

Period and Probable Variability Type of GSC 02684-00774

J. Greaves

Northants, England, UK

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(E-mail for contact: bydra@safe-mail.net)

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| Star Name: | GSC 02684-00774, NSVS 8493397, MSX6C G073.7003+00.3031 | | |
| Coordinates (J2000): | 20 16 03.04, +35 42 07.4 | | |
| Variability type: | BY; | Limits, System: | 10.65 - 11.05 (ROTSE1); |
| Period: | 11.8 d; | Epoch(max): | JD |

Remarks:

Nicholson and Scottish (2006) wrote that this star is an EB eclipser of 1.8347 day period using NSVS data (Wozniak et al. 2004).

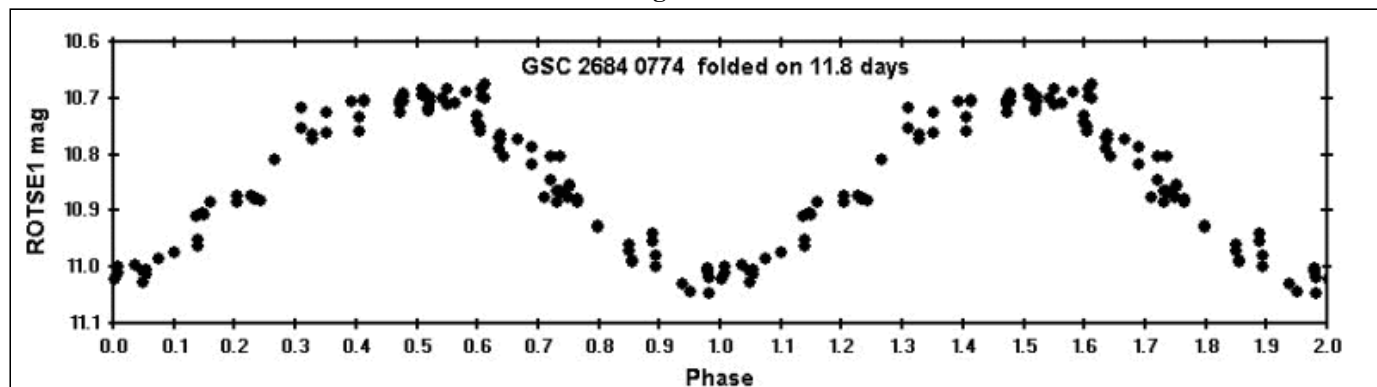
In fact those data actually show the period to be 11.8 days, and the lightcurve morphology as revealed by a phase plot upon that period, in tandem with the Carlsberg Meridian Catalogue 14 $r' = 11.01$ and 2MASS J = 7.39 and $K_s = 6.31$ magnitudes, show this object to be a rotation variable most likely of the BY Draconis variety.

However, a slightly extinguished rotational variable of the eclipse free RS CVn variety is not entirely precluded.

References:

Nicholson, M., Scottish, C., 2006, OEJV 30, 1
Wozniak, P.R., et al., 2004, Astron. J., 127, 2436

Light Curve



NSVS data phaseplot for GSC 02684-00774 folded on 11.8 days with two cycles given for illustration

Data Source

1. [gsc02684_00774.dat](#)