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INFORMATION BULLETIN ON VARIABLE STARS

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EMISSIONS OBSERVED ON OBJECTIVE-PRISM SPECTROGRAMS

In the course of inspection of old objective-prism plates, emission features in several spectra - most probably related to late-type stars - were discovered. Since some of them are rather unusual in appearance, we consider it necessary to report our observations.

The stars in question are listed below. For three of them the BD-numbers are indicated; for the rest identification charts are given. The stars are located in the direction of OB galactic associations.

Kodak-plates were taken in October 1974 on the 70-cm meniscus telescope of the Abastumani Astrophysical Observatory (USSR) by means of an 8^o-objective prism. The reciprocal dispersion at H_γ is 166 Å/mm; the spectra were widened to 0.4 mm, their extent being from H_β up to 3500 Å. Well-exposed spectrograms were obtained for stars from about 8 to 11 photographic stellar magnitude.

The author would be pleased to offer a more detailed information (including registrograms when possible) to anybody interested in these objects.

List of the observed stars with description of their spectra:

BD 62^o0161. Peculiar spectrum with very strong bands of TiO;
a number of strong emission lines present, incl.
H_β, H_γ, H_δ, Ca I - very strong in absorption.
Possibly a symbiotic star.

BD 58^o0109. The spectrum is rather weak; nevertheless, several emissions are clearly distinguished. The star is probably late-type.

BD 63^o0003. Very peculiar spectrum with very strong bands of TiO and many emission lines, incl. H_β, H_γ, H_δ.
Probably a symbiotic star.

No.1 id. shart (star A is BD 33^o4186, star B is HD 201668).
Late spectral type, probably Me. Emissions in H_γ, H_δ.

No.2 id. chart (star A is BD 56^o2679, star B is HD209296).

Strong emission lines, incl. H_β, H_γ, H_δ. Late-type variable.

No.3 id. chart (star A is BD 58^o2561, star B is HD 218997).

Balmer series in emission; late-type variable, possibly a symbiotic star.

No.4 id. chart (star A is BD 58^o0089, star B is BD 59^o0092).

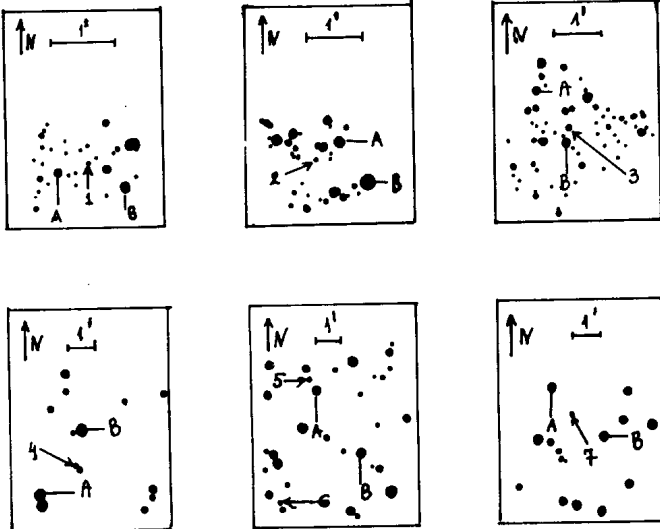
Strong bands of TiO. Long-period variable?

No.5 and No.6 id.chart (star A is BD 61^o0038, star B is BD 60^o0025). M-spectra with strong bands of TiO and a number of emission lines. Probably long-period variables.

No.7 id. chart (star A is BD 59^o0138, star B is BD 59^o0132).

Similar to No.5 and 6.

IDENTIFICATION CHARTS:



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