COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
NUMBER 756

Konkoly Observatory
Budapest
1973 January 17

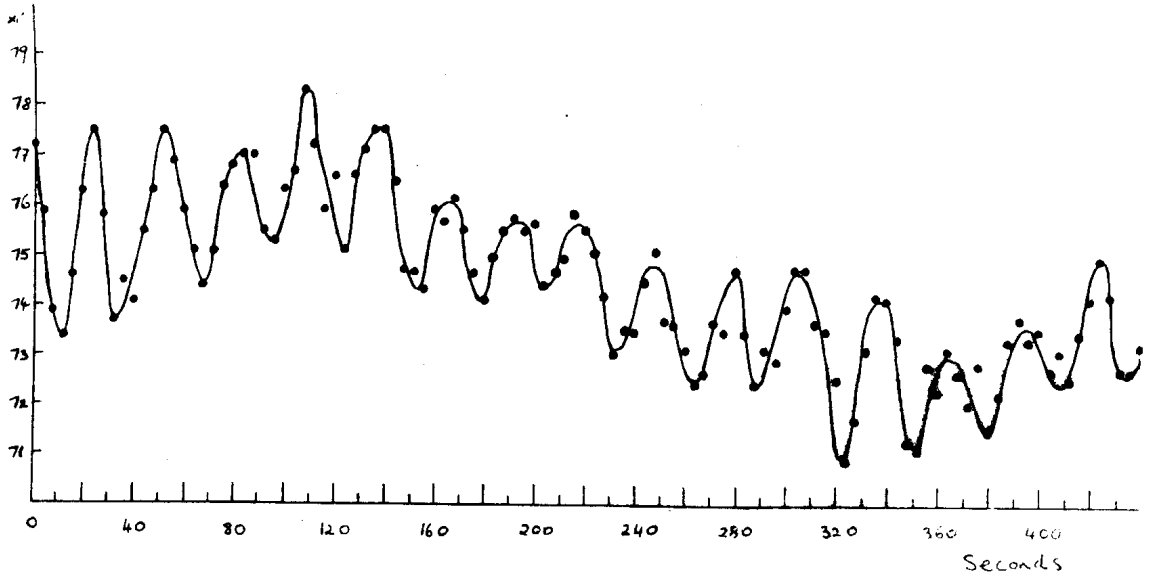
28-SECOND OSCILLATIONS IN VW Hyi

The southern hemisphere dwarf nova VW Hyi underwent an outburst starting on December 10 and returned to normal light by December 28. A fairly detailed photometric coverage of this outburst has been obtained with the 40 inch reflector of the Sutherland Station of the South African Astronomical Observatory, using high speed photometric equipment similar to that described by Nather and Warner (M.N.R.A.S. 152, 209, 1971). During outbursts of the dwarf novae Z Cam, CN Ori and AH Her, Warner and Robinson (Nature 239, 2, 1972) found oscillations with periods near 17, 24 and 31 secs respectively. All the data collected during the recent outburst of VW Hyi will be subjected to a periodogram analysis to search for similar periodic oscillations, but we feel it may be of interest to other observers to announce that on 25th December, when VW Hyi was rapidly declining but was still about 2 magnitudes above normal (minimum) light, brightness variations having a period of 28.15 secs and a peak-to-peak amplitude of about 5 percent were clearly seen throughout a 4 hour observing run. The beginning of this run is illustrated in the accompanying light curve.

This is the first time that rapid oscillations in the light curve of a dwarf nova have been large enough to see without the aid of a periodogram analysis. The appearance of the light curve is very similar to that shown by the wellknown 71 sec oscillations in DQ Her.

Department of Astronomy,
University of Cape Town.

BRIAN WARNER
JOHN M. HARWOOD



Vertical scale is total number of counts per 4-sec integration.