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A NEW PULSATING VARIABLE IN VELA

In April 1978 a new variable star was found at the European Southern Observatory, La Silla, among early-type stars in the field of planetary nebula NGC 3132. Further UBV measurements in 1979 and 1980 (50 cm and 1 m telescopes and pulse counting photometers with EMI 6256A photomultipliers) revealed this star to be a short-period pulsating variable. Stars in the E-regions (Cousins, 1973; Vogt et al., 1981) served as photoelectric standards.

The coordinates of the variable as well as of three comparison stars, measured on a Schmidt plate (ESO 100/162 cm Schmidt camera) are given in Table I. It also contains the UBV data together with their r.m.s. errors (n denotes the number of observations) and the estimated spectral types; the positions of the variable and of the comparison stars are marked on the finding chart.

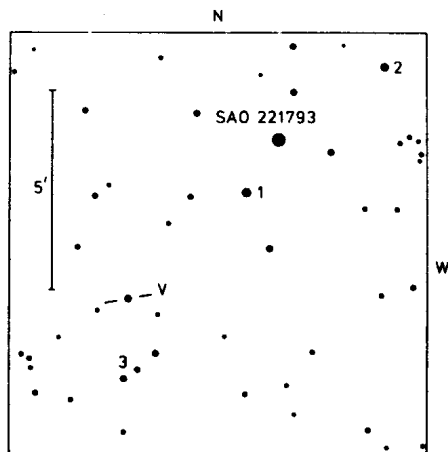


Figure 1

Table I

Positions, magnitudes and spectral types

Star	A.R. (1950)	Decl.	V	B-V	U-B	n	Sp
Var	10 ^h 05 ^m 59 ^s .78	-40°25'22".3	12.55	0.39	0.17	193	A8
Comp.1	05 43.55	22 50.9	10.986 ±.004	1.211 ±.007	1.072 ±.007	5	G8:
Comp.2	05 24.56	19 52.0	11.577 ±.002	0.553 ±.003	0.041 ±.005	24	F8
Comp.3	06 00.90	27 21.1	13.103 ±.002	0.629 ±.004	0.147 ±.006	7	G0:

Two objective-prism plates (ESO Schmidt camera, dispersion 450 A/mm at H γ , Kodak IIa-O and IIIa-J, March 1978) show, that the spectrum of the variable is of type A8.

The light curve of the variable star can be approximated by a sine curve with the period of $P = 0.088$ days and the mean visual amplitude of $A_V = 0.07$ mag. The detailed analysis of the observing data including the more accurate determination of the pulsating period will be presented later.

I wish to thank H.-E.Schuster for taking the Schmidt camera plates, and H.-M.Steinbach for assistance with the reduction. The observations have been collected at the European Southern Observatory, La Silla, Chile.

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References:

- Cousins, A.W.J., 1973, Mem.Roy.Astron.Soc. 77, 223
Vogt, N., Geisse, H.S., Rojas, S., 1981, Astron.Astrophys. Suppl. 46, 7