

A Couple of Kepler Eclipsers and a BY Draconis Star

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#	Name	Other	Coord (J2000)	Type	Max	Min	System	Period	Epoch (JD)	type	Sp	Comment	L.Curve	Find.Chart	Data
1		KEPLER 008456998	19 59 06.82, +44 27 40.0	EA/RS	13.266	(0.006)	KEPLER	7.532	2454991.790	min			k008456998.gif		k008456998.txt
2		KEPLER 007740302	19 06 34.39, +43 27 35.2	EA+ELL	11.999	(0.06)	KEPLER	1.15356	2454937.299	min		Comm. 2	k007740302.gif		k007740302.txt
3		KEPLER 006114003	19 14 52.80, +41 24 28.6	BY	13.458	(0.024)	KEPLER	1.16634	2454969.417	max		Comm. 3	k006114003.gif		k006114003.txt

Comments:

2. MinI amplitude (0.04). Wrongly classed as a pulsating variable of 0.267626 day period in Pigulski et al. (2008).

3. Optical and NIR colours point towards this star being a red dwarf (Bessell and Brett 1988).

Remarks:

Searching within public Kepler Exoplanet Mission (<http://kepler.nasa.gov>) data (e.g. Koch et al. 2010) sourced via the MAST archive server (http://archive.stsci.edu/kepler/data_search/search.php) led to these two eclipsing binary and one rotational variables.

There being stated no intent within the mission to photometrically calibrate the Kepler flux values, an instrumental amplitude is derived in a magnitude scale derived from the flux, and the analyses and phaseplots presented here are based upon a differential magnitude scaled to the median flux value for each dataset. The stars' quoted Kepler magnitudes are given for the maximum magnitude and the aforementioned amplitude quoted for the minimum.

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The SIMBAD and VizieR bibliographic and catalogue servers of the CDS, Strasbourg, where used during this research.

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References:

- Bessell, M.S., Brett, J.M., 1988, PASP, 100, 1134
Koch, D.G., Borucki, W.J., Basri, G., et al., 2010, arXiv:1001.0268v1
Pigulski, A., Pojmanski, G., Pilecki, B., Szczygiel, D., 2008, arXiv:0808.2558v2