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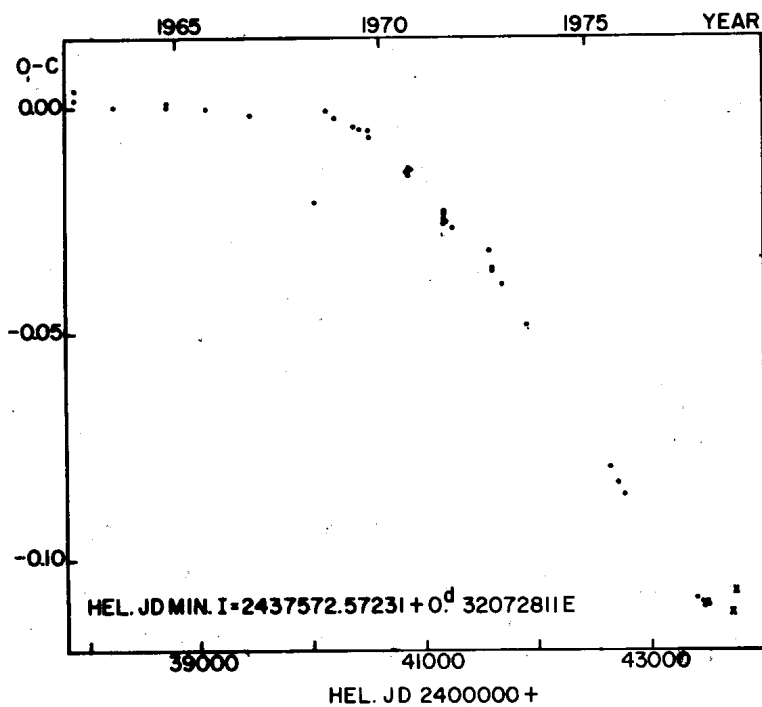
AN INCREASE IN THE PERIOD OF SW LACERTAE ?

The W Ursae Majoris-type eclipsing binary system SW Lac (BD+37^o4717) is known for the depths of its eclipse curves, the variation in the shape of its light curve, and its period behavior. Frasincka and Kreiner (IBVS No. 1285, 1977) noted that after increasing during the interval 1893-1968, the period decreased by 1.2 sec in the interval 1969-1973.

One secondary and three primary eclipse curves of SW Lac were observed photoelectrically in 1977 with the 40 cm telescope at North Georgia College, Dahlonega. The photometer houses a thermoelectrically-cooled EMI 6256 photomultiplier and standard B and V filters. BD+37^o4715 was observed as the comparison star. The bisection-of-chords method was utilized to determine the following epochs of minimum light.

JD Hel.	Min.	O-C
2443400+		
59.7476	I	-0.1099
60.5490	II	-0.1103
87.6504	I	-0.1104
88.6128	I	-0.1102

The O-Cs were formed from the ephemeris given by Bookmyer (Astr. J. 70, 415, 1965). These O-Cs, and those formed from all other epochs of minimum light observed photoelectrically within the past 15 or 16 years, are plotted versus Hel. JD in Figure 1. Also included are 2 normal points representing 16 times of minimum light observed visually early in this season (BBSAG No. 38, 1978).



Examination of the O-C curve shows there may have been a recent increase in the period of SW Lac. Additional observations are needed to confirm this. The following ephemeris,

$$\text{JD Hel. Min. I} = 2443459.74760 + 0^{\text{d}}.3207216\text{E},$$

is given to predict epochs of minimum light in the near future.

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