

COMMISSIONS 27 AND 42 OF THE IAU  
INFORMATION BULLETIN ON VARIABLE STARS  
Number 3957

Konkoly Observatory  
Budapest  
29 November 1993  
HU ISSN 0324 - 0676

**AO AQUARIII AND ITS GCVS CHART REFERENCE**

It has been shown that large errors do exist in the published positions of some variable stars (Lopez, 1989; Lopez and Girard, 1990). While continuing the work around the South Galactic Pole Region it was noted that the survey machine centered on a star image. The location of this image did not agree with the chart listed in the GCVS reference. A question therefore arose as to whether or not this chart was correct for this star.

AO Aquarii=CoD -23°17297=HV 3368=HV 4974 was first announced by Pickering in 1913 and was rediscovered in 1931 by Emily Hughes. A chart by Shapley and Swope (1931) for HV 4974 was located. This chart did identify the variable as the star image the survey machine centered. I now had two charts each identifying AO Aquarii as two different stars. In correspondence with Dr. Dorrit Hoffleit it was determined that the chart referenced by the GCVS might have interchanged the variable position and the comparison star (b) position.

Measurements by the author are given in epoch 1950 with an accuracy of 0".7 referenced to the system of the SRS.

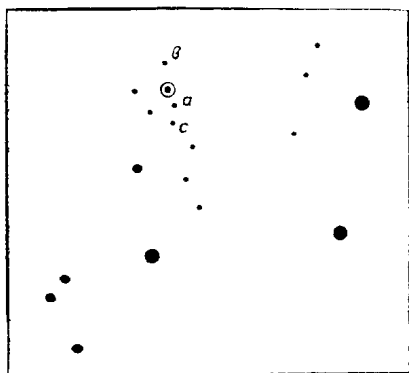


Figure 1. GCVS refers to this identification chart (Tsessevitch, 1954) where AO Aqr and comparison star b are interchanged

GCVS reference chart, comparison star b (believed to be AO Aquarii)

R.A. =  $22^{\text{h}}08^{\text{m}}45^{\text{s}}.1$

DEC. =  $-23^{\circ}02'06''.4$

GCVS reference chart, variable position (believed to be comparison star b)

R.A. =  $22^{\text{h}}08^{\text{m}}45^{\text{s}}.2$

DEC. =  $-22^{\circ}56'52''.7$

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