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NEW OBSERVATIONS OF GSC 3639.1081

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Name of the object:		
GSC 3639.1081 And		
Equatorial coordinates:		Equinox:
R.A. = $23^{h}53^{m}39^{s}$ DEC. = $+45^{\circ}37'21''$		J2000.0
Observatory and telescope: R. Szafraniec Observatory, Metzerlen, Switzerland: 35-cm R-C-reflector; Sonneberg Observatory, Sonneberg, Cermany: Sky Survey		
Observatory, Sonneberg, Germany. Sky Survey		
Detector:	SBIG ST6 CCD camera, photographic plates	
Filter(s):	None	
Comparison star(s):	GSC 3639.1061	
Check star(s):	GSC 3639.2363	
Transformed to a standard system: No		
Availability of the data:		
Upon request from R.D.		
Type of variability: EA		

Remarks:

Diethelm (1997) reported on the incidental discovery of GSC 3639.1081 as a variable star, very probably an eclipsing binary. In order to determine the elements of light variation for this star, we searched the historical Sky Survey photographic plate collection of Sonneberg Observatory, Germany. By visual inspection we found a most probable period of 0.95436 days. Armed with this information, we were able to observe two additional primary minima of GSC 3639.1081 with the CCD equipment (JD 2451032.4479 (7) and JD 2451076.3469 (5), published in the BBSAG Bulletins, Nos. 118 and 119 respectively) at R. Szafraniec Observatory, Metzerlen, Switzerland. The current elements are therefore:

 $JD(min, hel) = 2451032.4479(8) + 0.954326(3) \times E.$

The actual period value could still be 0.954326/n days (integer n), but the probability for $n \gg 1$ is very small.

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Reference:

Diethelm, R., 1997, IBVS No. 4525