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### A NEW VARIABLE STAR IN THE CEPHEUS REGION

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A new variable star has been discovered in the Cepheus region during the spectral observations of dark cloud regions.

The observations have been carried out with the 40° Schmidt telescope of the Byurakan Observatory. The spectral plates have been obtained by the 4° objective prims (1100 A/mm at H<sub>a</sub>) on Kodak 103aF and 103aE emulsions through RG610 and RG2 filters.

The limiting photographic magnitude of our observations was about 18.5. The different exposures and epochs of observations have allowed to detect the light variations of stars and variation of intensity of  $H_a$  emission line during the observational period.

During the period from 1979 to 1989 in the Byurakan Astrophysical Observatory 14 dark clouds regions were observed and about 100 new H<sub>a</sub> emission stars were discovered in three regions [1-3]. Altogether in these regions a few hundred H<sub>a</sub> emission stars are known already.

In the next two regions 130 new H<sub>e</sub> emission stars have been discovered.

In one of these regions a new variable star has been detected on the spectral plates obtained in 1985. In 1985 three plates have been obtained for this region: two plates on August 23 and one in September 8. On the last plate a brightness variation of the star was detected.

In table 1 the following data for this star are presented respectively: coordinates (1950.0), red magnitude of the star  $(m_1)$  at minimum of brightness and the amplitude of variation  $(\Delta R)$ .

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Table 1

a(1950)	8(1950)	m,	۵R
21 10.5	52 55.5	17.5	1.5

## THE DATA FOR THE NEW VERIABLE STAR

In Fig. 1 a, b the star images from the spectral plates obtained in 1985 are shown. As one can see in Fig. 1 b, a very strong  $H_a$  emission line exists. On the plates obtained in 1979 the star is again in the minimum without  $H_a$  emission.



This star is in Cepheus region. If the distance of the star is the same as for the association Cep OB2 [4], its absolute magnitude will be  $M_{\rm pe}$ =8. The star with such an absolute magnitude can be a red dwarf and in all probability it is a flare star.

Новая переменная звезда в области цефея. При спектральных наблюдениях области цефея, была обнаружена новая переменная звезда с амплитудой  $\Delta R=1.=5$ . По всей вероятности она является вспыхивающей звездой.

#### A NEW VARIABLE STAR IN THE CEPHEUS REGION 705

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