COMMISSION 27 OF THE I. A. U INFORMATION BULLETIN ON VARIABLE STARS NUMBER 87

Konkoly Observatory Budapest 12 March 1965

THE SPECTRUM OF Z CIRCINI

The light curve of Z Cir has recently been discussed by van Hoof (Information Bulletin Number 41, 1964). The variable is peculiar in that a rather flat maximum occupies about half of the period (which is $394^{\rm d}_{\rm c}$ 6). This originally suggested an eclipsing variable but van Hoof has shown that this is unlikely. Instead he suggests the light curve resembles most nearly the R CrB type variables though with certain unique features (a strong periodic tendency and a short interval between minima).

A spectrum of the variable was obtained on 1965 February 25 with the f/2 camera (86A/mm) at the Cassegrain focus of the 74-inch Radcliffe reflector. This shows the star to be of spectral type M (strong TiO bands). In addition H δ is seen in emission. The spectrum is typical of that expected for a Mira type variable.

Further photometric observations would be of interest to establish whether or not the light curve precludes the classification of the star as a Mira type variable. It may be mentioned that some Mira type variables do have relatively flat light curves near maximum light (e.g. S Pavonis, period = 389 days; Campbell, Studies of Long Period Variables A.A.V.S.O., 1955).

I am grateful to Professor van Hoof for kindly sending me a map of the field of $Z\ \mathrm{Cir.}$

1965, February 26.

M.W. FEAST
Radcliffe Observatory Pretoria
S. Africa