26·342	48 51 22·85	29° 508	2 54 24·980	30 10 18·10	219	4 2 26·337	23 7 58·50
163	2 41 31·919	49 27 51·70	30° 479	2 56 6·820	30 35 29·40	220	4 3 31·582	23 1 47·03
164	2 41 35·932	46 14 46·38	29° 534	3 5 54·297	29 27 14·34	221	4 4 26·355	22 34 19·56
165	2 41 58·776	46 45 51·27	28° 507	3 7 34·999	28 51 27·58	222	4 18 52·069	21 11 26·04
166	2 41 59·317	45 15 39·10	196	3 9 9·005	28 40 38·37	223	4 18 54·695	20 52 29·79
167	2 42 2·204	32 16 22·22	197	3 10 26·466	28 55 29·78	21° 644	4 20 22·804	21 14 36·76
168	2 42 5·917	49 43 56·17	198	3 13 18·800	28 21 17·30	224	4 20 53·249	20 41 25·49
169	2 42 9·204	45 55 1·26	199	3 14 10·659	27 57 38·67	21° 647	4 22 4·610	21 23 48·86
170	2 42 16·891	47 18 11·92	28° 517	3 14 36·993	28 27 57·62	225	4 22 30·569	20 39 13·09
171	2 42 27·295	44 42 22·61	200	3 14 43·739	27 52 1·95	226	4 22 31·864	20 49 7·22
172	2 42 30·154	44 54 55·53	201	3 16 21·078	28 25 11·17	20° 760	4 22 44·304	20 36 35·65
173	2 42 30·813	32 41 35·22	202	3 16 22·538	27 59 47·85	227	4 23 14·112	20 28 44·02
174	2 42 35·076	47 49 28·62	26° 572	3 28 57·165	26 16 22·75	228	4 24 27·836	20 46 42·07
175	2 43 14·814	31 35 27·17	26° 574	3 29 19·189	26 30 59·13	229	4 24 33·312	20 19 46·92
176	2 43 26·471	49 19 19·75	26° 579	3 30 6·050	27 0 40·90	20° 772	4 25 45·585	20 34 3·71
177	2 43 27·913	45 35 15·70	25° 580	3 31 9·976	25 40 3·52	230	4 26 49·833	19 55 21·95
178	2 43 44·970	31 33 40·22	203	3 31 23·426	26 12 32·00	231	4 27 34·232	20 20 37·40
179	2 43 50·661	47 45 38·19	204	3 32 34·984	26 23 16·07	232	4 28 22·978	20 17 41·66
180	2 44 6·309	32 8 37·72	25° 584	3 33 29·118	25 48 4·57	233	4 28 41·000	20 7 4·93
181	2 44 29·149	48 21 44·06	26° 596	3 34 11·992	26 33 45·80	19° 740	4 29 47·965	19 45 47·72
182	2 44 44·099	45 32 32·20	205	3 34 56·021	26 0 4·92	234	4 29 49·435	20 16 18·95
183	2 44 45·464	46 41 57·61	24° 568	3 41 47·084	25 4 38·07	19° 745	4 30 51·329	19 17 21·87
184	2 44 54·865	45 13 59·24	24° 571	3 42 8·016	24 40 48·16	235	4 31 18·285	20 19 20·69
185	2 44 58·774	48 8 24·39	206	3 43 52·219	25 20 35·42	236	4 32 12·687	19 19 52·94
44° 591	2 45 6·758	44 38 47·57	207	3 44 35·784	24 29 15·98	237	4 33 10·069	20 2 51·72
186	2 45 35·449	46 21 55·10	208	3 45 7·258	25 6 21·39	238	4 33 35·628	19 22 15·25
187	2 45 36·657	46 59 33·26	209	3 45 51·606	24 47 49·32	239	4 34 58·918	19 51 33·99
47° 720	2 45 37·332	47 30 3·61	23° 586	3 49 50·836	23 32 9·43	18° 725	4 41 4·006	18 53 56·31
188	2 45 37·851	45 4 58·11	210	3 49 57·892	24 4 12·52	18° 727	4 41 17·825	18 18 27·67
189	2 45 52·159	31 55 55·74	211	3 50 6·893	24 30 7·38	19° 782	4 41 51·383	19 8 22·65
190	2 46 7·488	32 3 6·47	212	3 52 27·454	24 24 18·09	18° 734	4 42 50·803	18 32 33·85
191	2 46 23·439	46 2 4·98	213	3 52 37·296	24 4 29·22	18° 738	4 44 27·341	19 1 10·87
30° 464	2 49 39·381	30 38 14·37	214	3 52 38·946	23 24 16·78	240	4 44 57·237	18 9 8·01
30° 465	2 49 50·629	31 10 29·94	215	3 57 47·128	23 20 39·70	241	4 52 39·225	17 22 55·69
192	2 50 29·477	31 32 48·68	216	3 58 13·153	23 8 5·62	242	4 52 56·405	17 50 6·08
30° 469	2 51 58·204	31 6 53·09	23° 611	3 58 52·397	23 14 5·14	243	4 54 7·190	18 2 33·63
193	2 52 3·815	+ 30 38 43·63	23° 613	3 59 17·118	+ 23 31 26·03	244	4 55 11·446	+ 17 22 19·49

TABLE A.—Corrections for Supplementary Division Errors of *Réseau*.

Astrographic.

No. of Plate.	Date.	Division Correction.	No. of Plate.	Date.	Division Correction.	No. of Plate.	Date.	Division Correction.	No. of Plate.	Date.	Division Correction.
		s			s			s			s
5126	Oct. 1	+ ·006	5211	Nov. 7	− ·006	5274	Nov. 27	− ·007	5344	Jan. 5	− ·004
5129	2	+ ·003	5212	9	+ ·006	5275	29	− ·007	5345	5	− ·004
5130	2	+ ·003	5213	9	+ ·006				5346	5	− ·005
5131	2	+ ·006	5214	9	− ·007				5347	5	− ·005
5133	2	+ ·006	5215	9	− ·006	5276	Dec. 6	− ·006	5348	5	− ·005
5134	3	+ ·006	5216	9	− ·006	5277	6	− ·006	5349	8	− ·001
5138	4	+ ·006	5217	9	− ·006	5278	6	− ·006	5350	8	− ·005
5139	4	+ ·006	5218	10	+ ·006	5279	7	...	5351	8	− ·005
5141	5	+ ·006	5219	10	+ ·006	5280	7	− ·006	5352	8	− ·005
5142	7	+ ·005	5220	10	+ ·006	5283	7	− ·006	5353	9	− ·002
5143	7	+ ·006	5222	10	− ·007	5285	9	+ ·007	5354	9	− ·004
5145	7	+ ·006	5223	10	− ·007	5286	9	− ·006	5355	9	− ·004
5146	7	+ ·006	5226	11	+ ·006	5287	10	− ·001	5356	9	− ·005
5148	8	+ ·006	5227	11	+ ·006	5288	13	− ·006	5359	13	− ·005
5150	8	+ ·006	5228	11	+ ·006	5289	13	− ·006	5365	14	− ·005
5152	8	− ·006	5229	11	− ·007	5290	13	− ·006	5366	14	− ·005
5154	10	+ ·006	5230	13	+ ·006	5294	13	− ·006	5367	14	− ·005
5160	14	+ ·006	5231	13	+ ·006	5297	13	− ·006	5368	15	− ·002
5161	14	+ ·006	5232	13	+ ·006	5299	15	+ ·008	5369	15	− ·002
5162	15	+ ·006	5234	13	− ·006	5300	15	+ ·008	5371	15	− ·005
5169	20	− ·007	5235	13	− ·006	5304	15	− ·006	5372	15	− ·005
5170	20	− ·007	5236	13	− ·006	5306	15	− ·006	5379	17	− ·005
5172	20	− ·006	5237	14	− ·007	5307	15	− ·006	5390	24	− ·002
5173	21	+ ·006	5238	14	− ·007	5308	16	+ ·008			
5174	21	+ ·006	5239	15	+ ·006	5309	17	+ ·008			
5177	21	− ·007	5240	15	+ ·006	5310	17	+ ·008	5394	Feb. 1	− ·002
5178	21	− ·006	5241	15	+ ·006	5313	17	− ·006	5397	3	− ·004
5179	21	− ·006	5242	15	− ·008	5314	19	+ ·008	5398	3	− ·004
5183	26	+ ·006	5243	15	− ·008	5315	19	+ ·008	5407	6	·000
5184	26	+ ·006	5248	18	− ·008	5318	19	− ·005	5408	11	+ ·005
5185	26	+ ·006	5249	18	− ·008	5319	19	− ·005	5409	11	+ ·006
5186	26	− ·006	5250	18	− ·008	5322	19	− ·005	5412	11	− ·006
5187	26	− ·006	5253	22	+ ·006	5324	19	− ·006	5413	11	− ·006
5189	26	− ·006	5254	22	+ ·006	5326	20	− ·006	5414	12	+ ·005
5190	26	− ·006	5256	22	− ·004	5327	21	·000	5415	12	+ ·006
5191	27	+ ·006	5257	22	− ·006	5328	21	·000	5416	12	+ ·006
5192	27	+ ·006	5258	22	− ·006	5329	21	·000	5420	13	+ ·005
5193	27	+ ·006	5259	22	− ·006	5330	24	− ·005	5421	13	− ·004
5200	27	− ·007	5260	22	− ·006	5331	26	− ·005	5422	13	− ·004
5201	27	− ·007	5261	23	+ ·007	5333	28	− ·005	5426	13	− ·006
5202	27	− ·006	5262	23	+ ·007	5334	28	− ·005	5427	13	− ·006
5203	27	− ·006	5263	23	− ·006	5335	28	− ·005	5428	14	− ·005
5204	28	− ·001	5264	23	− ·006	5336	28	− ·006	5429	15	+ ·005
5205	29	+ ·006	5267	25	+ ·006	5337	29	− ·007	5430	15	+ ·006
5206	29	+ ·006	5268	25	− ·002	5338	29	− ·002	5431	15	+ ·006
5207	31	− ·006	5269	25	·000				5434	17	+ ·004
5208	31	− ·006	5270	27	+ ·006				5436	20	+ ·005
			5271	27	+ ·006	5341	Jan. 4	− ·001	5438	20	+ ·004
5209	Nov. 6	+ ·006	5272	27	+ ·006	5342	4	·000	5441	20	− ·006
5210	7	− ·006	5273	27	− ·007	5343	4	+ ·002	5452	25	− ·006

TABLE A.—Corrections for Supplementary Division Errors of *Réseau*.

Thompson.

No. of Plate.	Date.	Division Correction.	No. of Plate.	Date.	Division Correction.	No. of Plate.	Date.	Division Correction.	No. of Plate.	Date.	Division Correction.
		s			s			s			s
744	Oct. 1	·000	802	Oct. 29	+ ·002	869	Dec. 17	+ ·003	912	Jan. 15	+ ·002
745	1	+ ·003	803	29	+ ·002	870	17	− ·002	913	15	+ ·002
746	1	+ ·003				871	17	+ ·004	914	15	+ ·002
747	2	+ ·003	804	Nov. 6	+ ·002	872	19	− ·001	915	17	− ·002
748	3	+ ·003	806	8	·000	873	19	− ·001	917	18	·000
749	3	+ ·003	807	8	·000	874	19	·000	918	18	·000
751	4	+ ·003	811	10	− ·002	875	19	+ ·003	919	18	− ·001
752	4	+ ·003	812	10	− ·002	876	19	+ ·003	920	18	− ·002
753	4	+ ·003	817	13	+ ·002	877	19	+ ·003	921	22	− ·001
754	5	+ ·003	818	13	+ ·002	878	21	− ·001	922	22	− ·001
755	5	+ ·003	819	13	− ·002	879	21	− ·001	925	24	− ·002
756	7	+ ·003	820	13	− ·002	880	21	+ ·003	926	24	− ·002
757	7	+ ·003	821	14	− ·003	881	21	+ ·003	927	28	·000
759	8	+ ·003	822	15	+ ·001	882	21	+ ·003	928	29	·000
760	8	+ ·003	823	15	+ ·002	883	26	− ·001	930	29	− ·002
761	8	+ ·003	844	27	+ ·003	884	26	− ·001			
762	9	+ ·003	845	27	+ ·003	885	28	+ ·002			
763	10	+ ·003	846	27	+ ·003	886	28	+ ·002	931	Feb. 1	·000
764	10	+ ·003	847	27	+ ·003	887	29	− ·001	933	1	− ·001
766	13	+ ·003							934	3	− ·002
770	14	+ ·003							935	3	− ·002
771	14	+ ·003	848	Dec. 6	− ·003	889	Jan. 2	− ·002	936	5	+ ·003
778	20	+ ·003	849	6	− ·003	890	2	− ·003	937	5	+ ·002
782	21	+ ·003	850	6	− ·003	891	4	·000	938	6	·000
783	21	+ ·003	851	7	+ ·003	892	4	·000	939	6	·000
787	26	+ ·003	852	7	− ·003	894	5	− ·001	940	6	·000
788	26	+ ·003	853	7	− ·003	895	5	− ·001	941	11	− ·002
789	26	+ ·003	854	7	− ·003	896	5	− ·002	942	11	− ·002
790	26	+ ·003	855	10	+ ·003	897	5	− ·002	943	11	− ·001
791	26	− ·003	856	10	+ ·003	898	5	− ·003	944	11	+ ·001
792	26	− ·003	858	13	+ ·004	899	9	·000	945	11	+ ·001
793	26	− ·003	859	13	+ ·004	900	9	·000	946	12	− ·001
794	27	+ ·001	860	13	+ ·004	901	9	·000	947	12	− ·002
795	27	+ ·004	861	13	− ·003	904	14	·000	948	12	− ·002
796	27	+ ·002	863	15	+ ·002	905	14	·000	949	13	− ·001
797	27	− ·003	864	15	+ ·002	906	14	− ·002	952	14	− ·001
798	27	− ·003	865	15	+ ·002	907	14	− ·002	954	17	− ·002
799	27	− ·003	866	15	− ·003	908	15	·000	955	17	− ·003
800	28	·000	867	15	− ·003	909	15	·000	958	20	− ·002
801	29	+ ·002	868	15	− ·003	910	15	·000	959	20	− ·002

TABLE X.—Observed Places of Eros and Deduced Corrections to Tabular Places from Photographs taken with the Astrographic and Thompson Refractors.

NOTE.—From 1900 Oct. 1 to Nov. 18 the comparison has been made with Ephemeris (A); from 1900 Nov. 22 to 1901 Jan. 5 with Ephemeris (B); and from 1901 Jan. 8 with Ephemeris (C); given in Circular 9 of the *Conférence Astrophotographique Internationale.*

The Parallax has been computed with the value of the Solar Parallax 8″·800.

The observed places of Eros given in Columns 4 and 5 are deduced from the Reference Stars for Astrographic, and from the Comparison Stars for Thompson photographs, indicated by A and T respectively in Column 2.

No. of Plate.	Telescope.	Date and G.M.T. 1900.	True Equinox of the Date.		Parallax.		Correction to Tabular Place.			
							From Reference Stars.		From Comparison Stars.	
			R.A.	Dec. N.	R.A.	Dec.	R.A.	Dec.	R.A.	Dec.
		d h m s	h m s	° ′ ″	s	″	s	″	s	″
744	T	Oct. 1 7 20 20·7	2 43 57·847	44 53 42·96	− 0·889	+ 9·77	...	...	− 0·004	+ 1·83
5126	A	1 10 52 10·8	2 43 58·851	44 57 0·56	0·671	3·93	− 0·022	+ 1·76	0·020	1·65
745	T	1 11 6 34·6	2 43 58·933	44 57 14·55	0·632	3·62	...	...	0·007	2·32
746	T	1 12 13 0·0	2 43 59·229	44 58 15·70	0·419	2·46	...	...	0·015	1·53
747	T	2 7 36 2·3	2 44 3·369	45 16 18·26	0·917	9·26	...	...	0·032	1·76
5129	A	2 8 43 44·2	2 44 3·537	45 17 20·99	− 0·905	+ 7·19	− 0·038	+ 1·60	− 0·037	+ 1·57
5130	A	2 9 26 17·3	2 44 3·645	45 18 0·46	0·857	5·99	0·036	1·60	0·035	1·64
5131	A	2 10 26 12·4	2 44 3·793	45 18 56·32	0·741	4·41	0·031	1·85	0·036	1·86
5133	A	2 12 51 3·7	2 44 4·125	45 21 10·64	0·270	1·92	0·020	1·78	0·015	1·79
748	T	3 7 53 45·4	2 44 5·429	45 38 49·94	0·939	8·65	...	...	0·026	2·00
749	T	3 9 7 40·3	2 44 5·410	45 39 58·04	− 0·894	+ 6·41	...	...	− 0·055	+ 1·88
5134	A	3 10 7 5·5	2 44 5·411	45 40 51·01	0·790	4·77	− 0·053	+ 1·73	0·062	1·75
5138	A	4 7 21 54·0	2 44 4·018	46 0 23·81	0·948	9·58	0·009	1·74	0·005	1·70
751	T	4 7 47 39·3	2 44 3·941	46 0 47·14	0·957	8·77	...	...	0·026	1·45
5139	A	4 8 3 47·9	2 44 3·880	46 1 2·32	0·955	8·24	0·048	1·83	0·046	1·74
752	T	4 8 4 29·8	2 44 3·875	46 1 3·20	− 0·955	+ 8·24	...	...	− 0·053	+ 2·07
753	T	4 12 18 2·7	2 44 3·274	46 4 54·86	0·379	2·04	...	...	0·016	1·36
754	T	5 6 48 2·4	2 43 59·084	46 21 49·13	0·940	10·57	...	...	0·084	1·84
5141	A	5 8 18 58·4	2 43 58·690	46 23 11·56	0·966	7·69	− 0·043	+ 1·48	0·046	1·33
755	T	5 8 40 36·0	2 43 58·577	46 23 31·63	0·949	7·01	...	...	0·050	1·87
756	T	7 8 32 29·0	2 43 37·035	47 6 43·66	− 0·985	+ 7·04	...	...	− 0·058	+ 1·70
5142	A	7 9 13 35·6	2 43 36·631	47 7 20·52	0·928	5·75	− 0·044	+ 1·79	0·035	1·80
5143	A	7 9 48 45·4	2 43 36·247	47 7 52·17	0·856	4·72	0·067	1·99	0·063	1·86
5145	A	7 11 1 16·2	2 43 35·491	47 8 56·89	0·644	2·92	0·073	1·92	0 069	1·98
5146	A	7 11 38 1·4	2 43 35·110	47 9 29·75	0·511	2·22	0·070	1·91	0·069	1·82
757	T	7 12 19 27·6	2 43 34·686	47 10 6·62	− 0·345	+ 1·64	...	...	− 0·057	+ 1·77
759	T	8 6 57 39·4	2 43 21·656	47 26 41·72	1·015	10·08	...	...	0·089	1·94
760	T	8 7 20 26·2	2 43 21·359	47 27 01·91	1·027	9·32	...	...	0·096	1·94
5148	A	8 7 43 37·7	2 43 21·067	47 27 22·74	1·029	8·54	− 0·092	+ 2·23	0·104	2·22
761	T	8 11 58 12·8	2 43 17·752	47 31 7·69	0·422	1·78	...	...	0·092	1·85
5152	A	8 12 57 3·1	2 43 16·931	47 31 59·48	− 0·168	+ 1·20	− 0·129	+ 1·62	− 0·122	+ 1·84
762	T	9 6 29 24·9	2 43 1·833	47 47 26·01	1·010	10·95	...	...	0·067	1·77
763	T	10 6 30 34·8	2 42 37·485	48 8 21·60	1·035	10·84	...	...	0·110	1·62
764	T	10 6 53 15·4	2 42 37·032	48 8 41·57	1·056	10·07	...	...	0·149	2·00
5154	A	10 7 21 13·9	2 42 36·569	48 9 5·89	1·069	9·10	0·097	2·06	0·092	2·03
766	T	13 12 46 13·3	2 40 48·861	49 14 33·15	− 0·129	+ 0·69	...	...	− 0·112	+ 1·57
770	T	14 11 50 46·0	2 40 7·944	49 33 23·91	0·381	1·02	...	...	0·118	1·71
771	T	14 12 17 13·3	2 40 7·110	49 33 45·33	0·252	0·75	...	...	0·131	1·72
5160	A	14 12 37 33·8	2 40 6·503	49 34 1·62	− 0·152	0·62	− 0·105	+ 1·56	0·108	1·61
5161	A	14 13 15 6·0	2 40 5·330	49 34 32·03	+ 0·038	0·56	0·107	1·62	0·100	1·63

TABLE X.—Observed Places of Eros and Deduced Corrections to Tabular Places from Photographs taken with the Astrographic and Thompson Refractors.

No. of Plate.	Telescope.	Date and G.M.T. 1900.	True Equinox of the Date.		Parallax.		Correction to Tabular Place.			
							From Reference Stars.		From Comparison Stars.	
			R.A.	Dec. N.	R.A.	Dec.	R.A.	Dec.	R.A.	Dec.
		d h m s	h m s	° ′ ″	s	″	s	″	s	″
5162	A	Oct. 15 7 7 57·5	2 39 30·574	49 48 52·63	− 1·170	+ 8·97	− 0·115	+ 1·55	− 0·123	+ 1·52
778	T	20 11 41 11·9	2 34 18·404	51 21 53·38	0·317	0·27	...	...	0·154	1·48
5169	A	20 11 51 38·5	2 34 17·865	51 22 0·52	0·260	+ 0·17	0·171	1·40	0·162	1·35
5170	A	20 12 22 33·6	2 34 16·337	51 22 21·79	− 0·088	− 0·01	0·152	1·29	0·153	1·31
5172	A	20 17 17 28·7	2 34 1·462	51 25 44·95	+ 1·209	+ 6·15	0·170	1·37	0·177	1·35
5173	A	21 6 20 34·0	2 33 21·105	51 34 37·32	− 1·296	9·96	− 0·162	+ 1·55	− 0·159	+ 1·45
5174	A	21 6 48 21·1	2 33 19·636	51 34 55·71	1·296	8·80	0·174	1·25	0·160	1·18
782	T	21 7 1 6·9	2 33 18·967	51 35 4·43	1·290	8·28	...	...	0·174	1·38
783	T	21 7 26 43·4	2 33 17·627	51 35 21·67	1·265	+ 7·23	...	...	0·169	1·41
5177	A	21 12 9 29·4	2 33 2·673	51 38 30·93	− 0·134	− 0·07	0·183	1·38	0·182	1·37
5178	A	21 16 47 32·9	2 32 47·840	51 41 35·75	+ 1·174	+ 5·20	− 0·156	+ 1·40	− 0·168	+ 1·46
5179	A	21 17 11 47·5	2 32 46·516	51 41 52·17	+ 1·229	6·13	0·177	1·77	0·176	1·84
5183	A	26 6 17 37·0	2 26 10·220	52 47 18·56	− 1·405	9·18	0·227	1·32	0·217	1·15
787	T	26 6 43 14·2	2 26 8·521	52 47 32·16	1·389	8·04	...	...	0·209	1·26
5184	A	26 7 0 1·2	2 26 7·382	52 47 41·42	1·370	7·32	0·224	1·58	0·236	1·33
788	T	26 7 5 41·6	2 26 6·996	52 47 44·07	1·362	7·07	...	...	− 0·229	+ 1·20
789	T	26 7 31 4·2	2 26 5·297	52 47 57·66	1·315	6·00	...	...	0·226	1·29
5185	A	26 7 35 47·9	2 26 4·980	52 48 0·24	1·304	+ 5·80	− 0·225	+ 1·35	0·212	1·15
790	T	26 11 19 19·7	2 25 49·936	52 49 58·45	0·288	− 0·34	...	...	0·220	1·24
5186	A	26 11 25 5·3	2 25 49·523	52 50 1·35	0·253	0·39	0·244	1·11	0·239	1·25
791	T	26 11 58 18·1	2 25 47·296	52 50 19·08	− 0·049	0·55	...	...	− 0·227	+ 1·35
5187	A	26 12 20 18·8	2 25 45·791	52 50 30·55	+ 0·087	− 0·53	− 0·244	+ 1·25	0·239	1·30
792	T	26 17 6 20·6	2 25 26·384	52 53 0·08	1·370	+ 7·06	...	...	0·230	1·33
5189	A	26 17 8 0·6	2 25 26·284	52 53 0·73	1·373	7·14	0·217	1·11	0·221	1·12
793	T	26 17 27 14·7	2 25 24·970	52 53 10·83	1·394	7·98	...	...	0·219	1·23
5190	A	26 17 39 31·0	2 25 24·110	52 53 17·41	+ 1·407	8·53	− 0·242	+ 1·44	− 0·247	+ 1·59
5191	A	27 6 36 27·3	2 24 30·588	52 59 53·52	− 1·412	8·13	0·220	1·39	0·216	1·35
5192	A	27 7 2 0·8	2 24 28·814	53 0 6·36	1·379	7·01	0·215	1·43	0·218	1·37
794	T	27 7 18 1·2	2 24 27·680	53 0 14·07	1·351	6·34	...	...	0·234	1·13
5193	A	27 7 23 53·2	2 24 27·292	53 0 17·15	1·338	6·06	0·213	1·28	0·206	1·15
795	T	27 7 49 29·8	2 24 25·490	53 0 29·87	1·274	+ 5·01	...	...	− 0·230	+ 1·20
5200	A	27 11 9 47·5	2 24 11·481	53 2 9·39	0·316	− 0·37	− 0·236	+ 1·11	0·232	1·24
5201	A	27 11 30 27·8	2 24 10·031	53 2 19·74	0·189	0·54	·236	1·23	0·241	1·24
796	T	27 11 37 51·6	2 24 9·504	53 2 23·29	− 0·143	0·58	...	...	0·245	1·13
797	T	27 12 15 5·8	2 24 6·884	53 2 41·74	+ 0·091	− 0·61	...	...	0·251	1·18
5202	A	27 16 56 55·4	2 23 47·060	53 4 59·96	1·384	+ 6·91	− 0·223	+ 1·20	− 0·221	+ 1·22
798	T	27 17 0 26·9	2 23 46·795	53 5 1·67	1·390	7·07	...	...	0·240	1·19
5203	A	27 17 25 1·2	2 23 45·067	53 5 13·60	1·422	8·16	0·230	1·16	0·243	1·17
799	T	27 17 25 26·7	2 23 45·018	53 5 13·85	1·422	8·18	...	...	0·249	1·21
800	T	28 17 9 58·3	2 22 2·563	53 16 23·25	1·428	7·75	...	...	0·243	1·11
5204	A	28 17 19 4·4	2 22 1·895	53 16 27·32	+ 1·438	+ 8·16	− 0·245	+ 1·06	− 0·241	+ 1·09
801	T	29 6 10 46·2	2 21 5·014	53 22 9·89	− 1·464	8·87	...	...	0·235	1·10
5205	A	29 6 16 11·9	2 21 4·603	53 22 12·26	1·460	8·62	0·243	1·11	0·244	1·09
802	T	29 6 31 38·3	2 21 3·425	53 22 19·07	1·446	7·91	...	...	0·273	1·21
5206	A	29 6 41 46·7	2 21 2·698	53 22 23·48	1·433	7·45	0·246	1·22	0·247	1·25
803	T	29 6 52 56·4	2 21 1·864	53 22 28·25	− 1·416	+ 6·95	...	...	− 0·250	+ 1·15
5207	A	31 17 0 0·8	2 16 33·692	53 45 9·58	+ 1·499	8·22	− 0·299	+ 1·04	0·298	1·06
5208	A	31 17 26 52·2	2 16 31·600	53 45 18·78	+ 1·518	9·49	0·263	0·95	0·263	0·89
804	T	Nov. 6 5 58 48·8	2 5 31·837	54 16 53·29	− 1·571	7·57	...	...	0·301	0·89
5209	A	6 6 5 54·3	2 5 31·235	54 16 54·23	− 1·558	7·23	0·297	0·93	0·286	0·98

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No. of Plate.	Telescope.	Date and G.M.T. 1900.	True Equinox of the Date.		Parallax.		Correction to Tabular Place. From Reference Stars.		From Comparison Stars.	
			R.A.	Dec. N.	R.A.	Dec.	R.A.	Dec.	R.A.	Dec.
		d h m s	h m s	° ′ ″	s	″	s	″	s	″
5210	A	Nov. 7 17 13 39·0	2 2 30·403	54 20 16·62	+ 1·635	+ 11·40	− 0·303	+ 0·41	− 0·300	+ 0·44
5211	A	7 17 59 49·1	2 2 26·465	54 20 19·73	1·575	13·71	0·273	0·53	0·269	0·43
806	T	8 12 37 2·1	2 0 50·392	54 21 13·00	0·745	0·03	...	...	0·300	0·63
807	T	8 13 0 5·1	2 0 48·423	54 21 13·64	+ 0·890	0·61	...	...	0·288	0·56
5212	A	9 6 12 48·1	1 59 19·729	54 21 29·56	− 1·543	6·18	0·289	0·92	0·290	0·86
5213	A	9 7 26 2·7	1 59 13·426	54 21 29·22	1·280	+ 2·94	− 0·309	+ 0·68	− 0·305	+ 0·66
5214	A	9 10 35 28·5	1 58 57·169	54 21 27·99	− 0·065	− 1·24	0·322	0·46	0·317	0·63
5215	A	9 14 25 42·2	1 58 37·468	54 21 25·41	+ 1·375	+ 3·90	0·294	0·53	0·306	0·45
5216	A	9 17 9 32·3	1 58 23·435	54 21 22·54	1·657	11·99	0·297	0·51	·312	0·43
5217	A	9 17 39 4·9	1 58 20·904	54 21 21·90	+ 1·618	13·50	0·299	0·47	0·318	0·41
5218	A	10 5 59 41·6	1 57 17·586	54 20 58·53	− 1·575	6·57	− 0·313	+ 0·66	− 0·312	+ 0·69
5219	A	10 6 24 28·4	1 57 15·470	54 20 57·48	1·503	5·39	0·315	0·69	0·308	0·57
5220	A	10 6 46 21·7	1 57 13·605	54 20 56·39	− 1·425	+ 4·39	0·313	0·56	0·307	0·54
5222	A	10 10 51 54·2	1 56 52·654	54 20 44·38	+ 0·099	− 1·23	0·327	0·33	0·325	0·46
5223	A	10 11 11 55·9	1 56 50·968	54 20 43·45	0·246	− 1·12	0·306	0·44	0·303	0·47
811	T	10 16 55 56·6	1 56 21·683	54 20 23·67	1·676	+ 11·64	...	...	− 0·313	+ 0·44
812	T	10 17 20 46·9	1 56 19·583	54 20 22·15	+ 1·650	12·98	...	...	0·301	0·48
5226	A	11 6 29 6·4	1 55 12·710	54 19 22·95	− 1·478	4·95	− 0·324	+ 0·52	0·313	0·53
5227	A	11 6 52 12·8	1 55 10·780	54 19 20·80	1·388	3·92	0·301	0·39	0·293	0·31
5228	A	11 7 15 15·3	1 55 8·826	54 19 18·74	1·284	+ 2·96	0·307	0·36	0·298	0·37
5229	A	11 10 15 53·1	1 54 53·562	54 19 2·14	0·121	− 1·22	− 0·312	+ 0·24	− 0·315	+ 0·37
5230	A	13 5 35 1·5	1 51 16·808	54 13 16·34	1·623	+ 7·12	0·293	0·15	0·283	0·18
817	T	13 5 47 10·9	1 51 15·790	54 13 14·31	1·592	6·51	...	...	0·312	0·21
5231	A	13 6 1 30·3	1 51 14·600	54 13 11·92	1·550	5·81	0·324	0·29	0·318	0·24
818	T	13 6 8 50·7	1 51 14·018	54 13 10·65	1·526	5·45	...	...	0·303	0·29
5232	A	13 6 28 5·0	1 51 12·436	54 13 7·49	− 1·456	4·61	− 0·304	+ 0·47	− 0·307	+ 0·41
819	T	13 16 1 47·1	1 50 25·472	54 11 22·66	+ 1·708	10·06	...	...	0·304	0·20
5234	A	13 16 16 39·9	1 50 24·264	54 11 19·80	1·713	10·85	0·298	0·18	0·303	0·25
820	T	13 17 1 47·0	1 50 19·587	54 11 11·28	1·684	13·25	...	...	0·298	0·32
5235	A	13 17 15 22·3	1 50 19·474	54 11 8·49	1·662	13·96	0·304	0·15	0·316	0·13
5236	A	13 17 44 32·2	1 50 17·111	54 11 2·94	1·595	15·45	− 0·292	+ 0·24	− 0·289	+ 0·18
821	T	14 12 38 34·9	1 48 45·523	54 7 3·69	1·016	1·16	...	...	0·291	0·11
5237	A	14 13 45 49·9	1 48 40·127	54 6 48·25	1·375	3·69	0·306	0·05	0·314	0·17
5238	A	14 14 13 29·2	1 48 37·934	54 6 41·90	+ 1·490	4·93	0·288	0·06	0·283	0·09
5239	A	15 6 2 24·3	1 47 22·679	54 2 50·06	− 1·523	5·34	0·296	0·33	0·303	0·18
822	T	15 6 3 45·3	1 47 22·543	54 2 49·64	1·519	5·28	...	...	− 0·325	+ 0·26
5240	A	15 6 23 18·8	1 47 21·020	54 2 44·62	1·443	4·37	− 0·311	0·31	0·308	0·18
823	T	15 6 28 14·3	1 47 20·603	54 2 43·24	1·422	4·15	...	...	0·341	0·20
5241	A	15 6 44 44·0	1 47 19·338	54 2 39·15	1·347	+ 3·44	0·310	+ 0·40	0·311	0·31
5242	A	15 9 18 36·2	1 47 7·247	54 1 58·35	0·378	− 0·87	0·328	− 0·06	0·328	0·02
5243	A	15 9 41 3·4	1 47 5·517	54 1 52·46	0·211	1·07	− 0·299	− 0·01	− 0·303	+ 0·12
5248	A	18 9 14 42·6	1 41 44·531	53 38 26·28	0·283	0·85	0·312	0·17	0·318	− 0·13
5249	A	18 9 43 46·1	1 41 42·469	53 38 15·05	− 0·062	1·01	0·317	0·09	0·318	0·09
5250	A	18 10 9 53·1	1 41 40·581	53 20 4·84	+ 0·138	− 0·98	0·359	0·11	0·352	0·16
5253	A	22 5 51 35·2	1 35 45·746	52 55 25·78	− 1·437	+ 4·65	0·340	0·06	0·338	0·15
5254	A	22 6 15 41·5	1 35 44·367	52 55 12·85	− 1·322	3·60	− 0·327	− 0·04	− 0·320	− 0·12
5256	A	22 13 21 31·5	1 35 20·025	52 51 21·53	+ 1·494	5·30	0·329	0·04	0·325	0·05
5257	A	22 13 48 21·6	1 35 18·497	52 51 6·73	1·592	6·61	0·340	0·11	0·335	0·06
5258	A	22 14 11 13·0	1 35 17·220	52 50 54·07	1·659	7·79	0·325	0·21	0·335	0·11
5259	A	22 15 43 38·4	1 35 12·024	52 50 3·20	1·756	12·85	0·314	0·16	0·324	0·11

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No. of Plate.	Telescope.	Date and G.M.T. 1900.	True Equinox of the Date.		Parallax.		Correction to Tabular Place. From Reference Stars.		Correction to Tabular Place. From Comparison Stars.	
			R.A.	Dec. N.	R.A.	Dec.	R.A.	Dec.	R.A.	Dec.
		d h m s	h m s	° ′ ″	s	″	s	″	s	″
5260	A	Nov. 22 16 6 5·1	1 35 10·747	52 49 50·90	+ 1·736	+ 14·10	− 0·330	− 0·06	− 0·337	− 0·05
5261	A	23 5 23 53·9	1 34 26·814	52 42 22·12	− 1·530	5·81	0·330	− 0·09	0·332	0·09
5262	A	23 5 46 40·6	1 34 25·591	52 42 9·18	1·436	+ 4·74	0·325	+ 0·01	0·320	0·06
5263	A	23 9 16 34·1	1 34 14·320	52 40 8·04	− 0·070	− 0·61	0·340	− 0·38	0·328	0·34
5264	A	23 9 41 40·5	1 34 12·995	52 39 53·63	+ 0·131	− 0·58	0·327	0·27	0·319	0·18
5267	A	25 7 3 11·8	1 31 58·568	52 12 12·11	− 0·956	+ 1·64	− 0·320	− 0·25	− 0·321	− 0·33
5268	A	25 8 24 56·0	1 31 54·855	52 11 19·37	0·379	− 0·11	0·329	0·45	0·319	0·45
5269	A	25 8 46 32·5	1 31 53·888	52 11 5·43	0·215	− 0·31	0·320	0·48	0·322	0·39
5270	A	27 5 7 18·3	1 30 4·542	51 41 15·10	1·513	+ 6·14	0·289	0·43	0·297	0·40
844	T	27 5 12 17·5	1 30 4·333	51 41 11·63	1·493	5·90	...	...	0·313	0·40
5271	A	27 5 29 0·8	1 30 3·694	51 40 59·14	1·417	5·08	− 0·299	− 0·50	− 0·302	− 0·48
845	T	27 5 35 4·8	1 30 3·493	51 40 55·58	1·395	4·85	...	...	0·311	0·48
5272	A	27 5 50 44·4	1 30 2·923	51 40 44·66	1·318	+ 4·17	0·303	0·41	0·307	0·37
5273	A	27 8 37 1·1	1 29 56·828	51 38 47·68	0·212	− 0·07	0·309	0·42	0·306	0·49
5274	A	27 9 1 44·7	1 29 55·938	51 38 30·15	− 0·022	− 0·17	0·301	0·51	0·299	0·53
846	T	27 9 51 47·1	1 29 54·115	51 37 54·88	+ 0·359	+ 0·11	...	...	− 0·312	− 0·44
847	T	27 10 39 10·7	1 29 52·419	51 37 21·41	0·706	0·93	...	...	0·299	0·40
5275	A	29 9 33 16·2	1 28 23·704	51 2 52·97	0·289	0·29	− 0·288	− 0·50	0·300	0·65
5276	A	Dec. 6 12 48 14·3	1 26 37·356	48 38 27·15	1·557	8·74	0·284	0·87	0·280	0·91
848	T	6 12 59 43·8	1 26 37·410	48 38 16·58	1·591	9·32	...	...	0·297	0·93
5277	A	6 14 21 5·3	1 26 37·956	48 37 2·09	1·707	+ 13·75	− 0·275	− 0·97	− 0·276	− 0·94
849	T	6 14 28 8·8	1 26 37·984	48 36 55·73	1·707	14·14	...	...	0·294	0·87
5278	A	6 14 42 47·0	1 26 38·080	48 36 42·26	1·702	14·96	0·295	0·93	0·293	0·89
850	T	6 15 18 51·6	1 26 38·333	48 36 9·23	+ 1·660	16·94	...	...	0·284	0·92
5279	A	7 7 32 55·4	1 26 46·449	48 21 11·29	− 0·364	1·68	0·264	0·90	0·258	0·85
5280	A	7 8 5 6·0	1 26 46·759	48 20 41·51	0·127	+ 1·43	− 0·273	− 0·84	− 0·270	− 0·86
851	T	7 8 21 52·9	1 26 46·925	48 20 25·97	− 0·003	1·40	...	...	0·275	0·79
852	T	7 8 54 25·7	1 26 47·253	48 19 55·71	+ 0·239	1·53	...	...	0·275	0·84
5283	A	7 13 33 43·0	1 26 50·217	48 15 35·89	1·664	11·49	0·262	0·95	0·271	0·90
853	T	7 14 29 32·4	1 26 50·804	48 14 43·95	1·698	14·57	...	...	0·295	0·86
854	T	7 15 13 45·2	1 26 51·332	48 14 2·75	+ 1·655	+ 16·99	...	...	− 0·264	− 0·83
5285	A	9 5 11 23·3	1 27 25·345	47 38 11·19	− 1·215	5·59	− 0·269	− 0·52	0·263	0·61
5286	A	9 12 16 32·9	1 27 33·495	47 31 23·35	+ 1·467	8·19	0·273	0·82	0·274	0·86
855	T	10 5 55 53·0	1 27 56·265	47 14 20·55	− 0·940	4·08	...	...	0·270	0·65
856	T	10 6 22 23·7	1 27 56·874	47 13 54·70	0·772	3·34	...	...	0·276	0·71
5287	A	10 7 48 24·9	1 27 58·889	47 12 31·22	0·163	+ 2·01	− 0·269	− 0·64	− 0·266	− 0·70
858	T	13 6 39 13·3	1 30 6·374	46 2 24·38	0·586	3·33	...	...	0·265	0·68
5288	A	13 6 56 37·8	1 30 6·995	46 2 6·57	0·466	3·02	0·279	0·97	0·276	0·86
859	T	13 7 1 42·2	1 30 7·187	46 2 1·62	0·431	2·95	...	...	0·272	0·81
5289	A	13 7 17 59·2	1 30 7·788	46 1 45·12	0·316	2·75	0·265	0·93	0·262	0·91
860	T	13 7 23 46·4	1 30 7·998	46 1 39·35	0·275	+ 2·70	...	...	− 0·255	− 0·87
5290	A	13 7 41 51·3	1 30 8·661	46 1 21·21	− 0·145	2·58	− 0·265	− 0·81	0·264	0·85
5294	A	13 12 49 37·3	1 30 20·069	45 56 11·02	+ 1·571	11·14	0·254	0·86	0·243	0·85
861	T	13 13 48 23·3	1 30 22·292	45 55 11·63	1·649	14·26	...	...	0·252	0·95
5297	A	13 14 13 32·1	1 30 23·224	45 54 46·29	+ 1·649	15·62	0·269	0·91	0·271	0·95
5299	A	15 5 13 58·6	1 31 59·718	45 15 5·93	− 1·065	+ 5·86	− 0·270	− 0·91	− 0·283	− 0·85
863	T	15 5 34 20·1	1 32 0·641	45 14 45·28	0·950	5·19	...	...	0·257	0·70
5300	A	15 5 38 42·6	1 32 0·847	45 14 40·73	0·925	5·06	0·247	0·77	0·256	0·71
864	T	15 5 57 59·7	1 32 1·701	45 14 20·93	0·808	4·51	...	...	0·256	0·81
865	T	15 6 24 17·8	1 32 2·869	45 13 53·93	0·639	3·89	...	...	0·267	0·86

TABLE X.—Observed Places of Eros and Deduced Corrections to Tabular Places from Photographs taken with the Astrographic and Thompson Refractors.

No. of Plate.	Telescope.	Date and G.M.T. 1900 and 1901.	True Equinox of the Date.		Parallax.		Correction to Tabular Place. From Reference Stars.		From Comparison Stars.	
			R.A.	Dec. N.	R.A.	Dec.	R.A.	Dec.	R.A.	Dec.
		d h m s	h m s	° ′ ″	s	″	s	″	s	″
866	T	Dec. 15 11 54 1·7	1 32 17·831	45 8 15·59	+ 1·409	+ 9·02	...	...	− 0·254	− 0·96
5304	A	15 12 7 39·2	1 32 18·462	45 8 1·80	1·456	9·66	− 0·248	− 0·76	0·252	0·66
5306	A	15 13 33 16·7	1 32 22·395	45 6 33·72	1·626	14·04	0·252	0·90	0·256	0·85
867	T	15 13 55 26·8	1 32 23·406	45 6 11·23	1·633	15·59	...	...	0·263	0·62
5307	A	15 14 2 50·0	1 32 23·772	45 6 3·44	1·632	15·63	0·239	0·92	0·233	0·94
868	T	15 14 18 17·9	1 32 24·451	45 5 47·61	+ 1·625	+ 16·46	...	...	− 0·275	− 0·75
5308	A	16 5 26 28·5	1 33 7·649	44 50 12·05	− 0·974	5·53	− 0·250	− 0·78	0·245	0·81
5309	A	17 5 14 56·3	1 34 20·307	44 25 31·91	1·018	6·01	0·260	0·61	0·261	0·67
869	T	17 5 26 31·6	1 34 20·917	44 25 19·40	0·953	5·20	...	...	0·263	1·07
5310	A	17 5 44 53·1	1 34 21·893	44 25 0·81	0·845	5·10	0·260	0·57	0·254	0·64
870	T	17 5 50 12·0	1 34 22·185	44 24 55·12	0·811	+ 4·97	...	...	− 0·249	− 0·73
871	T	17 6 9 37·7	1 34 23·212	44 24 34·96	0·691	4·48	...	...	0·252	0·68
5313	A	17 7 29 4·9	1 34 27·417	44 23 12·30	0·152	3·39	− 0·271	− 0·69	0·261	0·65
872	T	19 5 12 9·1	1 37 4·026	43 35 21·85	0·993	6·31	...	...	0·245	0·61
873	T	19 5 32 37·0	1 37 5·261	43 34 0·38	0·877	5·69	...	...	0·256	0·55
5314	A	19 5 44 2·4	1 37 5·953	43 34 48·19	0·809	+ 5·37	− 0·258	− 0·73	− 0·254	− 0·78
874	T	19 5 54 12·2	1 37 6·565	43 34 37·68	0·747	5·11	...	...	0·257	0·54
5315	A	19 6 2 41·9	1 37 7·082	43 34 28·63	0·694	4·81	0·268	0·66	0·264	0·71
5318	A	19 7 26 21·2	1 37 12·210	43 33 0·59	− 0·133	3·78	0·251	0·67	0·252	0·54
5319	A	19 7 46 24·2	1 37 13·434	43 32 39·76	+ 0·007	3·75	0·255	0·40	0·254	0·39
5322	A	19 12 10 43·6	1 37 29·739	43 28 1·11	1·463	+ 10·96	− 0·238	− 0·73	− 0·240	− 0·76
875	T	19 12 19 53·2	1 37 30·273	43 27 51·54	1·488	11·40	...	...	0·272	0·65
876	T	19 12 56 52·0	1 37 32·571	43 27 12·64	1·561	13·26	...	...	0·268	0·59
5324	A	19 13 35 6·9	1 37 34·974	43 26 32·27	1·594	15·24	0·243	0·66	0·249	0·68
877	T	19 14 20 24·7	1 37 37·790	43 25 44·46	1·576	17·59	...	...	0·247	0·74
5326	A	20 13 57 59·0	1 39 8·843	43 0 47·11	+ 1·583	+ 16·67	− 0·231	− 0·81	...	...
878	T	21 5 12 8·4	1 40 10·389	42 44 38·38	− 0·955	6·54	...	...	− 0·214	− 0·70
879	T	21 5 30 19·7	1 40 11·616	42 44 19·02	− 0·852	6·00	...	...	0·234	0·76
880	T	21 11 47 4·9	1 40 37·624	42 37 38·91	+ 1·389	10·39	...	...	0·238	0·90
5327	A	21 12 18 27·7	1 40 39·823	42 37 5·57	1·477	11·86	0·222	0·91	0·222	0·91
881	T	21 12 32 55·2	1 40 40·810	42 36 50·37	1·510	+ 12·58	...	...	− 0·242	− 0·75
5328	A	21 12 48 4·9	1 40 41·883	42 36 34·11	1·536	13·33	− 0·226	− 0·90	0·227	0·88
882	T	21 13 16 17·2	1 42 43·850	42 37 4·38	1·568	14·77	...	...	0·225	0·67
5329	A	21 13 29 38·6	1 40 44·781	42 35 50·11	1·575	15·45	0·226	0·75	0·224	0·78
5330	A	24 9 59 26·3	1 45 53·050	41 22 45·12	+ 0·918	7·04	0·217	0·97	...	...
883	T	26 6 49 47·8	1 49 37·144	40 34 40·41	− 0·270	+ 5·36	...	...	− 0·223	− 0·95
884	T	26 7 15 48·5	1 49 39·402	40 34 12·57	− 0·097	5·21	...	...	0·214	0·86
5331	A	26 9 58 31·9	1 49 53·518	40 31 17·69	+ 0·923	7·51	− 0·204	− 1·03	...	...
5333	A	28 8 48 27·8	1 54 6·503	39 40 57·92	0·528	6·31	0·195	1·15	0·203	1·10
5334	A	28 9 17 53·8	1 54 9·238	39 40 26·20	0·705	6·88	0·202	1·22	0·203	1·18
885	T	28 9 19 27·7	1 54 9·367	39 40 24·72	0·714	+ 6·94	...	...	− 0·219	− 1·01
886	T	28 12 11 39·1	1 54 25·438	39 37 19·63	1·429	13·19	...	...	0·226	0·93
5335	A	28 12 30 33·7	1 54 27·208	39 36 59·42	1·464	14·08	− 0·226	− 0·81	0·218	0·85
5336	A	28 13 9 51·1	1 54 30·900	39 36 16·95	1·505	16·01	0·213	1·03	0·217	1·07
5337	A	29 8 12 14·3	1 56 19·320	39 15 48·28	0·307	6·03	0·211	1·02	0·212	1·08
887	T	29 8 23 53·0	1 56 20·422	39 15 35·73	0·381	+ 6·17	...	...	− 0·220	− 1·04
5338	A	29 8 36 57·5	1 56 21·682	39 15 21·81	0·464	6·35	− 0·217	− 0·90	0·210	0·85
889	T	Jan. 2 12 27 57·3	2 6 33·341	37 27 58·15	1·424	14·89	...	...	0·240	0·92
890	T	2 12 53 58·1	2 6 36·185	37 27 30·27	+ 1·452	16·07	...	...	0·200	0·84
5341	A	4 5 36 30·8	2 11 4·790	36 43 45·49	− 0·610	7·95	0·209	0·92	0·205	0·96

TABLE X.—Observed Places of Eros and Deduced Corrections to Tabular Places from Photographs taken with the Astrographic and Thompson Refractors.

No. of Plate.	Telescope.	Date and G.M.T. 1901.	True Equinox of the Date.		Parallax.		Correction to Tabular Place.			
							From Reference Stars.		From Comparison Stars.	
			R.A.	Dec. N.	R.A.	Dec.	R.A.	Dec.	R.A.	Dec.
		d h m s	h m s	° ′ ″	s	″	s	″	s	″
5342	A	Jan. 4 6 5 49·7	2 11 8·064	36 43 14·00	− 0·444	+ 7·48	− 0·222	− 0·93	− 0·223	− 0·95
891	T	4 6 13 24·6	2 11 9·933	36 43 5·57	0·396	7·38	...	...	0·202	1·23
5343	A	4 6 35 37·5	2 11 11·405	36 42 42·01	0·256	7·15	0·223	0·91	0·222	0·87
892	T	4 6 43 1·6	2 11 12·245	36 42 33·96	− 0·210	7·10	...	...	0·213	1·01
5344	A	5 8 11 16·3	2 14 5·688	36 15 13·05	+ 0·347	7·48	0·176	0·92	0·161	1·06
894	T	5 8 33 48·9	2 14 8·269	36 14 48·61	0·482	+ 7·79	...	...	− 0·182	− 1·16
5345	A	5 8 38 15·0	2 14 8·779	36 14 43·80	0·508	7·90	− 0·181	− 1·21	0·180	1·05
895	T	5 8 58 52·0	2 14 11·162	36 14 21·75	0·627	8·23	...	...	0·164	1·13
896	T	5 11 44 9·4	2 14 30·140	36 11 24·25	1·320	13·50	...	...	0·184	1·20
5346	A	5 11 50 49·6	2 14 30·902	36 11 17·12	1·336	13·78	0·190	1·17	0·177	1·14
5347	A	5 12 30 14·8	2 14 35·457	36 10 35·12	1·404	+ 15·47	0·167	0·86	− 0·168	− 0·88
5348	A	5 12 54 26·3	2 14 38·240	36 10 9·07	1·425	16·54	− 0·176	− 0·94	0·178	1·09
897	T	5 12 57 33·3	2 14 38·692	36 10 4·77	1·427	16·68	...	...	0·159	1·10
898	T	5 13 28 19·8	2 14 42·162	36 9 32·64	+ 1·428	18·05	...	...	− 0·159	− 1·00
5349	A	8 6 12 2·1	2 22 21·553	35 0 8·50	− 0·363	8·08	+ 0·031	+ 1·28	+ 0·025	+ 1·28
5350	A	8 12 16 51·6	2 23 5·879	34 53 37·81	+ 1·362	+ 15·27	+ 0·027	+ 1·36	+ 0·027	+ 1·34
5351	A	8 12 39 55·5	2 23 8·703	34 53 13·33	1·389	16·29	0·042	1·58	0·021	1·40
5352	A	8 13 3 0·4	2 23 11·521	34 52 48·55	+ 1·401	17·29	0·049	1·51	0·044	1·44
5353	A	9 5 39 28·0	2 25 13·619	34 35 1·86	− 0·543	8·69	0·021	1·36	0·012	1·27
899	T	9 6 15 12·2	2 25 18·005	34 34 23·67	0·336	8·21	...	...	0·001	1·40
900	T	9 6 39 13·3	2 25 20·967	34 33 58·07	0·193	+ 8·03	...	...	0·000	+ 1·22
901	T	9 6 54 53·6	2 25 22·917	34 33 41·08	− 0·098	7·95	...	...	+ 0·017	1·28
5354	A	9 7 58 8·6	2 25 30·719	34 32 33·54	+ 0·286	8·14	+ 0·012	+ 1·40	0·023	1·41
5355	A	9 8 14 46·1	2 25 32·768	34 32 15·83	0·384	8·32	0·007	1·48	0·007	1·60
5356	A	9 12 38 15·5	2 26 5·366	34 27 33·68	1·378	16·34	0·015	1·19	0·013	1·27
5359	A	13 12 13 57·2	2 38 17·936	32 50 33·02	+ 1·312	+ 15·80	+ 0·008	+ 0·94	+ 0·009	+ 0·94
904	T	14 5 41 19·9	2 40 36·231	32 26 59·08	− 0·490	9·43	..	...	0·020	0·96
905	T	14 5 59 58·1	2 40 38·709	32 26 39·28	− 0·386	9·19	...	...	0·026	0·97
5365	A	14 11 55 28·1	2 41 25·929	32 20 21·43	+ 1·281	15·19	0·007	0·91	0·015	0·94
5366	A	14 12 20 27·9	2 41 29·294	32 19 55·07	1·317	16·15	+ 0·045	1·11	0·039	1·18
906	T	14 12 34 54·3	2 41 31·206	32 19 39·67	1·332	+ 16·72	...	...	+ 0·034	+ 1·05
5367	A	14 12 45 2·6	2 41 32·514	32 19 29·02	1·334	17·12	− 0·008	+ 1·17	− 0·018	1·23
907	T	14 12 57 35·4	2 41 34·216	32 19 15·57	+ 1·343	17·62	...	...	+ 0·024	1·05
5368	A	15 5 53 8·7	2 43 50·034	32 1 17·21	− 0·417	9·43	+ 0·007	1·03	0·012	1·05
908	T	15 6 9 48·2	2 43 52·271	32 0 59·68	0·324	9·27	...	...	0·005	1·17
5369	A	15 6 16 4·1	2 43 53·122	32 0 52·97	0·289	+ 9·19	+ 0·014	+ 1·12	0·013	+ 1·10
909	T	15 6 28 39·9	2 43 54·815	32 0 39·53	0·216	9·10	...	...	0·015	1·04
910	T	15 6 47 25·1	2 43 57·327	32 0 19·43	− 0·107	9·01	...	...	0·006	0·84
912	T	15 11 41 32·2	2 44 36·912	31 55 7·67	+ 1·246	14·78	...	...	0·012	1·10
913	T	15 12 1 47·3	2 44 39·646	31 54 46·22	1·283	15·53	...	...	+ 0·017	1·13
5371	A	15 12 6 57·1	2 44 40·322	31 54 40·92	1·291	+ 15·72	− 0·003	+ 1·31	− 0·003	+ 1·25
914	T	15 12 20 54·1	2 44 42·228	31 54 25·83	1·309	16·26	...	...	+ 0·023	1·02
5372	A	15 12 25 59·2	2 44 42·869	31 54 20·60	1·315	16·46	− 0·022	1·18	− 0·027	1·14
915	T	17 11 23 17·3	2 51 6·966	31 4 37·62	1·188	14·31	...	...	− 0·023	0·92
5379	A	17 11 50 9·0	2 51 10·697	31 4 8·96	1·248	15·29	+ 0·005	0·65	...	...

TABLE X.—Observed Places of Eros and Deduced Corrections to Tabular Places from Photographs taken with the Astrographic and Thompson Refractors.

No. of Plate.	Telescope.	Date and G.M.T. 1901.	True Equinox of the Date.		Parallax.		Correction to Tabular Place. From Reference Stars.		Correction to Tabular Place. From Comparison Stars.	
			R.A.	Dec. N.	R.A.	Dec.	R.A.	Dec.	R.A.	Dec.
		d h m s	h m s	° ′ ″	s	″	s	″	s	″
917	T	Jan. 18 6 19 41·1	2 53 44·315	30 44 37·69	− 0·251	+ 9·63	...	...	+ 0·021	+ 0·85
918	T	18 6 47 33·8	2 53 48·192	30 44 8·14	− 0·093	9·49	...	...	0·023	0·71
919	T	18 7 24 41·2	2 53 53·353	30 43 29·03	+ 0·119	9·51	...	...	+ 0·021	0·76
920	T	18 11 26 13·7	2 54 26·940	30 39 14·18	1·190	14·55	...	...	− 0·013	0·65
921	T	22 8 29 39·3	3 7 39·551	29 1 33·83	0·472	10·76	...	...	+ 0·037	0·85
922	T	22 8 51 25·4	3 7 42·690	29 1 11·19	0·585	+ 11·00	...	...	+ 0·042	+ 0·94
925	T	24 11 20 53·2	3 15 3·834	28 8 35·51	1·132	14·89	...	...	− 0·011	0·17
926	T	24 11 56 39·1	3 15 9·081	28 7 58·45	1·200	16·03	...	...	− 0·013	0·24
5390	A	24 12 6 20·5	3 15 10·520	28 7 48·53	+ 1·214	16·61	+ 0·003	+ 0·38	...	...
927	T	28 6 26 24·1	3 28 35·972	26 34 33·36	− 0·174	10·95	...	..	+ 0·003	0·08
928	T	29 8 28 52·4	3 32 31·339	26 7 52·84	+ 0·460	+ 11·55	...	...	+ 0·020	0·02
930	T	29 11 48 34·9	3 33 1·488	26 4 28·73	1·146	15·99	...	...	− 0·004	+ 0·06
5394	A	Feb. 1 7 46 38·9	3 43 21·461	24 55 21·27	0·247	11·49	− 0·009	− 0·26	...	...
931	T	1 7 53 50·8	3 43 22·573	24 55 14·16	0·283	11·54	...	...	+ 0·003	− 0·09
933	T	1 9 15 39·0	3 43 35·083	24 53 51·23	0·663	12·53	...	...	0·009	0·26
934	T	3 11 58 0·1	3 51 21·766	24 2 46·31	1·115	+ 16·36	...	...	0·034	− 0·15
5397	A	3 11 38 8·1	3 51 18·688	24 3 6·21	1·086	15·83	+ 0·013	− 0·18	...	...
935	T	3 12 21 33·6	3 51 25·396	24 2 22·76	1·140	17·01	...	...	0·039	0·07
5398	A	3 11 56 39·1	3 51 21·564	24 2 47·91	1·114	16·32	0·040	+ 0·10	..	...
936	T	5 11 5 8·8	3 58 37·786	23 15 41·26	1·003	15·05	...	...	0·022	0·36
937	T	5 11 29 36·5	3 58 41·566	23 15 16·92	+ 1·054	+ 15·64	...	...	0·021	− 0·36
938	T	6 6 11 48·3	4 1 35·160	22 56 42·21	− 0·220	11·87	...	...	0·013	0·52
939	T	6 6 37 5·5	4 1 39·072	22 56 17·04	− 0·097	11·86	...	...	+ 0·006	0·59
940	T	6 7 23 49·1	4 1 46·293	22 55 31·06	+ 0·132	11·88	...	...	− 0·026	0·24
5407	A	6 8 10 49·7	4 1 53·596	22 54 44·20	+ 0·358	12·15	+ 0·016	− 0·51	...	...
941	T	11 6 30 14·6	4 20 16·825	20 58 51·36	− 0·120	+ 12·26	...	...	+ 0·007	− 0·70
942	T	11 6 53 53·8	4 20 20·515	20 58 28·53	− 0·009	12·23	...	...	0·012	0·67
5409	A	11 7 9 26·5	4 20 22·942	20 58 13·55	+ 0·064	12·24	+ 0·016	− 0·62	0·019	0·72
943	T	11 10 17 16·8	4 20 52·210	20 55 11·85	0·833	14·21	...	...	0·015	0·80
5412	A	11 11 4 0·7	4 20 59·513	20 54 26·78	0·954	15·11	0·036	0·74	0·033	0·71
944	T	11 11 22 52·0	4 21 2·419	20 54 8·64	0·995	+ 15·51	...	...	0·004	− 0·67
945	T	11 11 54 39·5	4 21 7·385	20 53 37·95	+ 1·042	16·22	...	...	0·015	0·66
5414	A	12 6 21 52·9	4 23 59·992	20 35 51·00	− 0·157	12·35	0·034	− 0·75	0·043	0·75
5415	A	12 6 42 15·6	4 24 3·151	20 35 31·11	− 0·062	12·31	+ 0·015	1·05	0·008	1·02
946	T	12 7 1 53·5	4 24 6·213	20 35 12·65	+ 0·029	12·30	...	...	+ 0·017	0·63
5416	A	12 7 2 10·9	4 24 6·239	20 35 12·28	0·031	+ 12·30	− 0·002	− 0·72	− 0·003	− 0·75
947	T	12 7 21 43·0	4 24 9·322	20 34 53·45	0·122	12·33	...	...	+ 0·035	0·78
948	T	12 7 42 52·7	4 24 12·605	20 34 32·85	+ 0·219	12·42	...	...	+ 0·018	1·03
5420	A	13 6 31 18·7	4 27 45·984	20 12 41·26	− 0·112	12·39	− 0·016	0·98	− 0·013	1·03
5421	A	13 8 26 22·6	4 28 3·957	20 10 51·48	+ 0·411	12·77	+ 0·008	0·80	+ 0·011	0·81
949	T	13 8 30 23·5	4 28 4·586	20 10 47·55	0·428	+ 12·83	...	...	0·011	− 0·89
5422	A	13 8 45 55·5	4 28 7·006	20 10 32·64	0·493	12·98	0·008	− 0·96	0·006	0·81
5426	A	13 11 6 47·6	4 28 29·013	20 8 18·40	0·945	15·39	0·041	0·68	0·040	0·71
5427	A	13 11 27 41·6	4 28 32·247	20 7 58·22	0·985	15·60	0·014	0·90	0·015	0·83
5428	A	14 10 32 51·2	4 32 8·391	19 45 59·94	0·857	14·53	0·048	0·68	0·050	0·67

TABLE X.—Observed Places of Eros and Deduced Corrections to Tabular Places from Photographs taken with the Astrographic and Thompson Refractors.

No. of Plate.	Telescope.	Date and G.M.T. 1901.	True Equinox of the Date.		Parallax.		Correction to Tabular Place. From Reference Stars.		From Comparison Stars.	
			R.A.	Dec. N.	R.A.	Dec.	R.A.	Dec.	R.A.	Dec.
		d h m s	h m s	° ′ ″	s	″	s	″	s	″
952	T	Feb. 14 10 45 36·1	4 32 10·357	19 45 47·37	+ 0·889	+ 14·77	...	...	+ 0·023	− 1·15
5429	A	15 6 37 25·3	4 35 16·364	19 26 59·25	− 0·081	12·49	+ 0·050	− 1·06	0·040	0·99
5430	A	15 7 3 8·7	4 35 20·327	19 26 34·99	+ 0·037	12·48	− 0·001	1·03	0·002	1·03
5431	A	15 7 36 13·8	4 35 25·503	19 26 4·10	0·187	12·56	+ 0·012	0·69	0·013	0·63
954	T	17 9 36 35·6	4 43 13·702	18 39 10·51	0·665	13·69	...	...	+ 0·011	1·16
5434	A	17 9 40 13·9	4 43 14·282	18 39 6·86	+ 0·679	+ 13·74	+ 0·024	− 1·42	...	...
955	T	17 9 57 4·7	4 43 16·864	18 38 51·55	0·733	13·98	...	...	− 0·023	− 1·05
5436	A	20 7 15 20·7	4 54 5·373	17 34 57·74	0·093	12·71	0·066	1·28	+ 0·071	1·22
958	T	20 7 24 38·5	4 54 6·770	17 34 49·15	0·134	12·73	...	...	0·015	1·38
959	T	20 8 25 51·9	4 54 16·342	17 33 53·37	0·390	13·04	...	...	0·048	1·30
5438	A	20 8 27 15·2	4 54 16·557	17 33 52·11	+ 0·396	+ 13·05	+ 0·046	− 1·30	+ 0·047	− 1·31
5441	A	20 9 44 59·1	4 54 28·686	17 32 41·22	0·678	13·84	0·065	1·29	·060	1·23
5452	A	25 10 45 49·3	5 13 16·989	15 44 21·83	0·812	14·62	0·046	1·07	...	....

ADDENDUM.

THE following measures of additional stars on the Greenwich photographs were made at the request of Mr. Hinks, their places being primarily desired for the reduction of photographs of Eros taken with the Crossley Reflector at the Lick Observatory. These stars were measured after the rest of this work, including the discussion of the solar parallax in the *Introduction*, had been completed.

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars measured for the reduction of photographs taken with the Crossley Reflector at the Lick Observatory.

No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.					h m s	° ′ ″	
1	5276 Dec. 6	3564″·15	−″·02	7907″·07	−″·01	1 25 27·280	+ 49 39 59″·38	[little value. Very faint and diffused. Of
	5277 „	3573·92	− ·03	7907·10	− ·03	27·143	59·86	Two images only; very diffused.
	5278 „	3573·50	− ·03	7904·35	− ·05	27·273	59·28	Two images only; very faint and diffused.
				Mean		1 25 27·232	+ 49 39 59·51	
2	5276 Dec. 6	3788·51	·00	4966·97	·00	1 25 51·463	+ 48 51 2·65	
	5277 „	3798·07	·00	4966·74	·00	51·489	2·63	
	5278 „	3797·92	·00	4964·84	·00	51·435	2·54	
	5279 Dec. 7	3709·20	·00	6392·81	·00	51·454	2·64	
	5280 „	3658·70	·00	6329·16	·00	51·467	2·65	
	5283 „	3669·61	− ·01	6302·25	− ·01	51·460	2·81	Excessively faint.
				Mean		1 25 51·461	+ 48 51 2·65	
3	5276 Dec. 6	3898·85	− ·01	7585·53	− ·01	1 26 1·827	+ 49 34 39·56	
	5277 „	3909·49	− ·02	7584·66	− ·03	1·803	39·41	
	5278 „	3908·01	− ·03	7582·65	− ·04	1·805	39·35	Two images only.
				Mean		1 26 1·812	+ 49 34 39·44	
4	5276 Dec. 6	3995·32	·00	4777·92	·00	1 26 12·451	+ 48 47 54·41	
	5277 „	4005·06	·00	4777·38	·00	12·510	54·24	Very faint.
	5278 „	4004·66	·00	4775·72	·00	12·417	54·26	
	5280 Dec. 7	3867·33	·00	6141·82	·00	12·497	54·60	Two images only.
				Mean		1 26 12·469	+ 48 47 54·38	
5	5276 Dec. 6	4499·10	·00	4974·73	·00	1 27 3·412	+ 48 51 11·77	
	5277 „	4508·27	·00	4973·73	·00	3·410	11·64	
	5278 „	4508·56	·00	4972·59	·00	3·402	11·89	Two images only.
	5279 Dec. 7	4419·88	·00	6399·59	·00	3·397	11·55	
	5280 „	4369·19	·00	6342·09	·00	3·399	11·70	
				Mean		1 27 3·404	+ 48 51 11·71	
6	5286 Dec. 9	4047·51	·00	2743·30	·00	1 27 14·048	+ 47 6 31·77	
	5287 Dec. 10	3176·33	·00	5497·85	·00	14·044	31·90	
				Mean		1 27 14·046	+ 47 6 31·84	
7	5270 Nov. 27	2740·76	+ ·01	1607·87	·00	1 27 14·729	+ 50 53 0·73	
	5271 „	2754·65	·00	1626·64	·00	14·754	0·62	
	5272 „	2808·95	+ ·01	1624·83	·00	14·758	1·12	
	5273 „	2777·61	·00	1648·44	·00	14·709	0·81	Two images very faint.
	5274 „	2773·98	·00	1648·18	·00	14·719	0·87	
	5275 Nov. 29	3631·40	·00	3767·31	·00	14·713	0·57	
				Mean		1 27 14·730	+ 50 53 0·79	
8	5276 Dec. 6	4816·61	− ·01	1192·75	− ·01	1 27 34·785	+ 47 48 12·22	
	5277 „	4823·09	− ·02	1192·15	− ·02	34·749	12·21	
	5278 „	4826·06	− ·02	1191·22	− ·03	34·739	12·19	Two images touching *réseau*.
	5279 Dec. 7	4732·62	·00	2617·11	·00	34·772	11·91	
	5280 „	4713·71	·00	2562·46	·00	34·764	12·07	[fused.
	5283 „	4695·76	·00	2527·46	·00	34·769	12·06	Excessively faint and dif-
	5285 Dec. 9	4247·23	·00	5209·54	·00	34·752	12·66	Two images only.
	5286 „	4260·73	·00	5245·08	·00	34·740	12·15	
				Mean		1 27 34·759	+ 47 48 12·18	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.			x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.			″	″	″	″	h m s	° ′ ″	
9	5270	Nov.	27	2965·06	·00	2586·04	·00	1 27 36·909	+ 51 9 21·36	
	5271	,,		2972·14	·00	2606·38	·00	36·899	21·34	
	5272	,,		3027·01	·00	2603·96	·00	36·905	21·34	
	5273	,,		2996·62	·00	2627·78	·00	36·946	21·27	
	5274	,,		2992·18	·00	2627·56	·00	36·883	21·34	
	5275	Nov.	29	3845·02	·00	4747·80	·00	36·893	21·30	
						Mean		1 27 36·906	+ 51 9 21·33	
10	5276	Dec.	6	4853·30	− ·01	1864·54	− ·01	1 27 38·573	+ 47 59 23·37	
	5277	,,		4861·03	− ·01	1863·60	− ·02	38·623	23·17	Very faint.
	5278	,,		4863·05	− ·01	1862·72	− ·02	38·565	23·22	Very faint.
	5280	Dec.	7	4746·34	·00	3234·51	·00	38·626	23·29	Two images only.
						Mean		1 27 38·597	+ 47 59 23·26	
11	5276	Dec.	6	4863·22	− ·01	1253·63	− ·01	1 27 39·421	+ 47 49 12·94	
	5277	,,		4870·33	− ·02	1252·79	− ·02	39·446	12·74	
	5278	,,		4873·30	− ·03	1252·47	− ·03	39·439	13·31	
	5279	Dec.	7	4779·22	·00	2678·18	·00	39·399	12·91	
	5280	,,		4760·00	·00	2623·85	·00	39·413	13·01	
	5283	,,		4742·22	·00	2588·73	·00	39·389	13·24	
	5285	Dec.	9	4294·14	·00	5270·02	·00	39·402	13·14	Two images only.
	5286	,,		4307·84	·00	5305·95	·00	39·409	13·02	
						Mean		1 27 39·415	+ 47 49 13·04	
12	5270	Nov.	27	3027·08	·00	3032·01	·00	1 27 42·818	+ 51 16 47·84	Two images only.
	5271	,,		3031·36	·00	3052·63	·00	42·829	47·69	
	5272	,,		3086·66	·00	3050·33	·00	42·852	47·85	
	5273	,,		3055·82	·00	3073·90	·00	42·842	47·52	
	5274	,,		3052·11	·00	3073·94	·00	42·861	47·85	
	5275	Nov.	29	3902·78	·00	5194·25	·00	42·854	47·65	
						Mean		1 27 42·843	+ 51 16 47·73	
13	5286	Dec.	9	4427·95	·00	2008·17	·00	1 27 51·276	+ 46 54 17·57	
	5287	Dec.	10	3553·55	·00	4760·82	·00	51·276	17·47	
						Mean		1 27 51·276	+ 46 54 17·52	
14	5286	Dec.	9	4587·80	− ·01	1107·70	− ·01	1 28 6·777	46 39 17·81	Extremely faint.
15	5270	Nov.	27	3352·50	·00	2362·39	·00	1 28 18·347	+ 51 5 43·03	
	5271	,,		3361·35	·00	2384·95	·00	18·368	42·70	
	5272	,,		3415·92	·00	2382·69	·00	18·353	43·10	
	5273	,,		3385·03	·00	2406·42	·00	18·341	42·98	
	5274	,,		3381·26	·00	2406·12	·00	18·346	42·93	
	5275	Nov.	29	4235·20	·00	4528·35	·00	18·355	43·04	
						Mean		1 28 18·352	+ 51 5 42·96	
16	5270	Nov.	27	3545·74	·00	4036·30	·00	1 28 36·868	+ 51 33 37·90	Two images only.
	5271	,,		3543·15	·00	4060·47	·00	36·852	37·89	Two images only.
	5272	,,		3599·02	·00	4057·84	·00	36·874	38·01	Very faint.
	5274	,,		3564·08	·00	4081·59	·00	36·842	38·15	Two images only.
	5275	Nov.	29	4409·97	·00	6204·44	·00	36·828	38·07	
						Mean		1 28 36·853	+ 51 33 38·00	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.					h m s		
17	5270 Nov. 27	3567·08	·00	3747·79	·00	1 28 39·493	+ 51 28 49·83	Extremely diffused.
	5271 ,,	3566·41	·00	3772·16	·00	39·479	49·88	
	5272 ,,	3621·91	·00	3769·16	·00	39·479	49·66	
	5274 ,,	3587·50	·00	3792·70	·00	39·503	49·59	Two images only.
	5275 Nov. 29	4434·77	·00	5915·78	·00	39·494	49·63	
				Mean		1 28 39·490	+ 51 28 49·72	
18	5270 Nov. 27	3779·54	·00	2481·09	·00	1 29 3·524	+ 51 7 46·22	
	5271 ,,	3787·72	·00	2506·68	·00	3·557	46·12	
	5272 ,,	3842·50	·00	2503·99	·00	3·557	46·34	
	5273 ,,	3811·46	·00	2527·74	·00	3·523	46·30	
	5274 ,,	3807·71	·00	2527·55	·00	3·531	46·32	
	5275 Nov. 29	4661·02	·00	4651·57	·00	3·537	46·26	
				Mean		1 29 3·538	+ 51 7 46·26	
19	5270 Nov. 27	3906·92	·00	3815·51	·00	1 29 15·782	+ 51 30 0·84	Two images only.
	5272 ,,	3961·96	·00	3839·27	·00	15·834	1·03	
	5273 ,,	3931·06	·00	3862·45	·00	15·803	0·43	Two images only.
	5274 ,,	3927·14	·00	3862·72	·00	15·810	0·88	
	5275 Nov. 29	4774·32	·00	5987·62	·00	15·825	1·15	Two images only.
				Mean		1 29 15·811	+ 51 30 0 87	
20	5270 Nov. 27	3899·07	·00	2429·21	·00	1 29 16·264	+ 51 6 55·47	
	5271 ,,	3907·51	·00	2455·78	·00	16·286	55·56	
	5272 ,,	3962·29	·00	2453·11	·00	16·288	55·88	
	5273 ,,	3931·50	·00	2476·80	·00	16·282	55·80	
	5274 ,,	3927·53	·00	2476·60	·00	16·266	55·79	
	5275 Nov. 29	4781·30	·00	4601·20	·00	16·295	55·74	
				Mean		1 29 16·280	+ 51 6 55·71	
21	5270 Nov. 27	3991·02	·00	2667·12	·00	1 29 25·812	+ 51 10 53·98	
	5271 ,,	3997·75	·00	2694·47	·00	25·819	54·26	
	5272 ,,	4052·77	·00	2691·40	·00	25·833	54·22	
	5273 ,,	4021·77	·00	2715·13	·00	25·800	54·19	
	5274 ,,	4018·00	·00	2714·99	·00	25·810	54·23	
	5275 Nov. 29	4870·56	·00	4840·12	·00	25·828	54·31	
				Mean		1 29 25·817	+ 51 10 54·20	
22	5285 Dec. 9	5408·42	+ ·01	1451·98	− ·01	1 29 27·908	+ 46 45 35·21	Two images only.
	5286 ,,	5421·79	− ·01	1487·89	·00	27·912	35·27	
	5287 Dec. 10	4544·98	·00	4236·41	·00	27·902	35·25	
	5288 Dec. 13	3726·80	·00	7170·34	·00	27·868	35·15	Very faint and diffused.
	5289 ,,	3730·03	·00	7171·74	·00	27·898	34·95	Very faint and diffused.
	5290 ,,	3731·34	·00	7173·58	·00	27·916	35·48	
				Mean		1 29 27·901	+ 46 45 35·22	
23	5270 Nov. 27	4141·39	·00	3024·98	·00	1 29 41·509	+ 51 16 52·76	
	5271 ,,	4145·38	·00	3052·70	·00	41·478	52·41	
	5272 ,,	4200·66	·00	3050·02	·00	41·498	52·86	
	5273 ,,	4170·02	·00	3073·75	·00	41·499	52·84	
	5274 ,,	4165·80	·00	3073·56	·00	41·463	52·81	
	5275 Nov. 29	5016·61	·00	5199·36	·00	41·473	52·89	
				Mean		1 29 41·487	+ 51 16 52·76	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.					h m s	° ′ ″	
24	5270 Nov. 27	4168″·30	″·00	4204″·16	″·00	1 29 43·452	+ 51 36 31·33	Two images only; very faint and diffused.
25	5270 Nov. 27	4559·27	·00	3929·00	·00	1 30 25·541	+ 51 31 58·73	
	5271 ,,	4557·35	·00	3959·79	·00	25·518	58·69	
	5272 ,,	4613·73	·00	3956·58	·00	25·600	58·85	
	5274 ,,	4579·06	·00	3980·12	·00	25·586	58·80	
	5275 Nov. 29	5425·53	·00	6107·74	·00	25·579	58·70	
				Mean		1 30 25·565	+ 51 31 58·75	
26	5254 Nov. 22	2046·67	+ ·01	2214·90	·00	1 31 29·006	+ 52 18 32·76	
	5256 ,,	1709·67	− ·02	2386·52	− ·01	28·980	32·71	
	5258 ,,	2074·46	− ·02	2247·81	− ·01	28·984	32·67	
	5261 Nov. 23	2619·99	·00	3069·83	·00	29·005	32·74	
	5263 ,,	2643·28	·00	3097·97	·00	28·997	32·73	
	5264 ,,	2653·33	·00	3097·17	·00	29·010	32·65	
	5267 Nov. 25	4067·32	·00	4783·97	·00	29·011	33·25	
	5268 ,,	3426·32	·00	4897·05	·00	28·985	32·98	
	5269 ,,	2773·49	·00	4751·02	·00	29·011	33·00	
				Mean		1 31 28·999	+ 52 18 32·83	
27	5254 Nov. 22	2050·17	+ ·01	2393·34	·00	1 31 29·112	+ 52 21 31·11	
	5256 ,,	1713·67	− ·02	2564·94	− ·01	29·090	31·02	
	5258 ,,	2077·72	− ·02	2425·95	− ·01	29·065	30·72	
	5261 Nov. 23	2622·69	·00	3248·18	·00	29·088	31·00	
	5263 ,,	2646·13	·00	3276·23	·00	29·087	30·89	
	5264 ,,	2656·31	·00	3275·60	·00	29·113	30·98	
	5267 Nov. 25	4068·02	·00	4962·27	·00	29·053	31·43	
	5268 ,,	3428·24	·00	5075·32	·00	29·071	31·11	
	5269 ,,	2775·71	·00	4929·32	·00	29·060	31·19	
				Mean		1 31 29·082	+ 52 21 31·05	
28	5254 Nov. 22	2930·93	·00	2937·61	·00	1 33 4·653	+ 52 30 45·20	
	5256 ,,	2595·63	− ·01	3107·49	·00	4·635	45·38	
	5258 ,,	2958·93	− ·01	2970·28	− ·01	4·645	45·20	
	5261 Nov. 23	3501·64	·00	3795·89	·00	4·655	45·32	
	5263 ,,	3525·12	·00	3823·37	·00	4·613	45·21	
	5264 ,,	3535·23	·00	3822·78	·00	4·630	45·36	
	5267 Nov. 25	4942·33	·00	5517·34	·00	4·650	45·25	
	5268 ,,	4304·75	·00	5626·90	·00	4·631	45·45	
	5269 ,,	3654·50	·00	5477·49	·00	4·649	45·50	
				Mean		1 33 4·640	+ 52 30 45·32	
29	5269 Nov. 25	3661·92	·00	6024·46	·00	1 33 5·199	+ 52 39 51·89	Two images only. Of little value.
30	5256 Nov. 22	2665·16	− ·01	2875·44	·00	1 33 12·515	+ 52 26 54·26	
	5258 ,,	3029·05	− ·01	2738·03	− ·01	12·540	53·77	
	5261 Nov. 23	3572·37	·00	3563·99	·00	12·520	53·93	
	5263 ,,	3596·12	·00	3591·13	·00	12·521	53·53	
	5267 Nov. 25	5015·12	·00	5286·35	·00	12·511	54·16	
	5268 ,,	4376·84	·00	5395·25	·00	12·530	54·00	
	5269 ,,	3725·66	·00	5245·76	·00	12·539	54·07	
				Mean		1 33 12·525	+ 52 26 53·96	
31	5330 Dec. 24	2480·23	·00	5230·31	·00	1 43 25·948	+ 41 36 51·45	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.		″		″	h m s	° ′ ″	
32	5330 Dec. 24	4080″·38	·00	3393″·64	·00	1 45 48·794	+ 41 6 24″·62	
	5331 Dec. 26	1401·96	− ·01	6523·57	·00	48·770	24·78	
				Mean		1 45 48·782	+ 41 6 24·70	
33	5330 Dec. 24	4798·00	·00	3938·10	·00	1 46 52·303	+ 41 15 28·91	
	5331 Dec. 26	2126·40	− ·01	7059·46	·00	52·328	28·68	
				Mean		1 46 52·316	+ 41 15 28·80	
34	5331 Dec. 26	4598·86	·00	3496·33	·00	1 50 31·288	+ 40 16 20·62	
35	5213 Nov. 9	900·55	+ ·02	4339·94	·00	1 52 27·410	54 23 10·66	Very faint.
	5214 ,,	904·76	·00	4383·70	·00	27·396	10·20	
	5215 ,,	898·62	− ·02	4385·33	·00	27·398	10·78	
	5216 ,,	913·50	− ·05	4398·44	− ·02	27·429	10·65	
	5217 ,,	910·59	− ·05	4383·59	− ·03	27·384	10·41	Very diffused.
	5218 Nov. 10	1946·56	+ ·01	4384·02	·00	27·356	10·78	
	5219 ,,	2024·83	+ ·01	4375·43	·00	27·372	10·82	
	5220 ,,	1964·64	+ ·01	4381·04	·00	27·377	10·83	
	5222 ,,	1958·63	·00	4426·46	·00	27·362	10·48	
	5223 ,,	1975·27	·00	4424·00	·00	27·360	10·47	
	5226 Nov. 11	3041·73	·00	4461·38	·00	27·362	10·83	
	5227 ,,	3043·62	·00	4466·50	·00	27·371	10·76	
	5228 ,,	3044·74	·00	4467·56	·00	27·385	10·97	
	5229 ,,	3038·17	·00	4521·05	·00	27·359	10·72	Images trailed.
	5234 Nov. 13	5141·66	− ·01	4907·37	·00	27·354	10·68	
	5235 ,,	5142·02	− ·01	4907·24	− ·01	27·384	10·76	
	5236 ,,	5151·87	− ·01	4907·66	− ·01	27·385	10·98	
	5237 Nov. 14	6163·53	− ·01	5236·74	·00	27·379	10·83	
	5238 ,,	6171·93	− ·01	5210·65	·00	27·380	10·69	
				Mean		1 52 27·379	54 23 10·70	
36	5213 Nov. 9	1177·71	+ ·02	3751·65	·00	1 53 0·859	54 13 30·61	Very faint.
	5214 ,,	1184·78	·00	3796·75	·00	0·861	30·28	
	5215 ,,	1178·70	− ·02	3798·05	·00	0·861	30·46	
	5216 ,,	1193·88	− ·05	3811·28	− ·03	0·896	30·31	
	5217 ,,	1190·37	− ·05	3796·53	− ·03	0·820	30·28	Very diffused.
	5218 Nov. 10	2230·90	+ ·01	3799·19	·00	0·841	30·78	
	5219 ,,	2309·67	+ ·01	3790·87	·00	0·849	30·84	
	5220 ,,	2249·34	+ ·01	3796·41	·00	0·856	30·87	
	5222 ,,	2242·68	·00	3841·56	·00	0·826	30·55	
	5223 ,,	2259·59	·00	3839·19	·00	0·840	30·56	
	5226 Nov. 11	3328·77	·00	3877·91	·00	0·825	30·74	
	5227 ,,	3332·27	·00	3884·15	·00	0·828	30·96	
	5228 ,,	3333·25	·00	3884·89	·00	0·836	30·93	
	5229 ,,	3326·81	·00	3938·26	·00	0·833	30·61	Images trailed.
	5234 Nov. 13	5438·65	− ·01	4328·85	·00	0·848	30·72	
	5235 ,,	5438·56	− ·01	4328·71	− ·01	0·832	30·77	
	5236 ,,	5448·08	− ·01	4328·76	− ·01	0·834	30·75	
	5237 Nov. 14	6466·74	− ·01	4661·09	·00	0·849	30·44	
	5238 ,,	6472·17	− ·01	4633·77	·00	0·835	30·56	
				Mean		1 53 0·842	54 13 30·63	
37	5209 Nov. 6	4498·09	·00	3884·51	·00	2 5 31·133	+ 54 12 3·69	Two images only.
	5214 Nov. 9	7770·51	·00	3713·67	·00	31·100	3·84	
	5215 ,,	7763·80	− ·02	3715·74	·00	31·108	3·95	
	5216 ,,	7776·91	− ·05	3729·83	− ·02	31·054	4·04	
	5217 ,,	7773·93	− ·05	3710·55	− ·03	31·071	3·83	Very faint and diffused.
				Mean		2 5 31·093	+ 54 12 3·87	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.					h m s	° ′ ″	
38	5209 Nov. 6	6097″·34	+″·01	3769″·61	″·00	2 8 33·124	+ 54 9 57·90	
39	5207 Oct. 31	2524·43	− ·01	5083·32	·00	2 13 40·975	+ 53 57 5·77	
	5208 ,,	2527·92	− ·01	5085·10	·00	40·996	5·26	
				Mean		2 13 40·986	+ 53 57 5·52	
40	5205 Oct. 29	837·40	+ ·05	5458·81	− ·03	2 14 15·057	+ 53 44 59·90	
	5206 ,,	845·19	+ ·05	5459·13	− ·03	15·054	59·88	
	5207 Oct. 31	2821·77	− ·01	4353·89	·00	15·000	60·10	
	5208 ,,	2824·70	− ·01	4356·03	·00	15 002	60·09	
				Mean		2 14 15·028	+ 53 44 59·99	
41	5201 Oct. 27	1637·33	·00	5685·76	·00	2 19 17·102	+ 53 26 7·94	Two images only.
	5202 ,,	1629·05	− ·02	5682·72	·00	17·074	8·16	Two images only.
	5203 ,,	1627·45	− ·02	5683·14	− ·01	17·113	8·54	Two images only.
	5208 Oct. 31	5514·06	− ·01	3218·69	·00	17·106	8·01	
				Mean		2 19 17·099	+ 53 26 8·16	
42	5186 Oct. 26	1406·16	·00	5880·96	·00	2 20 31·640	+ 53 17 3·64	
	5187 ,,	1401·38	·00	5881·75	·00	31·674	3·66	
	5189 ,,	1411·47	− ·02	5885·26	− ·01	31·654	3·66	
	5190 ,,	1425·08	− ·03	5886·10	− ·01	31·647	3·56	
	5200 Oct. 27	2296·84	·00	5133·08	·00	31·673	3·80	
	5201 ,,	2297·05	·00	5130·79	·00	31·675	3·56	
	5202 ,,	2288·43	− ·01	5127·16	·00	31·663	3·71	
	5203 ,,	2286·61	− ·01	5127·53	·00	31·667	3·93	
	5204 Oct. 28	2789·59	− ·01	4396·15	·00	31·653	3·62	
	5205 Oct. 29	4176·82	·00	3740·82	·00	31·655	3·91	
	5206 ,,	4185·61	·00	3742·25	·00	31·654	3·71	
	5207 Oct. 31	6185·15	− ·01	2680·25	·00	31·662	3·89	
	5208 ,,	6186·87	− ·01	2680·31	·00	31·637	3·76	
				Mean		2 20 31·658	+ 53 17 3·72	
43	5186 Oct. 26	4091·21	·00	3970·28	·00	2 25 31·254	+ 52 45 43·19	
	5187 ,,	4086·23	·00	3971·18	·00	31·263	43·31	
	5189 ,,	4095·64	·00	3973·72	·00	31·259	43·27	
	5190 ,,	4109·12	·00	3974·10	·00	31·261	43·02	
	5200 Oct. 27	4994·72	·00	3241·03	·00	31·263	43·24	
	5201 ,,	4993·69	·00	3237·15	·00	31·270	43·23	
	5202 ,,	4983·32	·00	3231·47	·00	31·248	43·44	
	5203 ,,	4982·03	·00	3231·92	·00	31·282	43·34	
	5204 Oct. 28	5490·66	− ·01	2509·21	·00	31·257	43·62	
				Mean		2 25 31·262	+ 52 45 43·30	
44	5186 Oct. 26	5177·74	·00	4213·94	·00	2 27 31·003	+ 52 49 45·15	
	5187 ,,	5172·55	·00	4214·63	·00	30·991	45·07	
	5189 ,,	5181·98	·00	4216·97	·00	31·010	45·27	
	5190 ,,	5195·20	·00	4217·19	·00	30·987	45·03	
	5200 Oct. 27	6079·44	·00	3492·25	·00	30·997	45·33	
	5201 ,,	6078·29	·00	3487·66	·00	30·970	45·32	
	5202 ,,	6068·12	− ·01	3481·00	·00	30·978	45·47	
	5203 ,,	6066·54	− ·01	3481·61	− ·01	30·989	45·42	
	5204 Oct. 28	6574·78	− ·02	2762·26	− ·01	30·999	45·63	
				Mean		2 27 30·992	+ 52 49 45·30	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.			x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.							h m s	° ′ ″	
45	5173	Oct.	21	1327″16	+ ″09	6971″58	− ″08	2 27 (44·985)	52 24 (21″14)	
	5177	,,		1398·42	·00	7025·98	·00	44·916	21·40	
	5186	Oct.	26	5312·69	·00	2689·85	·00	44·915	21·39	
	5187	,,		5307·44	·00	2690·85	·00	44·895	21·60	
	5189	,,		5316·56	·00	2692·93	·00	44·908	21·52	
	5190	,,		5329·89	− ·01	2693·63	·00	44·905	21·60	
	5200	Oct.	27	6224·81	·00	1969·18	·00	44·891	21·65	
	5201	,,		6222·98	·00	1964·58	·00	44·903	21·73	
	5202	,,		6211·68	− ·01	1957·82	·00	44·891	21·80	
	5203	,,		6210·29	− ·01	1958·40	− ·01	44·890	21·64	
	5204	Oct.	28	6723·16	− ·03	1239·45	− ·01	44·891	22·08	
						Mean		2 27 44·901	52 24 21·64	
46	5186	Oct.	26	5639·63	·00	2904·42	·00	2 28 20·795	52 27 53·62	Two images only.
	5187	,,		5634·78	·00	2905·56	·00	20·819	53·97	Two images only.
	5190	,,		5656·38	− ·01	2908·34	·00	20·740	54·27	
	5201	Oct.	27	6548·43	·00	2181·62	·00	20·768	54·32	Two images only.
	5202	,,		6537·46	− ·01	2174·13	·00	20·784	53·96	Two images only; excessively faint.
						Mean		2 28 20·781	52 27 54·03	
47	5169	Oct.	20	1326·98	·00	7395·76	·00	2 28 49·168	52 14 18·86	
	5170	,,		1314·48	·00	7390·66	·00	49·140	18·92	
	5173	Oct.	21	1905·57	+ ·05	6359·36	− ·04	49·159	18·91	
	5177	,,		1977·49	·00	6413·10	·00	49·147	19·00	
	5186	Oct.	26	5906·59	·00	2091·41	·00	49·140	18·96	
	5187	,,		5901·40	·00	2092·37	·00	49·127	19·15	
	5189	,,		5910·28	− ·01	2094·45	·00	49·136	19·25	
	5190	,,		5923·73	− ·01	2094·75	− ·01	49·153	19·10	
	5200	Oct.	27	6822·90	·00	1374·65	·00	49·113	19·09	
	5201	,,		6820·43	·00	1369·85	·00	49·098	19·37	
	5202	,,		6808·90	− ·02	1362·48	− ·01	49·112	19·30	
	5203	,,		6807·58	− ·02	1363·17	− ·01	49·110	19·15	
	5204	Oct.	28	7322·09	− ·04	646·19	− ·01	(49·089)	(19·89)	
						Mean		2 28 49·134	52 14 19·09	
48	5177	Oct.	21	2278·29	·00	6547·28	·00	2 29 21·667	52 16 37·45	Two images only; very faint.
	5186	Oct.	26	6204·31	·00	2233·23	·00	21·698	37·59	Very faint.
	5187	,,		6199·32	·00	2234·15	·00	21·708	37·73	Very faint.
	5189	,,		6207·93	− ·01	2236·23	·00	21·691	37·95	Two images only; very faint.
	5190	,,		6220·54	− ·01	2236·48	− ·01	21·616	37·81	Very faint.
	5202	Oct.	27	7105·41	− ·03	1506·50	− ·01	21·631	38·50	Two images only; excessively faint.
						Mean		2 29 21·669	52 16 37·84	
49	5169	Oct.	20	2155·27	·00	7423·60	·00	2 30 19·201	52 15 0·86	
	5173	Oct.	21	2733·47	+ ·03	6390·59	− ·03	19·205	0·22	
	5177	,,		2805·73	·00	6443·60	·00	19·202	0·09	Two images only.
	5186	Oct.	26	6733·82	·00	2142·81	·00	19·192	0·44	
	5187	,,		6728·88	·00	2143·56	·00	19·206	0·41	
	5189	,,		6737·41	− ·02	2145·36	− ·01	19·195	0·56	
	5190	,,		6750·60	− ·02	2145·47	− ·01	19·187	0·34	
	5201	Oct.	27	7647·27	·00	1426·59	·00	19·128	0·08	Two images only: excessively faint.
	5202	,,		7635·46	− ·03	1418·66	− ·01	19·126	0·14	Two images only; very diffused.
						Mean		2 30 19·182	52 15 0·35	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.					h m s	° ′ ″	
50	5173 Oct. 21	2977·89	+ ·04	6754·25	− ·04	2 30 45·472	52 21 5·89	Two images only.
	5177 ,,	3050·08	·00	6807·71	·00	45·450	6·28	
	5186 Oct. 26	6969·00	·00	2512·35	·00	45·426	6·06	
	5187 ,,	6963·92	·00	2513·21	·00	45·426	6·15	
	5189 ,,	6972·60	− ·02	2515·01	− ·01	45·429	6·40	Two images only; very diffused.
	5190 ,,	6985·93	− ·02	2515·37	− ·01	45·436	6·49	
	5201 Oct. 27	7880·25	·00	1797·58	·00	45·377	6·74	Two images only.
				Mean		2 30 45·431	52 21 6·29	
51	5172 Oct. 20	3338·80	·00	6314·11	·00	2 32 39·449	51 56 37·00	Excessively faint.
52	5169 Oct. 20	3823·78	·00	5459·48	·00	2 33 21·584	51 42 33·69	
	5170 ,,	3811·72	·00	5454·62	·00	21·583	33·64	
	5172 ,,	3724·97	·00	5468·02	·00	21·604	33·76	
	5173 Oct. 21	4409·88	·00	4436·24	·00	21·583	34·03	Two images only.
	5177 ,,	4482·79	·00	4486·95	·00	21·615	33·06	Two images only.
				Mean		2 33 21·594	51 42 33·64	
53	5169 Oct. 20	3909·87	·00	5128·49	·00	2 33 30·961	+ 51 37 3·25	
	5170 ,,	3897·90	·00	5123·75	·00	30·964	3·31	
	5172 ,,	3810·98	·00	5137·08	·00	30·994	3·42	
	5173 Oct. 21	4497·46	·00	4105·66	·00	30·968	3·50	
	5177 ,,	4570·03	·00	4157·06	·00	30·962	3·33	
				Mean		2 33 30·970	+ 51 37 3·36	
54	5169 Oct. 20	3932·10	·00	4972·60	·00	2 33 33·401	+ 51 34 27·55	
	5170 ,,	3920·21	·00	4967·75	·00	33·411	27·50	
	5172 ,,	3833·23	·00	4981·02	·00	33·446	27·56	
	5173 Oct. 21	4520·07	·00	3949·63	·00	33·375	27·49	
	5177 ,,	4592·96	·00	4001·00	·00	33·404	27·35	
				Mean		2 33 33·407	+ 51 34 27·49	
55	5160 Oct. 14	3154·75	·00	6652·72	·00	2 37 40·514	+ 50 12 16·15	
	5161 ,,	3178·36	·00	6649·49	·00	40·510	16·04	
	5162 Oct. 15	3287·20	+ ·01	5365·95	− ·01	40·494	16·33	
				Mean		2 37 40·506	+ 50 12 16·17	
56	5160 Oct. 14	3173·95	·00	6878·30	·00	2 37 42·354	+ 50 16 1·71	
	5161 ,,	3197·91	·00	6875·17	·00	42·351	1·72	
	5162 Oct. 15	3306·12	+ ·01	5591·37	− ·01	42·325	1·68	
				Mean		2 37 42·343	+ 50 16 1·70	
57	5154 Oct. 10	2849·69	+ ·07	7828·95	− ·07	2 40 8·372	+ 49 8 23·65	
	5160 Oct. 14	4580·62	·00	2814·07	·00	8·369	23·99	
	5161 ,,	4598·97	·00	2808·80	·00	8·403	23·94	
	5162 Oct. 15	4716·39	+ ·03	1529·39	− ·03	8·424	23·76	
				Mean		2 40 8·392	+ 49 8 23·84	
58	5160 Oct. 14	4650·27	·00	3829·56	·00	2 40 15·648	+ 49 25 18·72	Two images only.
	5161 ,,	4669·62	·00	3824·82	·00	15·631	19·30	Three images only.
				Mean		2 40 15·640	+ 49 25 19·01	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.	″	″	″	″	h m s	° ′ ″	
59	5154 Oct. 10	3014·42	+ ·07	7688·89	− ·07	2 40 25·258	+ 49 6 4·96	
	5160 Oct. 14	4747·05	·00	2675·36	·00	25·283	5·07	
	5161 ,,	4764·48	·00	2669·77	·00	25·243	4·93	
	5162 Oct. 15	4882·36	+ ·03	1390·70	− ·03	25·286	4·68	
				Mean		2 40 25·268	+ 49 6 4·91	
60	5154 Oct. 10	3085·78	+ ·07	8013·87	− ·07	2 40 32·280	+ 49 11 30·21	[diffused. Two images only; very
	5160 Oct. 14	4814·91	·00	3001·48	·00	32·279	30·82	
	5161 ,,	4833·20	·00	2996·27	·00	32·278	31·17	
				Mean		2 40 32·279	+ 49 11 30·73	
61	5160 Oct. 14	4887·52	·00	3723·46	·00	2 40 39·911	+ 49 23 32·11	
	5161 ,,	4906·92	·00	3717·97	·00	39·914	32·39	
	5162 Oct. 15	5022·09	+ ·02	2439·38	− ·02	39·923	32·20	
				Mean		2 40 39·916	+ 49 23 32·20	
62	5154 Oct. 10	3224·63	+ ·06	7700·51	− ·06	2 40 46·643	+ 49 6 17·99	
	5160 Oct. 14	4957·36	·00	2688·84	·00	46·689	17·96	
	5161 ,,	4974·77	·00	2682·96	·00	46·645	17·85	
	5162 Oct. 15	5092·49	+ ·03	1404·92	− ·03	46·676	18·03	
				Mean		2 40 46·663	+ 49 6 17·96	
63	5160 Oct. 14	4976·38	·00	3267·83	·00	2 40 48·837	+ 49 15 56·49	
	5161 ,,	4995·13	·00	3261·89	·00	48·842	56·36	
				Mean		2 40 48·840	+ 49 15 56·43	
64	5160 Oct. 14	5013·87	·00	4566·03	·00	2 40 53·176	+ 49 37 33·72	Two images only.
	5161 ,,	5034·24	·00	4560·12	·00	53·151	+ 33·67	
				Mean		2 40 53·164	+ 49 37 33·70	
65	5161 Oct. 14	5039·83	·00	3588·20	·00	2 40 53·485	+ 49 21 22·35	Two images only.
66	5160 Oct. 14	5031·07	·00	3948·88	·00	2 40 54·694	+ 49 27 16·89	
	5161 ,,	5050·67	·00	3943·02	·00	54·684	16·93	
	5162 Oct. 15	5165·32	+ ·02	2664·60	− ·01	54·698	16·63	
				Mean		2 40 54·692	+ 49 27 16·82	
67	5154 Oct. 10	3309·12	+ ·05	7439·71	− ·05	2 40 55·404	+ 49 1 57·84	Two images only.
	5161 Oct. 14	5061·83	·00	2423·29	·00	55·437	58·17	
				Mean		2 40 55·421	+ 49 1 58·01	
68	5154 Oct. 10	3555·65	+ ·05	7451·81	− ·05	2 41 20·453	+ 49 2 11·15	Two images only.
	5161 Oct. 14	5307·96	·00	2437·21	·00	20·450	11·32	Very faint.
				Mean		2 41 20·452	+ 49 2 11·24	
69	5160 Oct. 14	5650·79	·00	3088·23	·00	2 41 57·549	+ 49 12 53·33	
	5161 ,,	5669·24	·00	3081·44	·00	57·551	53·34	
				Mean		2 41 57·550	+ 49 12 53·34	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.			x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.							h m s		
70	5154	Oct.	10	3931·65	+ ·02	6486·29	− ·02	2 41 58·925	+ 48 46 7·37	
	5160	Oct.	14	5676·54	·00	1480·92	·00	58·945	7·06	
	5161	,,		5692·43	·00	1474·33	·00	58·927	7·31	
						Mean		2 41 58·932	+ 48 46 7·25	
71	5154	Oct.	10	4032·34	·00	5414·73	·00	2 42 9·327	+ 48 28 16·47	
72	5154	Oct.	10	4098·67	+ ·03	7560·04	− ·04	2 42 15·626	+ 49 4 0·79	Very diffused.
	5160	Oct.	14	5832·79	·00	2556·03	·00	15·649	0·13	Two images only.
	5161	,,		5850·49	·00	2548·98	·00	15·654	0·14	
						Mean		2 42 15·643	+ 49 4 0·35	
73	5143	Oct.	7	3633·21	+ ·01	7586·58	− ·01	2 42 29·571	+ 48 3 16·20	[ful; of little value. Very diffused; measures doubt-
	5146	,,		3648·96	+ ·01	7477·70	− ·01	29·587	15·58	Very diffused.
						Mean		2 42 29·579	+ 48 3 15·89	
74	5142	Oct.	7	4022·76	·00	5559·13	·00	2 42 32·146	+ 47 23 39·65	
	5143	,,		3649·25	·00	5208·42	·00	32·144	39·78	
	5145	,,		3646·98	·00	5139·09	·00	32·099	39·86	Two images very faint.
	5146	,,		3651·64	·00	5100·13	·00	32·144	39·83	
	5148	Oct.	8	3794·55	·00	4093·32	·00	32·120	39·50	Two images only. [fused.
	5150	,,		3817·68	·00	3866·24	·00	32·169	39·30	Two images only; very dif-
	5152	,,		3885·58	·00	3905·46	·00	32·150	39·72	Two images only; very faint.
	5154	Oct.	10	4256·29	+ ·03	1535·85	− ·03	32·151	39·40	
						Mean		2 42 32·140	+ 47 23 39·63	
75	5143	Oct.	7	3696·63	+ ·01	7590·70	− ·01	2 42 35·888	+ 48 3 20·57	Very diffused; of little value.
	5146	,,		3712·48	+ ·01	7482·66	− ·01	35·911	21·15	Very diffused.
						Mean		2 42 35·900	+ 48 3 20·86	
76	5143	Oct.	7	3700·88	+ ·01	7349·63	− ·01	2 42 36·406	+ 47 59 19·72	Very diffused. [fused.
	5145	,,		3708·67	+ ·01	7279·71	− ·01	36·399	19·45	Two images only; very dif-
	5146	,,		3715·62	·00	7240·91	·00	36·451	19·64	
	5152	Oct.	8	3933·70	·00	6046·69	·00	36·359	19·69	Two images only.
	5154	Oct.	10	4300·74	·00	3677·43	·00	36·404	20·05	Two images only.
						Mean		2 42 36·404	+ 47 59 19·71	
77	5141	Oct.	5	3762·94	+ ·02	7087·24	− ·01	2 43 (4·006)	+ 47 10 (3·58)	Two images only.
	5142	Oct.	7	4346·13	·00	4742·99	·00	3·998	4·31	
	5143	,,		3971·00	·00	4391·46	·00	4·007	4·35	
	5145	,,		3965·51	·00	4320·67	·00	4·007	4·43	Very faint.
	5146	,,		3968·70	·00	4281·23	·00	3·991	4·26	
	5148	Oct.	8	4116·85	·00	3276·75	·00	3·970	3·91	
	5154	Oct.	10	4580·57	+ ·03	720·06	− ·05	3·997	3·91	Very faint and diffused.
						Mean		2 43 3·995	+ 47 10 4·20	
78	5141	Oct.	5	3897·65	+ ·01	6557·95	− ·01	2 43 (17·346)	+ 47 1 (14·98)	
	5142	Oct.	7	4482·86	·00	4213·85	·00	17·377	15·43	
	5143	,,		4106·24	·00	3862·10	·00	17·349	15·56	
	5145	,,		4098·56	·00	3790·42	·00	17·369	15·39	
	5146	,,		4101·22	·00	3751·14	·00	17·353	15·49	
	5148	Oct.	8	4252·94	+ ·01	2747·82	− ·01	17·352	15·32	
	5150	,,		4277·04	·00	2520·97	·00	17·365	15·41	
	5152	,,		4344·71	·00	2559·38	·00	17·375	15·24	
						Mean		2 43 17·363	+ 47 1 15·41	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.					h m s	° ′ ″	
79	5141 Oct. 5	3927·97	+ ·01	6357·75	− ·01	2 43 (20·359)	+ 46 57 (54·97)	Two images only.
	5142 Oct. 7	4513·04	·00	4013·08	·00	20·315	54·75	Two images touching *réseau*.
	5143 ,,	4136·29	·00	3662·00	·00	20·316	55·62	
	5145 ,,	4127·37	·00	3590·09	·00	20·302	55·35	
	5146 ,,	4129·94	·00	3550·81	·00	20·299	55·49	
	5148 Oct. 8	4282·97	+ ·01	2546·85	− ·01	20·301	54·46	Very faint and diffused.
	5152 ,,	4374·79	·00	2359·25	·00	20·317	55·24	Two images only.
				Mean		2 43 20·308	+ 46 57 55·15	
80	5142 Oct. 7	4521·35	+ ·01	6397·68	− ·01	2 43 21·273	+ 47 37 37·95	
	5143 ,,	4149·72	·00	6045·85	·00	21·279	38·08	
	5145 ,,	4151·57	·00	5974·11	·00	21·265	38·06	
	5146 ,,	4156·86	·00	5934·89	·00	21·287	38·28	
	5148 Oct. 8	4294·45	·00	4931·28	·00	21·284	37·86	
	5150 ,,	4316·30	·00	4704·74	·00	21·266	37·82	
	5152 ,,	4384·89	·00	4743·32	·00	21·280	37·80	
	5154 Oct. 10	4753·96	+ ·02	2375·35	− ·02	21·287	37·98	
				Mean		2 43 21·278	+ 47 37 37·98	
81	5142 Oct. 7	4614·56	+ ·01	6638·54	− ·01	2 43 30·514	+ 47 41 38·55	
	5143 ,,	4243·46	·00	6286·38	·00	30·522	38·55	
	5145 ,,	4246·34	·00	6214·39	·00	30·504	38·70	
	5146 ,,	4251·76	·00	6174·81	·00	30·512	38·67	
	5148 Oct. 8	4387·93	·00	5172·18	·00	30·525	38·64	
	5150 ,,	4409·81	·00	4945·31	·00	30·530	38·18	Extremely diffused.
	5152 ,,	4477·93	·00	4983·87	·00	30·488	38·18	
	5154 Oct. 10	4846·62	+ ·01	2616·50	− ·02	30·512	38·78	
				Mean		2 43 30·513	+ 47 41 38·53	
82	5139 Oct. 4	3969·06	+ ·01	5637·89	− ·01	2 43 30·842	+ 46 24 5·52	
	5142 Oct. 7	4623·40	+ ·01	1982·38	− ·01	30·865	5·14	
	5143 ,,	4242·42	+ ·01	1630·18	− ·01	30·874	5·25	
	5145 ,,	4224·26	·00	1557·80	·00	30·853	4·98	
	5146 ,,	4224·93	·00	1518·44	·00	30·871	5·16	
				Mean		2 43 30·861	+ 46 24 5·21	
83	5142 Oct. 7	4625·46	·00	5593·42	·00	2 43 31·472	+ 47 24 14·08	
	5143 ,,	4251·84	·00	5241·46	·00	31·451	14·30	
	5145 ,,	4250·21	·00	5169·46	·00	31·452	14·48	Very faint.
	5146 ,,	4255·06	·00	5129·94	·00	31·511	14·51	
				Mean		2 43 31·472	+ 47 24 14·34	
84	5142 Oct. 7	4632·20	+ ·01	6757·25	− ·01	2 43 32·275	+ 47 43 37·15	
	5143 ,,	4261·26	·00	6405·07	·00	32·273	37·18	
	5145 ,,	4264·72	·00	6333·04	·00	32·259	37·37	
	5146 ,,	4270·21	·00	6293·51	·00	32·262	37·41	
	5148 Oct. 8	4405·83	·00	5291·22	·00	32·288	37·66	
	5150 ,,	4427·58	·00	5064·41	·00	32·290	37·18	
	5152 ,,	4495·44	·00	5102·67	·00	32·217	36·89	
	5154 Oct. 10	4864·09	+ ·01	2735·02	− ·02	32·270	37·21	
				Mean		2 43 32·267	+ 47 43 37·26	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

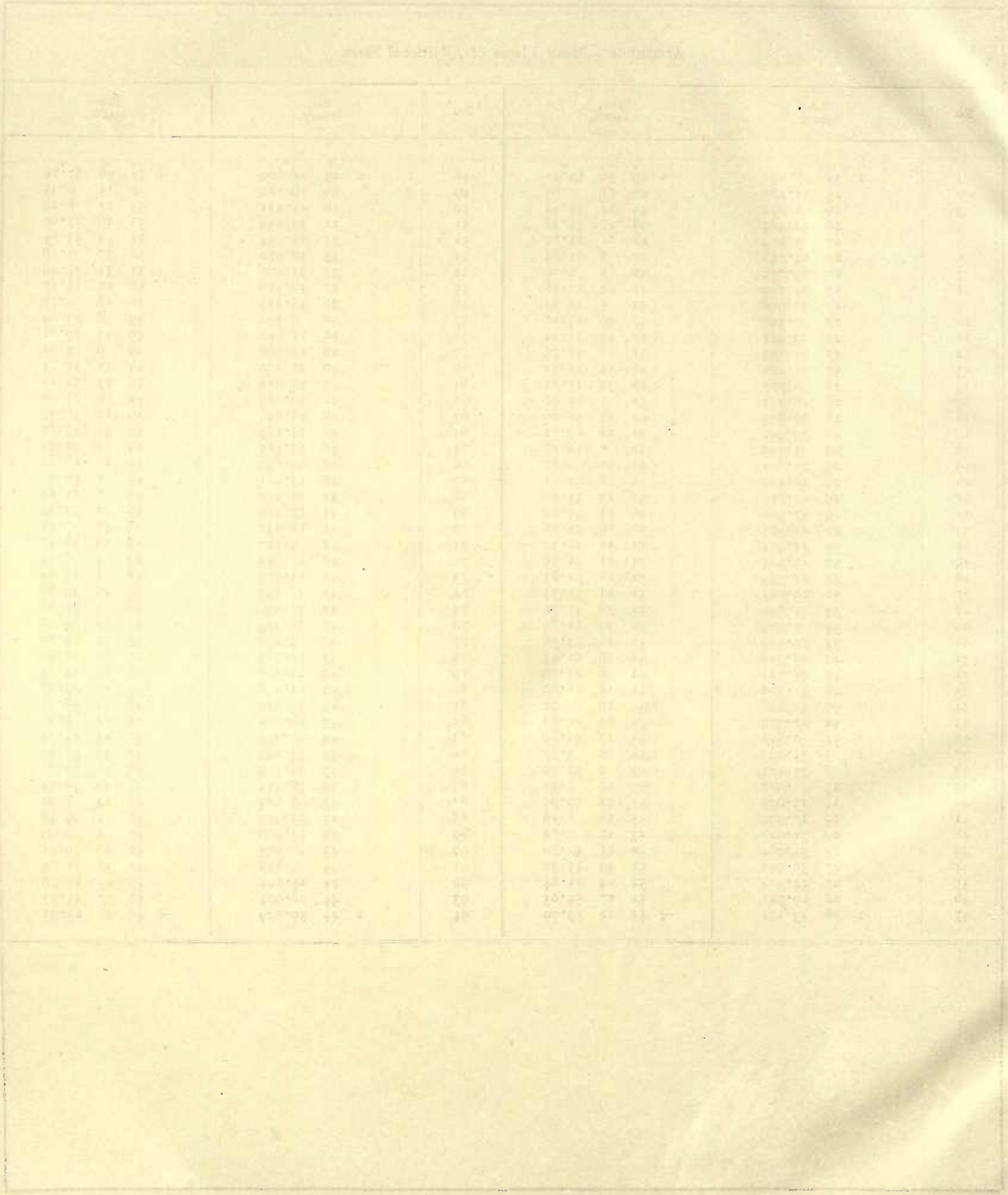
No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.					h m s		
85	5139 Oct. 4	4008·24	+ ·01	6383·16	− ·01	2 43 34·475	+ 46 36 30·51	Very faint.
	5142 Oct. 7	4659·89	·00	2728·32	·00	34·489	30·56	
	5143 ,,	4280·38	·00	2376·10	·00	34·484	30·69	
	5145 ,,	4265·91	·00	2303·73	·00	34·494	30·61	
	5146 ,,	4266·83	·00	2264·20	·00	34·471	30·66	
	5152 Oct. 8	4520·10	·00	1074·30	·00	34·424	31·26	Two images only.
				Mean		2 43 34·473	+ 46 36 30·72	
86	5141 Oct. 5	4114·36	+ ·02	7141·25	− ·02	2 43(38·440)	+ 47 10(58·31)	
	5142 Oct. 7	4697·64	·00	4798·07	·00	38·458	59·08	
	5143 ,,	4322·54	·00	4446·09	·00	38·456	59·45	
	5145 ,,	4317·32	·00	4373·31	·00	38·457	59·07	
	5146 ,,	4320·56	·00	4333·67	·00	38·439	59·16	
	5148 Oct. 8	4468·45	·00	3331·68	·00	38·437	58·88	
	5150 ,,	4492·03	·00	3105·67	·00	38·444	59·60	Two images touching *réseau*.
	5152 ,,	4560·01	·00	3143·34	·00	38·461	58·76	
	5154 Oct. 10	4932·14	+ ·04	776·10	− ·05	38·470	59·09	
				Mean		2 43 38·453	+ 47 10 59·14	
87	5141 Oct. 5	4198·67	+ ·02	7329·58	− ·02	2 43(46·686)	+ 47 14 (6·58)	
	5142 Oct. 7	4781·42	·00	4986·74	·00	46·707	7·50	
	5143 ,,	4406·46	·00	4634·16	·00	46·680	7·43	
	5145 ,,	4401·98	·00	4561·49	·00	46·670	7·64	
	5146 ,,	4405·78	·00	4521·69	·00	46·688	7·58	
	5148 Oct. 8	4552·33	·00	3520·24	·00	46·675	7·27	
	5150 ,,	4574·99	·00	3293·33	·00	46·608	7·01	Two images touching *réseau*.
	5152 ,,	4644·00	·00	3331·92	·00	46·718	7·12	
	5154 Oct. 10	5015·71	+ ·04	964·36	− ·05	46·722	6·94	
				Mean		2 43 46·684	+ 47 14 7·31	
88	5139 Oct. 4	4208·14	+ ·01	6112·29	− ·01	2 43 53·894	+ 46 31 59·99	Two images only.
	5142 Oct. 7	4861·05	+ ·01	2457·15	− ·01	53·934	59·16	
	5143 ,,	4481·47	·00	2104·72	·00	53·980	59·55	
	5145 ,,	4465·19	·00	2031·42	·00	53·923	59·45	
	5146 ,,	4465·98	·00	1991·63	·00	53·913	59·45	
	5152 Oct. 8	4721·43	·00	802·28	·00	53·903	59·27	Two images only.
				Mean		2 43 53·925	+ 46 31 59·48	
89	5141 Oct. 5	4276·68	+ ·01	6692·93	− ·01	2 43(54·385)	+ 47 3(30·38)	Two images only.
	5142 Oct. 7	4861·23	·00	4349·85	·00	54·390	30·76	
	5143 ,,	4485·54	·00	3997·43	·00	54·424	31·07	
	5145 ,,	4478·24	·00	3924·09	·00	54·419	30·98	
	5146 ,,	4481·17	·00	3884·74	·00	54·417	31·42	
	5148 Oct. 8	4631·54	+ ·01	2883·85	− ·01	54·375	31·07	
	5152 ,,	4723·49	·00	2695·10	·00	54·412	30·63	Two images only.
				Mean		2 43 54·406	+ 47 3 30·99	
90	5139 Oct. 4	4257·26	+ ·01	6372·21	− ·01	2 43 58·631	+ 46 36 19·82	
	5142 Oct. 7	4909·60	·00	2718·09	− ·01	58·707	19·84	
	5143 ,,	4529·80	·00	2365·52	·00	58·674	20·14	
	5145 ,,	4515·17	·00	2291·91	·00	58·671	19·95	
	5146 ,,	4516·27	·00	2251·88	·00	58·656	19·77	
	5152 Oct. 8	4769·82	·00	1063·26	·00	58·637	19·92	Two images only.
				Means		2 43 58·663	+ 46 36 19·91	

ADDENDUM.—Measured Co-ordinates and Deduced Mean Places of Additional Stars.

No.	Plate No. and Date.	x.	Refraction Correction applied.	y.	Refraction Correction applied.	R.A. 1900·0.	Dec. 1900·0.	Remarks.
	1900.	″	″	″	″	h m s	° ′ ″	
91	5142 Oct. 7	4919·33	+ ·01	6439·05	− ·01	2 44 0·630	+ 47 38 18·55	
	5143 ,,	4547·71	·00	6086·14	·00	0·627	18·49	
	5145 ,,	4549·90	·00	6012·83	·00	0·627	18·72	
	5146 ,,	4555·06	·00	5972·82	·00	0·631	18·58	
	5152 Oct. 8	4782·68	·00	4784·49	·00	0·611	18·60	Two images only.
	5154 Oct. 10	5151·37	+ ·02	2417·06	− ·02	0·604	18·33	
				Mean		2 44 0·622	+ 47 38 18·55	
92	5141 Oct. 5	4477·69	+ ·02	7393·18	− ·02	2 44 (14·068)	+ 47 15 (10·13)	
	5142 Oct. 7	5060·25	·00	5050·96	·00	14·091	10·87	
	5143 ,,	4685·71	·00	4697·97	·00	14·091	11·02	
	5145 ,,	4681·68	·00	4623·39	·00	14·096	10·62	
	5146 ,,	4685·37	·00	4583·79	·00	14·096	11·01	
	5148 Oct. 8	4831·75	·00	3584·35	·00	14·114	10·81	
	5150 ,,	4855·15	·00	3357·60	·00	14·115	10·58	
	5152 ,,	4922·84	·00	3395·96	·00	14·092	10·59	
	5154 Oct. 10	5294·57	+ ·05	1029·41	− ·05	14·122	10·73	
				Mean		2 44 14·102	+ 47 15 10·78	
93	5141 Oct. 5	4629·72	+ ·01	6327·07	− ·01	2 44 (28·874)	+ 46 57 (24·53)	Two images only.
	5142 Oct. 7	5215·55	·00	3985·15	·00	28·894	25·06	
	5143 ,,	4838·68	·00	3631·79	·00	28·887	25·20	
	5145 ,,	4829·83	·00	3556·70	·00	28·890	24·97	
	5146 ,,	4832·28	·00	3516·61	·00	28·878	25·04	
	5148 Oct. 8	4985·96	+ ·01	2517·98	− ·01	28·936	24·49	Very diffused.
	5152 ,,	5077·89	·00	2329·95	·00	28·941	24·83	Two images only.
				Mean		2 44 28·904	+ 46 57 24·93	
94	5139 Oct. 4	4679·73	+ ·01	6378·83	− ·01	2 44 39·609	+ 46 36 26·16	
	5141 Oct. 5	4741·76	·00	5068·18	·00	(39·606)	(26·08)	
	5142 Oct. 7	5331·67	+ ·01	2725·63	− ·01	39·640	25·74	
	5143 ,,	4952·06	+ ·01	2372·39	− ·01	39·626	26·32	
	5145 ,,	4937·66	·00	2296·67	·00	39·641	25·98	
	5146 ,,	4938·77	·00	2256·33	·00	39·627	25·92	
	5148 Oct. 8	5100·17	+ ·03	1259·00	− ·04	39·644	25·81	
	5150 ,,	5125·97	+ ·01	1032·11	− ·01	39·670	25·76	
	5152 ,,	5192·80	·00	1070·50	·00	39·653	25·94	
				Mean		2 44 39·639	+ 46 36 25·95	

ADDENDUM.—Mean Places of Additional Stars.

No.	R.A. 1900·0.	Dec. 1900·0.	No.	R.A. 1900·0.	Dec. 1900·0.
	h m s	° ′ ″		h m s	° ′ ″
1	1 25 27·232	+ 49 39 59·51	48	2 29 21·669	+ 52 16 37·84
2	25 51·461	48 51 2·65	49	30 19·182	52 15 0·35
3	26 1·812	49 34 39·44	50	30 45·431	52 21 6·29
4	26 12·469	48 47 54·38	51	32 39·449	51 56 37·00
5	27 3·404	48 51 11·71	52	33 21·594	51 42 33·64
6	27 14·046	47 6 31·84	53	33 30·970	51 37 3·36
7	27 14·730	50 53 0·79	54	33 33·407	51 34 27·49
8	27 34·759	47 48 12·18	55	37 40·506	50 12 16·17
9	27 36·906	51 9 21·33	56	37 42·343	50 16 1·70
10	27 38·597	47 59 23·26	57	40 8·392	49 8 23·84
11	27 39·415	47 49 13·04	58	40 15·640	49 25 19·01
12	27 42·843	51 16 47·73	59	40 25·268	49 6 4·91
13	27 51·276	46 54 17·52	60	40 32·279	49 11 30·73
14	28 6·777	46 39 17·81	61	40 39·916	49 23 32·20
15	28 18·352	51 5 42·96	62	40 46·663	49 6 17·96
16	28 36·853	51 33 38·00	63	40 48·840	49 15 56·43
17	28 39·490	51 28 49·72	64	40 53·164	49 37 33·70
18	29 3·538	51 7 46·26	65	40 53·485	49 21 22·35
19	29 15·811	51 30 0·87	66	40 54·692	49 27 16·82
20	29 16·280	51 6 55·71	67	40 55·421	49 1 58·01
21	29 25·817	51 10 54·20	68	41 20·452	49 2 11·24
22	29 27·901	46 45 35·22	69	41 57·550	49 12 53·34
23	29 41·487	51 16 52·76	70	41 58·932	48 46 7·25
24	29 43·452	51 36 31·33	71	42 9·327	48 28 16·47
25	30 25·565	51 31 58·75	72	42 15·643	49 4 0·35
26	31 28·999	52 18 32·83	73	42 29·579	48 3 15·89
27	31 29·082	52 21 31·05	74	42 32·140	47 23 39·63
28	33 4·640	52 30 45·32	75	42 35·900	48 3 20·86
29	33 5·199	52 39 51·89	76	42 36·404	47 59 19·71
30	33 12·525	52 26 53·96	77	43 3·995	47 10 4·20
31	43 25·948	41 36 51·45	78	43 17·363	47 1 15·41
32	45 48·782	41 6 24·70	79	43 20·308	46 57 55·15
33	46 52·316	41 15 28·80	80	43 21·278	47 37 37·98
34	50 31·288	40 16 20·62	81	43 30·513	47 41 38·53
35	52 27·379	54 23 10·70	82	43 30·861	46 24 5·21
36	1 53 0·842	54 13 30·63	83	43 31·472	47 24 14·34
37	2 5 31·093	54 12 3·87	84	43 32·267	47 43 37·26
38	8 33·124	54 9 57·90	85	43 34·473	46 36 30·72
39	13 40·986	53 57 5·52	86	43 38·453	47 10 59·14
40	14 15·028	53 44 59·99	87	43 46·684	47 14 7·31
41	19 17·099	53 26 8·16	88	43 53·925	46 31 59·48
42	20 31·658	53 17 3·72	89	43 54·406	47 3 30·99
43	25 31·262	52 45 43·30	90	43 58·663	46 36 19·91
44	27 30·992	52 49 45·30	91	44 0·622	47 38 18·55
45	27 44·901	52 24 21·64	92	44 14·102	47 15 10·78
46	28 20·781	52 27 54·03	93	44 28·904	46 57 24·93
47	2 28 49·134	+ 52 14 19·09	94	2 44 39·639	+ 46 36 25·95



ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS OF THE PLANET

EROS.

1900–1901.