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RESULTS OF THE PHOTOELECTRIC OBSERVATIONS OF 88 Her

In 1974 Harmanec, Koubsky and Krpata (1974) confirmed both the spectral duplicity and the 87-days period for the Be shell star 88 Her, discovered by the above authors earlier. Having used the radial velocity curve obtained by Harmanec et al., with allowance for that eclipses can be expected at the phase of 0.29 and 0.80, Haupt (1974) estimated and published the moments of possible eclipse of 88 Her for the nearest future (1974,1975).

Based on the photometry in UBV system performed at five observatories in 1968-1977, Harmanec et al., (1978) found a long-term variation of light and colour for 88 Her. In 1978 Hirata (1978) pointed to the similarity of photometric and spectral behaviour of 88 Her and Pleione. Unlike 88 Her, which represents a spectroscopic double system, the properties indicating the double nature of Pleione have not been discovered.

Our attention was drawn by P. Koubsky to 88 Her in 1975. We observed 88 Her in the UBV system from June 1977 through August 1980 with the electrophotometer attached to the 48-cm reflector AZT-14 A. The recording was performed using the photon counting method. HD 162132 = BD +47°2537 served as the comparison star.

Our observations of 1977-78 show the light variation near the phase of 0.8 with an amplitude of $0^m.14$, $0^m.10$ and $0^m.07$ in UBV, respectively. The phases were calculated by the formula:

$$T_{\max RV} = \text{HJD } 2419429^d.251 + 86^d.7207 \cdot E.$$

Further observations of 88 Her in 1979-80 show that the star has constant maximum brightness (Figures 1,2) both near 0.8 and at other phases, which proofs that the light decrease of 88 Her observed in 1977-78 is not of eclipsing pattern, but it has the character similar to the light variation of Pleione.

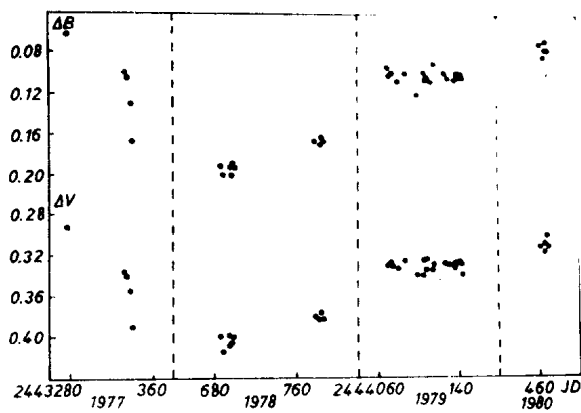


Fig. 1

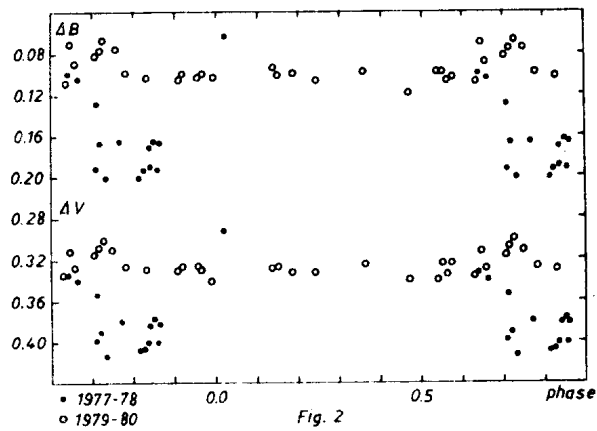


Fig. 2

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