

British Astronomical Association

VARIABLE STAR SECTION

CIRCULAR 5.

Deurne, Antwerp, Belgium, 1923 Sept. 28.
23, rue Thisius.

(1) SECOND SECTIONAL MEETING, 1923 OCTOBER 31. —

The second Meeting of the Section under the present Directorship will be held on Wednesday, October 31, at 2.0 p.m. punctually, in the Porch Room at Sion College, Victoria Embankment, London, previous to the Annual General Meeting of the Association.

The following points will be discussed :

1. *Stars to be added to our Working List.* — It is proposed to add the following stars to our Working List and to start their observation in 1924 :

S CEPHEI S PERSEI R URSÆ MINORIS

The two latter stars are probably irregular and will require rather frequent observation ; although, owing to their reddish colour, they are not " easy " stars, both are well within the reach of a good 3 in. refractor. S Cephei, also a red star, will require a larger aperture at minimum.

When these three stars are included, the V. S. S. Working List will contain all the Rousdon stars, which have been under almost constant observation in England since 1885.

2. *Suggested alterations in form of next Memoir (1920—1924).*—

It is proposed to so arrange the printed columns of the next Memoir that nine pages of the old form should be contained in five of the new, without the omission of any information. In view of the great number of observations, this would mean an important saving in cost.

3. *How to increase the scope and activity of the Section.* — A discussion of the best means of attaining this result.

It is hoped that a fair number of observers will make an effort to attend this Meeting, for it will afford an opportunity of discussing in common some aspects of our work which cannot conveniently be dealt with by correspondence.

(2) CORRECTIONS IN BLUE PRINTS. — The following is a list of corrections which are needed in the blue prints at present in use by the Section :

R Andromedæ. — The magnitude of Hagen 25 should be 10.00 and not 10.58. Hagen 55, mag. 13.70, should be added to the List.

V Bootis. — Hagen 25 is probably a variable, and ought not to be used for purposes of comparison.

R Coronæ. — Change magnitude of star Hagen 3 from 9.20 to 9.26.

R Cygni. — The position of star (H.C.O) α , mag. 12.76, is incorrectly given in H. A. 37,188 and in our Region 10' square issued 1910 May 25. Its true coordinates, from Hagen's " Aggiunte " (star 64), are -3^s , -2.1 .

Star β (H. C. O.) in Region 10' square does not exist, and should be deleted.

V Cygni. — Hagen 3 is not shown on the blue print. It can conveniently be inserted, its position with reference to the Variable being $+3^m40^s$, -26.9 .

U Orionis. — Comparison star Hagen 41 = q (H. C. O.) is the variable star UW Orionis, $10^m.3 - 10^m.9$, period $0^d.5033$, and its use should be avoided. It should be marked " var " on our Chart and List.

T Ursæ Majoris. — The star without a number almost due North of Hagen 24 on the Telescopic Chart issued 1910 July 6 should be numbered 26.

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

(3) ADDITIONAL COMPARISON STARS. — The following additional Comparison stars will be found useful in certain cases. It is suggested that observers should either insert the stars in their copies of Hagen's Charts, or, when this is not possible, in a reduction of the same, which they could make for themselves, and which would contain only the brighter comparison stars.

$\Delta \alpha$ and $\Delta \delta$ signify the difference in R. A. and Dec. respectively between the Variable and the comparison star to which the figures refer.

VARIABLE	H.C.O. LETTER	B. D.	H.C.O. MAG.	$\Delta \alpha$	$\Delta \delta$
WAndromedæ	<i>a</i>	+ 43° 431	5 ^m ·99	— 8 ^m ·9	+ 0° 7'
"	<i>b</i>	+ 43 474	6 ·95	+ 4 ·0	+ 0 18
"	<i>d</i>	+ 43 478	8 ·30	+ 4 ·5	— 0 1
R Aurigæ	<i>b</i>	+ 54 882	6 ·61	+ 4 ·0	+ 0 41
"	<i>c</i>	+ 53 912	7 ·18	+ 12 ·6	— 0 8
"	<i>d</i>	+ 54 874	7 ·72	— 0 ·4	+ 0 35
S Herculis	<i>l</i>	+ 15 3057	9 ·15	— 2 ·3	+ 0 20
R Ursæ Majoris	<i>l</i>	+ 69 592	8 ·80	+ 12 ·1	— 0 12
"	<i>m</i>	+ 69 578	9 ·43	— 9 ·9	— 0 23
S Ursæ Majoris	<i>e</i>	+ 60 1416	7 ·86	— 3 ·7	— 1 34
"	<i>h</i>	+ 61 1304	9 ·22	— 5 ·7	— 0 26
S Virginis	<i>e</i>	— 7 3643	7 ·32	+ 1 ·3	+ 1 25
"	<i>f</i>	— 7 3642	7 ·70	+ 0 ·5	+ 1 14
R Vulpeculæ	<i>e</i>	+ 23 4253	8 ·07	+ 4 ·1	+ 0 17
"	<i>f</i>	+ 23 4248	8 ·47	+ 3 ·1	+ 0 11

R Aquilæ. — When R is considerably brighter than Hagen 1, observers are recommended to use, with the binocular, the following stars :

H (Fl. 62 Serpentis)	5 ^m ·65	H.A. 44
B (Fl. 19 Aquilæ)	5 ·35	" 45

S Herculis. — The star on the other side of Hagen 2 is H.C.O. *m* (9^m·39).

S Ursæ Majoris. — Star *e* is Hagen 2 (H.C.O. *e* in T Ursæ Majoris field.)

S Virginis. — There is a 7th mag. star (BD — 7°3639)— 0^m15^s, + 0'·7 from *f*, which should not be confused with the latter star.

(4) SENDING IN OBSERVATIONS. — It should be clearly understood that the dates given at the top of p. 3 of Circular 1 refer in each case to the observations of the previous year. Several observers have taken these dates to mean that we want observations, e.g. for 1922 July to December and 1923 January all sent together. Of course, this is inconvenient, as we want observations of different years on different sheets.

The dates given are simply the *latest dates* on which, in the normal course of our work, the observations *of the previous year* for the different classes of variables should be in the hands of the compiler.

Only forms completely filled in with observations of one and the same star are required in the course of the year during which they have been made.

(5) RECORDING OBSERVATIONS.— A new observer has been enquiring how he should record the dates of his observations. Generally speaking, the forms should be filled in so as to approximate as closely as possible to the text which has to be printed later in the Memoirs. It is well, therefore, to put the *year* at the top of the "Date" column, and to write the abbreviated name of the *month* first, followed by the *calendar date*.

The name of the month should not be repeated for each date when several observations occur during the same month.

All observations should be checked after being copied on the forms.

It is a convenience to the compiler for the observer to state at the end of each *series* of observations of the same star the total number of observations recorded during the calendar year.

(6) NEW CHARTS AND LISTS. — New charts and lists designed by COL. MARKWICK and embodying the latest data are now available for **U GEMINORUM, SS AURIGÆ, S CASSIOPELÆ, S CYGNI, T DRACONIS,** and **U GEMINORUM.** They include in each case a Binocular Chart, a Telescopic Chart, and a Comparison Stars List with a Region 10' square. No Binocular Chart is needed for T Draconis, but there is a Supplementary Telescopic Chart for SS Aurigæ. In addition, a Binocular Chart for finding **R VULPECULÆ** has been issued.

Members intending to observe any of these stars should communicate with Mr. A. N. BROWN, who has the Charts and Lists in stock. The Director would particularly appreciate observations of SS Aurigæ and U Geminorum.

(7) Mr. A. N. BROWN'S NEW ADDRESS. — Will members kindly take note that Mr. A. N. Brown's *only* address is now :

Brackenhurst, Bucklebury Common, Nr. Reading

Any communications sent to Ludgrove, New Barnet are liable to delay.

FELIX DE ROY,

Director.