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ON THE MEAN CYCLE-LENGTH OF THE U GEMINORUM
STAR VW VULPECULAE

VW Vul has been suspected by Shafter (Inf.Bull.Variable Stars No. 2373 and Astron.J. 90, 643) as being a U Geminorum star of SU Ursae Majoris type; he also gave an estimate of the mean cycle-length of "roughly 30 days" (according to Mattei, unpublished).

Since its discovery by Wolf in 1904 (Astron.Nachr. 166, 77) and a few estimates given by him (Astron.Nachr. 221, 261; 1924) no long-term photometric observations have been published. Its probable nature as a cataclysmic variable was not detected before 1978, when Bond (Publ.Astron.Soc.Pac. 90, 526) found spectroscopic features.

I therefore determined the brightness of VW Vul on 132 Sonneberg plates taken with the 140/700 mm Triplet camera between 1930 and 1969 by the late R.Brandt. On this material the star varied from 13.1^m to 14.9^m pg., exhibiting the numerous "bright observations" typical for a medium-cycle U Geminorum star: 27 observations show the star in the upper part of the eruptions down to 0.6 mag below maximum light. At this level an average width of 4_{+1}^d of the outbursts can be deduced from the short series of the AFOEV (observer Verdenet, Bull. 26; 27a-28; 30). With this, our material statistically yields a mean cycle-length of about 19_{+5}^d . That means that the findings of Mattei and the AFOEV, from a comparatively very short time interval, are confirmed by our 40 years' data, thus indicating a stable behaviour of the star.

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