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# GSC 4004\_1211: A NEW VARIABLE IN THE FIELD OF V360 CASSIOPEIAE

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DSCT:

Type of variability:

Name of the object:		
GSC 4004_1211		
Equatorial coordinates:		Equinox:
<b>R.A.</b> = $23^{\text{h}}34^{\text{m}}17^{\text{s}}$ <b>DEC.</b> = $+55^{\circ}53'58''$		2000.0
Observatory and telescope:		
Private Observatory in Lennestadt, 0.32-m Ritchey-Chretien telescope; Esteve Du-		
ran Observatory, 0.6-m Cassegrain telescope		
Detector:	CCD	
Filter(s):	V	
Comparison star(s):	GSC 4008_809	
Check star(s):	GSC 4004_1159, GSC 4004_1259	
Transformed to a standard system:		No
Availability of the data:		
Through IBVS Web-site as 4701-t1.txt		

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#### Remarks:

The variability of GSC 4004\_1211 was found while being used as comparison star for V360 Cas. CCD observations show that this object has light variations with an amplitude in the V band close to 0.1 magnitude and a period of  $0.129701\pm0.000002$  days. The shape of the light curve indicates that this variable is not an ellipsoidal nor eclipsing binary system. Although the period has remained stable for almost a year, from 31 October 1997 to 7 October 1998, the light curve shows instabilities from cycle to cycle similar to those of a Delta Sct star. To derive more information about GSC 4004\_1211, its average B-V color index was estimated using the TYCHO star GSC 4004\_0715. Photometric data showed that  $B-V=0.61\pm0.07$ . This value is redder than the typical one for a Delta Sct variable, but GSC 4004\_1211 is near the Galactic plane and it might be affected by interstellar extinction. Figure 1 shows the light curve of GSC 4004\_1211 folded according to the given period. To construct Figure 1 and due to light curve instabilities, the zero epoch was arbitrarily fixed.

### Acknowledgements:

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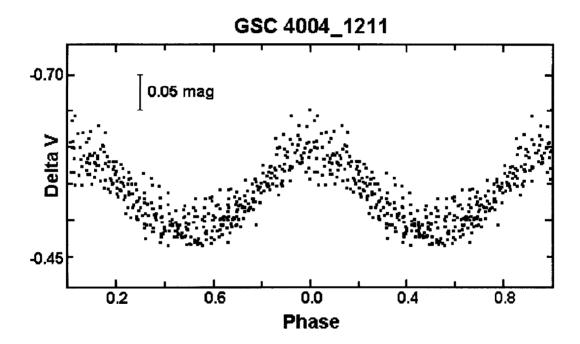


Figure 1.