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ON THE VARIABLE STAR UU SAGITTAE

This eclipsing star has been studied by Bezdenezhny and Tsessevich (1) and the following elements have been obtained

$$\text{Min.hel.JD} = 2432797.283 + 0.4650697 \cdot E. \qquad (A)$$

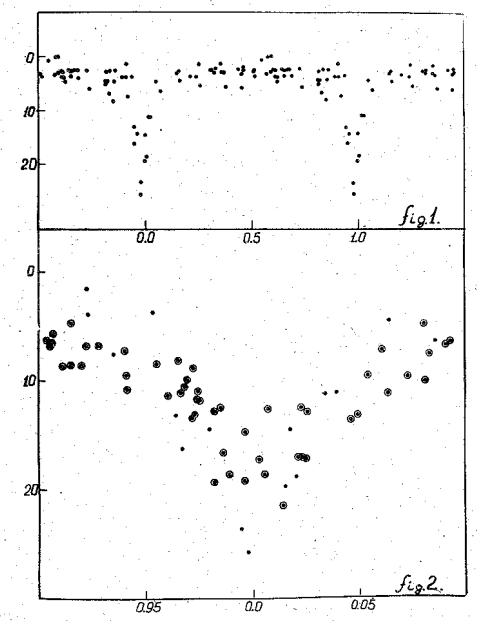
Recently Bond (2) has discovered that this star is the nucleus of a planetary nebula which makes it distinguished among all the other objects. Müller, Krzeminski and Priedhorsky (3) confirmed the eclipsing character of light variation independently of us and determined nearly the same value of the period. They also reported the moment of the minimum observed which I have taken into account when I have improved the period evaluated by me.

Since the time my book (1) was published, more and more sky photographs of Moscow collections have been gained. From these new observations a mean light curve (Fig. 1) and a moment of minimum have been obtained by me. All the known moments are given in the table; the O-C residuals are calculated with the new improved formula:

Moments of minima of UU Sagittae

Min.hel.JD	E	O-C	Source of Information
2432797.283	0	+0.003	Simeis
3033.534	508	- .002	"
3447.439	1398	- .009	"
3448.379	1400	+ .001	"
7163.358	9388	+ .006	Moscow
7176.381	9416	+ .007	"
40512.310	16589	- .007	"
0819.266	17249	+ .003	"
1475.468	18660	- .008	"
1564.312	18851	+ .007	"
2626.520!	21135	- .003	"
3013.928	21968	+ .002	IAU Circ.2974

$$\text{Min.hel.JD} = 2432797.2805 + 0.46506944 \cdot E;\ P^{-1} = 2.1502165. \qquad (B)$$



In Figure 2 observations ranging from phases $-0^{P}.1$ to $+0^{P}.1$ reduced to one period with the formula (B) are shown. As is seen from Figure 2 the light curve undergoes essential fluctuations which are not unexpected.

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References:

1 Tsessevich, V.P., "Studies of Variable Stars in Selected Regions of the Galactic Field", Kiev

2 Bond, H.E., PASP, No.522, 192

3 Miller, J.S., Krzeminski, W., Priedhorsky, IAU Circular 2974