

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS

Number 2232

Konkoly Observatory
Budapest
1982 November 22
HU ISSN 0374-0676

VY AQUARII

This recurrent nova (1907, 1962) appears to be in outburst on chart 225 of the Papadopoulos True Visual Magnitude Star Atlas. The image is elongated with the same shape and direction as stellar images and its position as measured from the paper chart is coincident (three arcseconds distant, approximately the error of measurement) with the precise position

RA (1950) $21^{\text{h}} 09^{\text{m}} 28^{\text{s}}.33$
DEC (1950) $-09^{\circ} 01' 56''.3$
ACCURACY $\pm 0''.3$

measured by A.S.-Czerny (RGO) from a glass copy of the PSS.

The plate (chart 225) was exposed on 1973 July 31 at $21^{\text{h}} 34^{\text{m}}$ UT and the image is of mag +9.7 in comparison with a published photometry of nearby stars, Vogt (1980). This is about three magnitudes above the chart limit. The original plate has not yet been checked.

Previous outbursts have occurred in August 1907 and August 1962, an interval of 55.0 years. Should the 1973 outburst be confirmed (11.0 years after the 1962 outburst) a recurrence period of 11 years is suggested with the next outburst possibly in 1984.

A check of plates taken in 1973 would be valuable, and if confirmed, a check of other plates may produce further outbursts.

The following references contain identification charts for VY Aqr.

The "outburst" was found whilst preparing charts for the TA/BAA Nova Search Programme and the writer wishes to thank A.S.-Czerny and the RGO for the use of facilities.

ROBERT H. McNAUGHT

Earth Satellite Research Unit
Royal Greenwich Observatory
Herstmonceux Castle
Herstmonceux
Nr. Hailsham
East Sussex
United Kingdom.

References:

- Kukarkin, B.V., 1968, *Astro. Tsirk.*, 479
Vogt, N., 1980, *Publ V.S.S. of R.A.S.N.Z.*, 8, 8-16
Wyckoff, S. and Wehinger, P.A., 1978, *PASP*, 90, 557-562