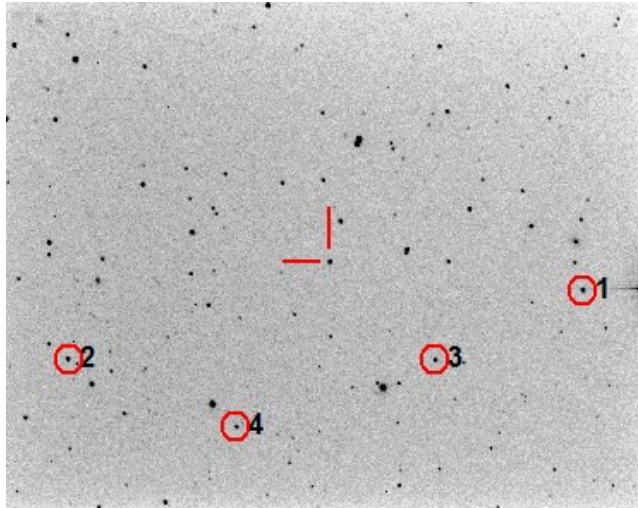


## SUBMISSION OF NEW VARIABLE STAR

We submit the discovery of a new variable star in the Bootes constellation, observed at the (IAU station 565) Bassano Bresciano Observatory on May 4th 2014 . The star is cataloged as GSC 01485-00645 (14H 58m 14.84s +16d 24' 25.3"). From light curve analysis the star should be an EW eclipsing type variable. We computed the epoch HJD 2456782.37894 and the period  $P = 0.3235250$  days. Magnitude is 14.44V with a amplitude = 0.26(clear).



**Image1:** GSC 01485-00645 and comparison stars

**Tab 1 Comparison stars**

Catalog = 2MASS		Color band=V							
Num	Num.Cat.	RA J2000	DE J2000	Mag	B-V	V-R	R-I	J-H	
1	14572596+1623126	224.3582070	16.3868480	13.821	+0.75	+0.42	+0.40	+0.38	
2	14590545+1620096	224.7727320	16.3360250	14.501	+0.74	+0.42	+0.40	+0.41	
3	14575442+1620097	224.4767780	16.3360290	14.788	+0.55	+0.32	+0.32	+0.27	
4	14583281+1617144	224.6367450	16.2873550	15.142	+0.82	+0.46	+0.43	+0.45	

**Tab 2. Cross identification of variable star**

**GSC 01485-00645** = 2MASS J14581483+1624254 = USNO-B1.0 1064-0226602 = CSS\_J145814.8+162425

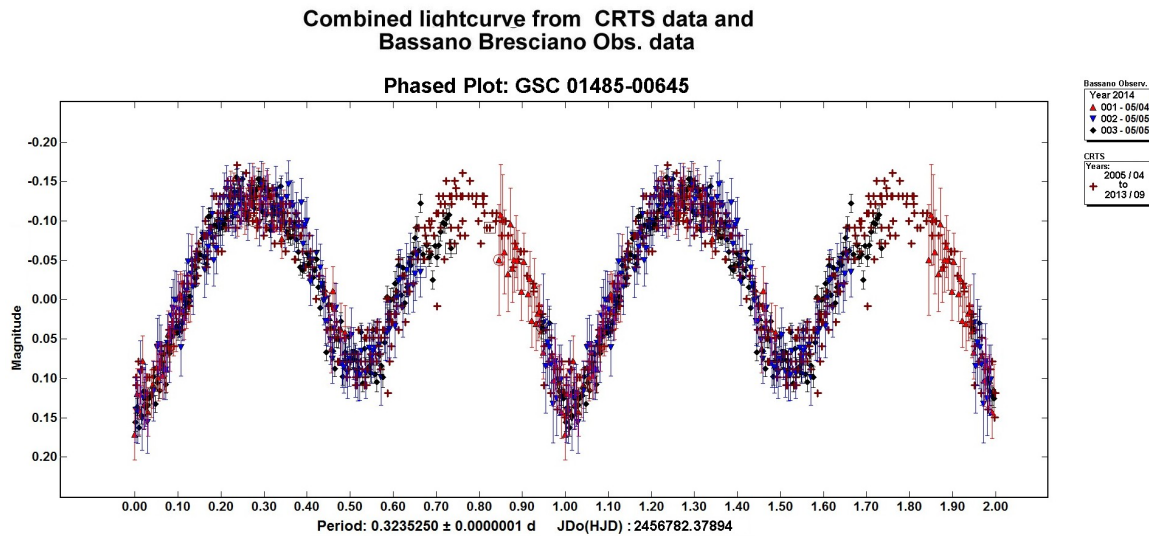
**Tab 3 Summary of the Bassano Bresciano observations:**

Session, Date of sessions, number of images/session, Telescope, exposure times

Session number	Date of the observations	N. of images	Telescope	exp. time sec.
S1	May 04 <sup>th</sup>	87 points	Schmidt	120
S2	May 05 <sup>th</sup>	133 points	Schmidt	120
S3	May 05 <sup>th</sup>	163 points	Newton	120

## PERIOD DETERMINATION

Period was performing combining Bassano Bresciano Observatory data and Catilina survey data (CRTS Identifier = **CSS\_J145814.8+162425**). Following is the combined plot giving us the period of **0.323525** days:



## EPOCH AND AMPLITUDE DETERMINATION

Using Peranso software was able to compute the minimum epoch = **HJD 2456782.37894** and amplitude = **0.26 mag** (clear)

**Tab 4. Main characteristics of discovered star**

Name	Type	Period (d)	Initial epoch (HJD)	V Mag	Amplitude Mag(Clear)
GSC 01485-00645	EW	0.3235250 +/- 0.000001	2456782.37894	14.44	0.26

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