

A new faint long-period variable star, by *A. Blaauw*.

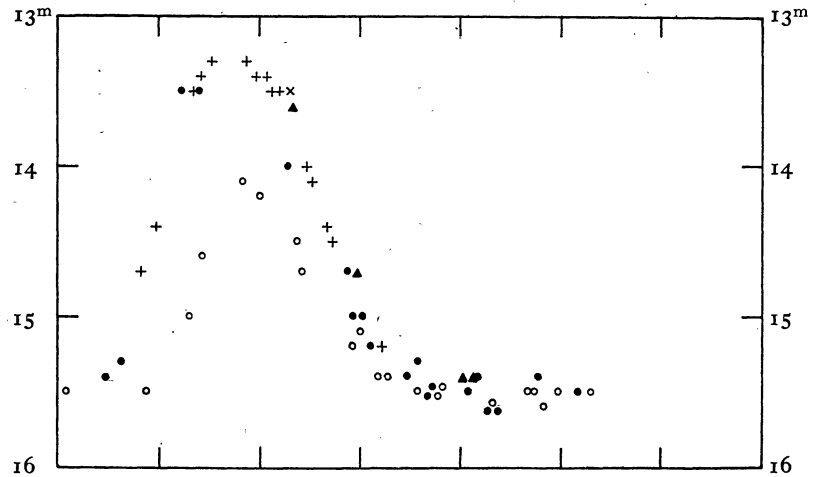
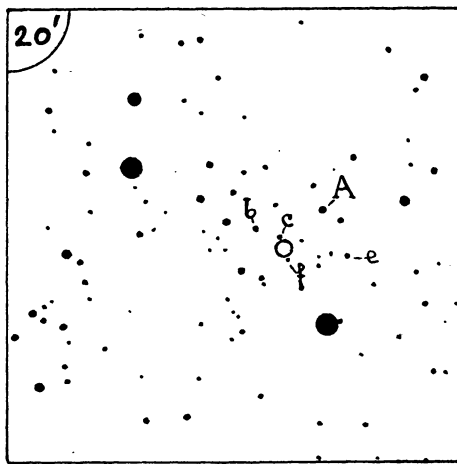
The co-ordinates of this star are

$$7^{\text{h}}39^{\text{m}}56^{\text{s}}, -20^{\circ}26'.9 \text{ (1875)},$$

and the approximate limits of brightness $13^{\text{m}}.3$ and $15^{\text{m}}.7$. It was estimated in the year 1937 on 198 plates of the region around π Puppis, taken with the Franklin-Adams camera of the Union Observatory at Johannesburg by the late Dr H. VAN GENT, who also detected the variability. The comparison stars used are indicated on the accompanying diagram, the size of which is $20' \times 20'$. Their approximate photographic magnitudes are

	m
A	13.4
b	13.6
c	14.1
e	14.7
f	15.3

The period is about 350 days. The observations were combined into means for groups of 5 or less consecutive days, and these are plotted in the figure. Different cycles of 350 days are represented by different symbols; the Julian Day numbers of the beginning and the end of each cycle and the corresponding symbol are indicated below the figure. The maximum brightness in the second cycle (open circles) is considerably less than in the other cycles. The best epoch of maximum observed is J.D. 2426285. Generally, not more than two plates of the same night were estimated. As the period is nearly one year, the latter part of the cycles represented by our material is not covered by the observations. If the variable is faint, it is close to the limit of the plates. The brightness of comparison star f and the limiting brightness of the variable, given above, are, therefore, very uncertain.



- JD 2425500 to 2425850
- JD 2425850, 2426200
- + JD 2426200, 2426550
- × JD 2427250, 2427600
- ▲ JD 2427600, 2427950