

British Astronomical Association

VARIABLE STAR SECTION

CIRCULAR 7

Deurne, Antwerp, 1925 February 28.
26, rue Herry.

(1) REPORT ON THE THIRD SECTIONAL MEETING, 1924 NOVEMBER 26. — The Director begs to report upon this successful Meeting, which was held in the Porch Room of Sion College, London, at 2.0 p. m., and was attended by eight Members: Miss VERA REYNOLDS, Col. E.E. MARKWICK, past Director, Dr. W.H. STEAVENSON, Director of the Mars Section, and Messrs G.P.B. HALLOWES, G.H. LEPPER, W.M. LINDLEY, B.M. PEEK, and H. WEBBER.

The Rev. T.E.R. PHILLIPS, Director of the Jupiter Section, wrote that he would certainly have been present, were it not that he had met with an accident lately, and was unable to leave home. The Director being prevented from coming to London, sent a telegram wishing success to the Meeting, and the chair was taken by Mr. A. N. BROWN, Hon. Secretary to the Section.

The following points were discussed: —

1. *Forms for recording observations.* — The plan outlined in *Circular 6*, p. 17, was agreed to, but it was proposed and carried that the sum to be paid annually by Members towards the cost of printing and distributing Forms should be *one shilling*, and not 6 d., which would not cover the expenses involved. Plenty of forms being available, Members will be able to record their work on each variable on a separate sheet, a plan which, as pointed out by Col. MARKWICK, presented distinct advantages in classifying and storing the observations for actual and future reference.

3. *Storing of original observations.* — It was decided to divide the custody of the current observations, and of those not yet printed, as follows: —

C. L. BROOK. — *SS Cygni.*

A. N. BROWN. — *Long Periods.*

F. DE ROY. — *"Irregulars"*.

E. E. MARKWICK. — *Short Periods and Novæ.*

Observations already printed in the Memoirs will be deposited, by special arrangement, at the Registered Offices of the B.A.A., under the care of the Assistant Secretary to the Association.

3. *Variable Star Section of the N. S. Wales Branch.* — The Chairman communicated to the Meeting all that was likely to interest Members in a recent letter from Mr. J. J. RICHARDSON, Director of the S. Variable Star Section, which is working in close connexion with us. Several Blue Prints have been issued by him, and a certain number of Variables taken in hand.

4. *Order of arrangement of Variables in new Memoir.* — The Meeting agreed that the arrangement of Variable Stars in alphabetical order, as adopted for the Reports published in the *Journal*, presented undoubted advantages for easy and quick reference to any particular star, and that it would be advisable to follow it in the Tenth Memoir (1920-24), now under compilation. Dr. STEAVENSON suggested, and it was carried, that opposite the page of Contents showing the Variables in alphabetical order, they should be printed again in their R. A. order. Thus, the views of everyone would be met.

5. *Julian Date and G. M. T.* — The Meeting discussed the position created by the advance of 12^h in the G. M. T. on 1924 Dec. 31·5, and were informed of the Resolution of the American Association of Variable Star Observers to *recommend* to the International Astronomical Union, through the American Section, that the beginning of the Julian Day, after 1924 Dec. 31·5, be coincident with the Greenwich Civil Day.

It was pointed out at the Meeting: 1° that no change of this sort has been carried out in the Nautical Almanac with regard to the Julian Date, and that it was of primary importance to preserve the continuity of this Period in records of Variable Star work; 2° that the change of the Calendar and Julian Dates in the middle of every observing night would permanently be a possible source of error; and that 3° if the Julian Day remains unchanged, as it is in fact according to the Nautical Almanac, there would be every reason to keep unchanged also the Calendar Date commencing at Noon, in order to avoid destroying the correspondence between Julian Date and Calendar Date, which would result in difficulty and confusion.

All the Members, including Messrs BROOK, BROWN, BUTTERWORTH and MARKWICK, as well as the Director, were strongly opposed to any change, unless previously discussed and sanctioned by international agreement. The Meeting finally decided that, pending an eventual authoritative decision by the International Astronomical Union, no modification at all should be made in the usual procedure of the V.S.S., which should continue unchanged in 1925, and remain exactly as it was in 1924.

(2) RECORDING OF OBSERVATIONS. — Conformably with the decision of the Third Sectional Meeting, Members of the V.S.S. are recommended to continue, for all classes of Variables, the reckoning used so far, i. e., the hours as at present from 0^h = Greenwich Noon, through 12^h = Midnight to 0^h = Noon again. All records for 1925 should be kept in this way. If a change were decided upon by the competent authorities, following an international agreement, due notice would be given well in advance, to take effect in 1926.

In the meantime, all Members are earnestly requested to record on the Forms sent to the V. S. S., for *all* classes of Variables, including Long Periods, the Greenwich Time (commencing at Noon) of each observation. It would be well if the following insertion were made at the head of the Date column: "Greenwich Time, 0^h = Noon".

(3) NEW FORMS. — A large supply of V. S. S. forms for recording observations has been printed and is now available for Members. In accordance with the decision of the Third Sectional Meeting, Members wanting forms are requested to send, in stamps or otherwise, the sum of 1 s. (one shilling) to Mr. A. N. BROWN, Hon. Secretary to the Section, Brackenhurst, Bucklebury Common, near Reading, at the same time stating the approximate number of forms needed in 1925. A large supply of forms being now available, it has been decided to rescind the instructions given in *Circular 4*, p. 12, (4). It will be a distinct convenience to our Compiler, for each series of observations of any star — even the shortest — made in any given year to be written on a separate sheet (or sheets).

(4) NEGATIVE OBSERVATIONS. — When, for any reason, a Variable is recorded as not seen, observers are requested to be sure always to state the *faintest* star in the field which is actually visible, and to record their observation in this way: —

$$v < x \qquad < 11.5$$

Obviously, a simple statement < 11.5 is an incomplete record, which should be avoided.

(5) CORRECTIONS TO BLUE PRINTS, SECOND LIST. —

The following is a List of corrections which are needed in certain Blue Prints at present in use by the Section, and is in continuation of the First List issued in *Circular 5*, p. 14, (2): —

R Arietis. — On Comparison Stars List dated 27-6-10, change magnitude of Hagen 20 (H.C.O. *t*) from 13.21 to 13.26.

Hagen 3, magnitude 8.31, is not shown on the Chart dated 27-6-10. Its position with reference to the Variable is — 0^m3^s, — 56'.3. Another useful comparison star, H.C.O. *d*, magnitude 7.79, is at — 3^m.8, — 1°6'.

R Aurigæ. — On Comparison Stars List dated 4-7-10, change magnitude of Hagen 16 from 10.04 to 10.01; and magnitude of Hagen 23 (H.C.O. *l*) from 11.06 to 10.68 [H.A., 37,5].

S Cassiopeiæ. — On Comparison Stars List dated 1923 Jan., Hagen 35 = H.C.O. *r* (12.28) should be marked " var ? " and its use avoided, unless a separate comparison between *q*, *r*, and *s* be made.

◦ (*Mira*) *Ceti.* — On Comparison Stars List dated 17-9-10, H.C.O. *m* is δ Ceti, not δ Piscium.

R Geminorum. — On Comparison Stars List dated 2-8-10, change magnitude of Hagen 31 from 11.57 to 11.51.

U Geminorum. — H.C.O. *z* is Hagen 46, not 42. Therefore, in Region 10' Square dated 1923 April, substitute 46 for 42, and insert 42 in position + 19^s, — 1'.5. In Comparison Stars List on same Blue Print, against 42, delete *z*; against 46, insert *z*; correct 14.5 to 14.7; and delete " ? Identical with 42 ".

R Hydræ. — H.C.O. *m* is 73 Virginis. It is erroneously described as 75 Virginis on Comparison Stars List dated 2-5-10. Moreover, the letter *m* is affixed wrongly to B.A.C. 4466 on undated Chart. The letter *m* should be deleted near this star, and affixed to a star shown at 13^h 26^m.7, — 18°3', which is 73 Virginis. H.C.O. *k*, shown as a single large dot on this Chart, is a wide double formed by 55 and 57 Virginis. *k* is the *sf* and brighter component.

On Comparison Stars List dated 2-5-10, the magnitude of Hagen 3 is 7.03, not 7.63.

A good additional star is C = α Corvi, magnitude 4.18.

V Tauri. — On undated Comparison Stars List, delete: " 11 and 22 should not be used, if possible ".

R Ursæ Majoris. — On Comparison Stars List dated 2-8-10, change magnitude of Hagen 29 from 13.22 to 13.12.

Observers are urged to enter the above corrections on their Charts and Lists as soon as possible.

The Director begs to present his good wishes to the Members of the Section; he hopes that they will all enjoy good health and many observing nights this year, and trusts that the results of 1925 will come up to our best standard of accuracy and completeness.

FELIX DE ROY
Director.