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HD 182844: A NEW LOW AMPLITUDE VARIABLE STAR

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Name of the object:	
HD 182844 = SAO 124629 = PPM 167860 = BD +03°4021 = AGK +03°2464 = = GSC 469_2661	
Equatorial coordinates:	Equinox:
R.A. = 19 ^h 26 ^m 34 ^s .5 DEC. = +03°31'51".5	2000.0
Observatory and telescope:	
Mollet del Valles Observatory, 0.4-m Newtonian telescope	
Detector:	CCD
Filter(s):	V
Comparison star(s):	HD 182810 = SAO 124627 = PPM 167855 = = BD +03°4018 = AGK +03°2463 = GSC 469_690
Check star(s):	No suitable check star was available within the CCD frames
Transformed to a standard system:	No
Availability of the data:	
Upon request	
Type of variability:	Unknown

Remarks:

HD 182844 is a B8 or B9 star with a V magnitude of 9.4. It was found variable while used as comparison star for V1454 Aql. Photometric observations show a brightness variation of 0.033 magnitudes with a period of 0.96 days. The light curve is slightly asymmetric and it is not possible to establish the type of variability. Data cannot be satisfactorily overlapped after being folded with a double period, so it is probably not an ellipsoidal variable. Another possibility is a 53 Per (SPB) pulsating object. Nevertheless, the prewhitened light curve after removing the main frequency component does not show additional periodicities. According to Waelkens (1993), 53 Per stars sometimes must be observed for more than one season to detect multiperiodicity. It may also be a Bp star, but there is insufficient spectral information to support this hypothesis. The following ephemeris was computed:

$$\begin{aligned} \text{Max} = \text{HJD } 2\,451\,012.4826 + 0^{\text{d}}962 \times E. \\ \pm 0.0030 \quad \pm 0.003 \end{aligned}$$

Acknowledgements:

For this research the SIMBAD database, operated by CDS, Strasbourg, France, has been utilized

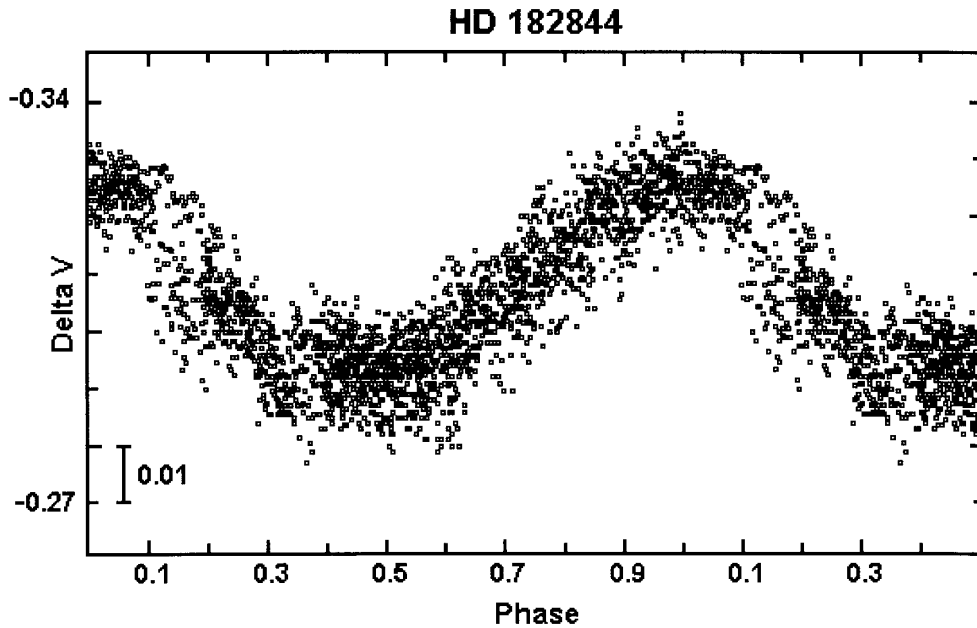


Figure 1.

Reference:

Waelkens, C., 1993 in *New Perspectives on Stellar Pulsation and Pulsating Variable Stars*, Nemeč, J.M. and Matthews, J.M. editors, Cambridge University Press, p. 180