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B V OBSERVATIONS OF PLEIONE (BU Tau) 1977 - 1980

Pleione is a well known shell star. Its photometric variability was investigated by Sharov and Lyuty (1976) who collected all available photometric observations of the star. They observed a minimum in 1973 connected with a new shell outburst of BU Tau. In 1974 and 1975 Sharov and Lyuty observed the beginning of a slow increase in B and V.

New B and V observations were made with the 75 cm telescope of the Wilhelm Foerster Sternwarte, Berlin, an uncooled 1P21 photomultiplier and Schott filters BG12+GG13 for B and GG11 for V. The measurements are listed in the table. The accuracy is about $\pm 0\,\mathrm{m}01$ for V and B-V. In the figure, the B lightcurve of Table

The V and B-V observations of BU Tau

| Date | V | B-V | n |
|----------------------|------|-------|---|
| 2443177 ^d | 5.22 | | 3 |
| 193 | 5.21 | -0.12 | 2 |
| 411 | 5,23 | -0.05 | 6 |
| 482 | 5.24 | -0.03 | 5 |
| 808 | 5.20 | -0.03 | 2 |
| 833 | 5.19 | -0.02 | 2 |
| 862 | 5,21 | -0.05 | 3 |
| 9 30 | 5.20 | -0.04 | 2 |
| 4132 | 5.22 | -0.05 | 1 |
| 169 | 5.22 | -0:06 | 4 |
| 271 | 5.17 | ±0.00 | 2 |
| 289 | 5.23 | -0.05 | 3 |

n : Number of individual measurements of BU Tau in each colour. Comparison star magnitudes from the Yale University Bright Star Catalogue.

Sharov and Lyuty is shown together with four mean values of our observations. These observations show that the shell outburst

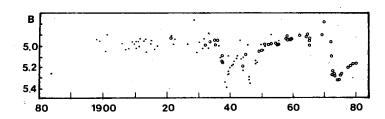


Figure 1: Total B lightcurve of BU Tau 1880 to 1980. Circles represent photoelectric observations.

still goes on as the star has not returned to its normal maximum light.

U. HOPP, S. WITZIGMANN
Wilhelm Foerster Sternwarte
D 1000 Berlin 41, F.R.G.

Reference:

Sharov, A.S., Lyuty, V.M., 1976, in IAU Symposium No. 70, 105 ed. A.Slettebak, D.Reidel Publ.Co. Dordrecht