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## NEW MINIMUM TIMES AND PERIOD CHANGES OF SW LACERTAE

SW Lac is a W UMa type binary and well known to have a variable period (see Panchatsaram and Abhyankar, 1981). A sudden period change in 1977 was announced by Mikolajewska and Mikolajewski (1981).

The photoelectric observations of the system were made on seven nights from July 15 to 27, 1985 at the Ege University Observatory. The 48 cm Cassegrain reflector equipped with an EMI 9781 A photomultiplier, B, V filters and a usual DC amplifier were used at the observations. BD+37°4715 and BD+37°4711 were chosen as comparison and check stars, respectively.

From these observations two times of secondary and six times of primary minima were determined. They are listed in the following table. The 0-C values are calculated with the ephemeris of Kreiner and Frasinka (1977);

Min I= JD Hel. 2442 697.404+0.320724716.E.

Hopp et al. (1982) noted that no period change has been occurred since the period jump in 1977. We collected all the available 0-C values obtained since June 1968 and plotted in Figure 1. Some of the 0-C values obtained visually and published in BBSAG were grouped and shown as circles in this figure. From this figure it is seen that the variations of the 0-C values against the epoch numbers may be separated into two parts: viz. 1800 < E < 4300 and 4300 < E < 11200. In this case linear light elements agree well with the 0-C values. An application of the least squares to these parts gave the following ephemeris:

It seems, from the Figure 1 that two jumps have been occurred in the period of SW Lac: the first at about 1977 and the second about July 1979.

Naturally, we are interested in the behaviour of light curves of the system. For this reason the system will be monitored in coming months and the resultant light curves and their variations will be presented and discussed elsewhere.

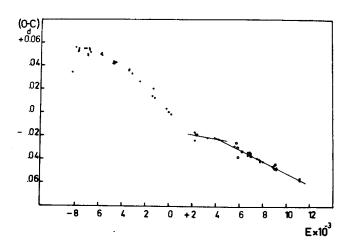


Figure 1

		New buotoetectic mi	nima times of SW La	.c
	J.D.	0-C	E	Colour
2446	000+	a	_	
	262.3636	-0 <sup>d</sup> 0560	11115.5	ь
	<b>.363</b> 3	.0563	11115.5	v
	264.4470	.0573	11122	ъ
	.4467	.0576	11122	v
	270.3797	.0580	11140.5	b,v
	270.5404	.0577	11141	b
	.5408	.0573	11141	v
	271.5028	.0574	11144	ь
	.5030	.0572	11144	v
	272.4656	.0568	11147	ь
	.4655	.0570	11147	v
	273.4271	.0575	11150	Ъ
	.4268	.0578	11150	v
	274.3887	.0581	11153	b
	.3891	.0576	11153	v

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## References

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