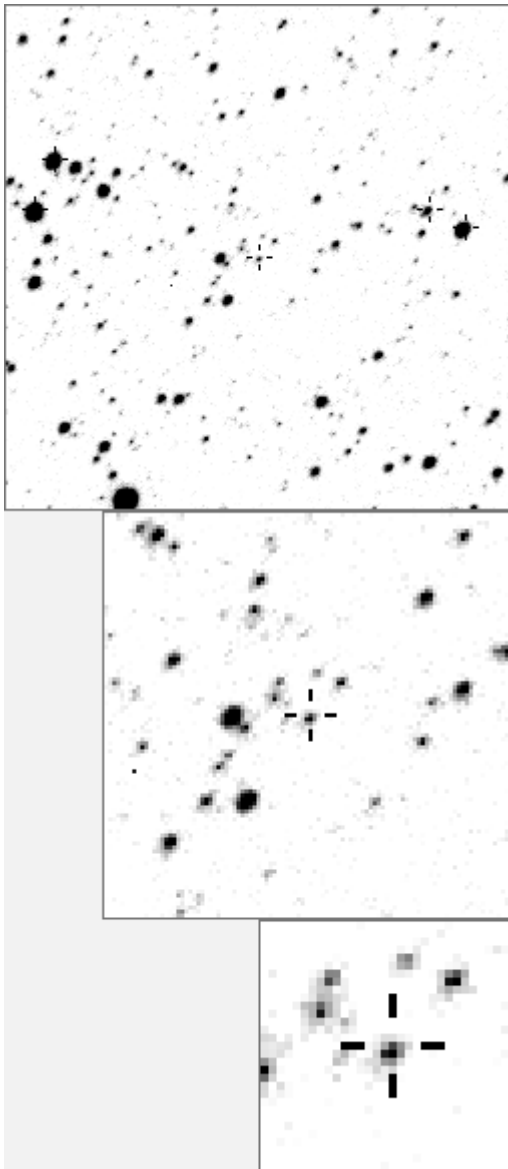


a17101



variable and brighter stars		
.	O 17101	v
.	a 166	v
. m	b 387	v
.	c 616	v
. b g	d 1310	
. . f	e 1673	
a n c	f 1801	
. k O	g 2078	
d l	h 2230	
.	i 2332	
.	j 2622	
. i	k 3368	
. h	l 3568	
. . j e	m 3762	
.	n 7806	v

. m i	O 17101	v
.	a 3368	
. j	b 3568	
. l c	c 9270	
.	d 9369	
. . g	e 10116	
. n d	f 10782	
. a . . O	g 12969	
. k	h 16121	
.	i 16999	
. . . h . b	j 17233	
.	k 22188	
. . e	l 22322	
.	m 22664	
.	n 22862	

Bitmap sizes are 251, 101 and 31 pixels square, South up. The keys to the right refer to the 1st two bitmaps. The numbers in the key are those in my catalogue 'starlistA'. Stars marked with a cross have been found to be variable.

Data and comments on star a17101

SWid: a17101 / **USNO id: 1353 422210 / other id:**

Co-ordinates, x,y in image z1051: 2855.2 364.3

J2000 sky co-ordinates: 21 11 25.41 +45 22 35.61

CMC r'magnitude and 2MASS J, H, K magnitudes: 13.842 12.686 12.442 12.464

USNO B1.0 magnitudes, B1, R1, B2, R2, I2: 15.11 13.07 15.02 13.27 13.91

Misc comments :

A low range noisy eclipsing binary.

Note for SW: I had a quick look at 17101 and I can find a noisy triangular dip at a period of 3.02 days of depth 0.13 mag using 1801 or 1920 ref. It's best in 'v' but visibly there in 'a' 'y' and 'z' but very messed up in 'w' by the false steps in some dates, eg: 2650, 2677, 2667, 2649 and 2664. I don't know what these are. I'd normally associate that kind of step with meridian switch-over (SO) which in 2003 involved the image rotating on the chip at SO and I presumed though never proved that the steps were caused by flat errors (they affect stars near edges and corners). After 2003 I rotate the scope on it's axis by 180 degrees at SO so the stars stay about in the same place except in 2006 I tried a reflector briefly (up to date 2515 inclusive) and that was not rotateable so there are SO steps in some of those. The SO steps are distinguishable by the 10min or so gap in the data. The 2650-2700 steps are later than the 2515 return to refractor and happen from one pic to the next. These movements are clearly not astrophysical because the same steps happen to the close and similar 17233. In fact, dips often occur in the dates 2650 to 2700 and I've done some work on them but not enough yet; I still need to find out why it happens (I suspect a focus change).

However, having said that, star 17101 has real dips that 17233 does not have and those give me a period of 3.02 days.

Comparison reference star(s) co-ordinates:

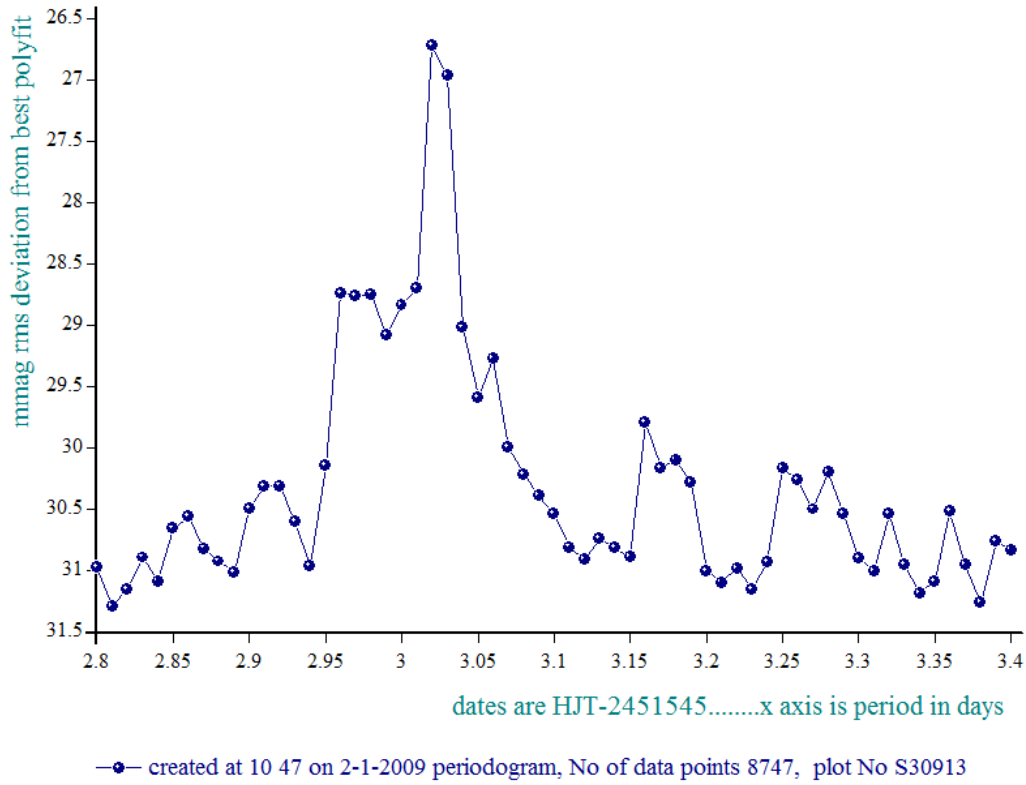
a01801: 21 11 7.95 +45 21 15.19

a01920: 21 11 56.21 +45 22 18.09

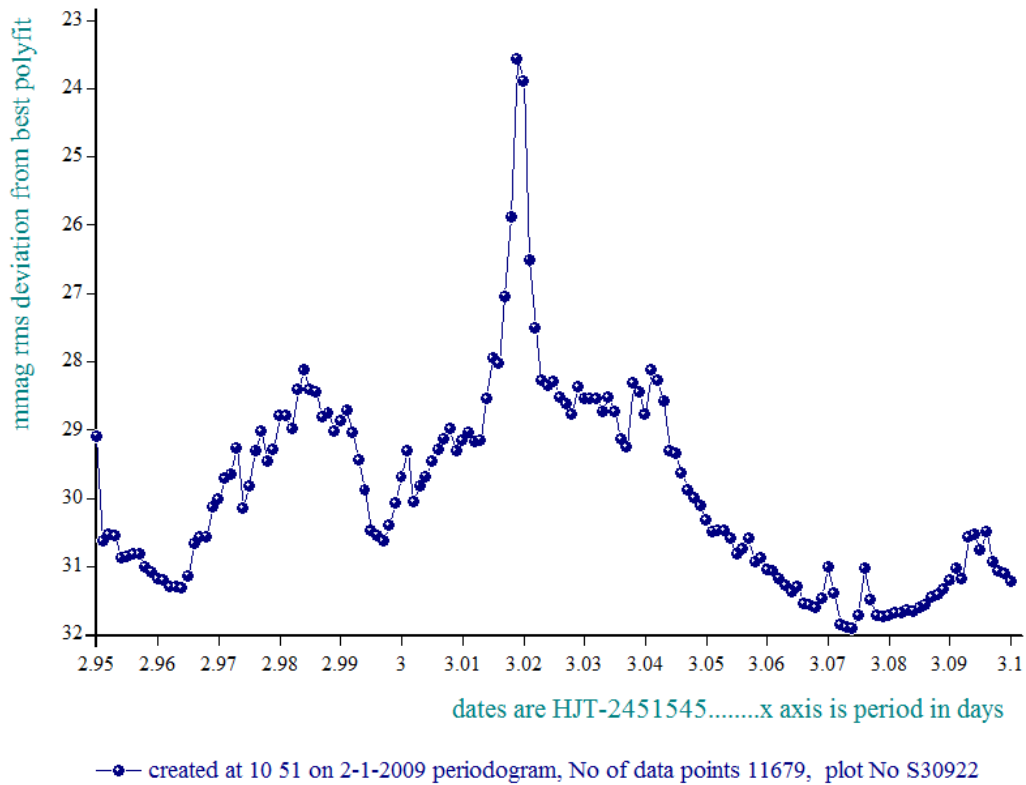
Reminder: **All dates, JD and HJD are from Jan 1st 2000**

season 1: dates 1316 to 1553 is 9/8/2003 to 3/4/2004	(a)
season 2: dates 1696 to 1838 is 23/8/2004 to 12/01/2005	(z)
season 3: dates 2085 to 2177 is 16/9/2005 to 17/12/2005	(y)
season 4: dates 2442 to 2755 is 8/9/2006 to 19/7/2007	(w)
season 5: dates 2772 to 2903 is 4/8/2007 to 13/12/2007	(v)
season 6: dates 2930 to 3266 is 9/1/2008 to 10/12/2008	(u)
season 7: dates 3403 to 3539 is 26/4/2009 to 10/9/2009	(t)

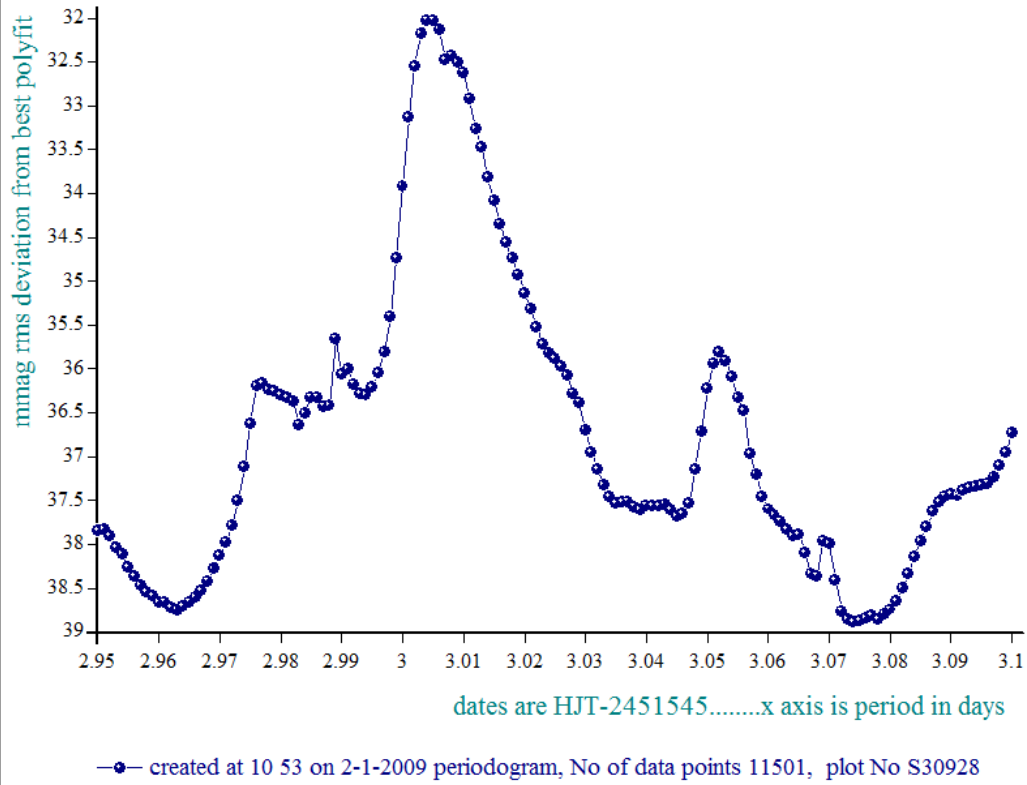
periodogram of star a17101 in dates 1344-1553, dia 8, ref a1801



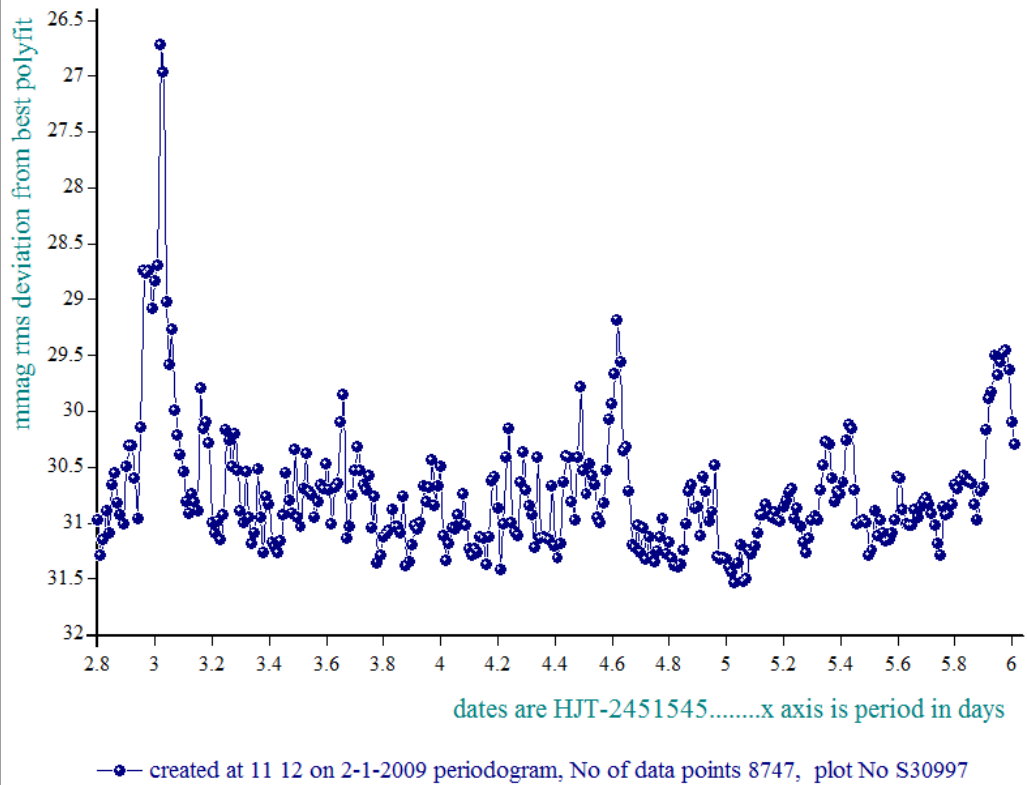
periodogram of star a17101 in dates 1702-1838, dia 8, ref a1801



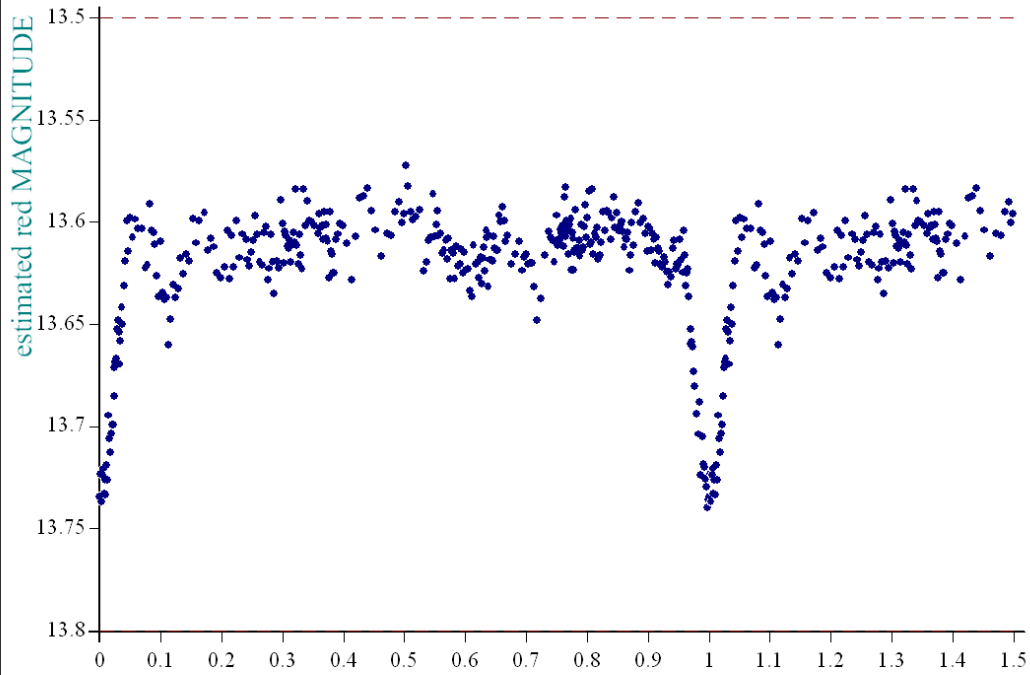
periodogram of star a17101 in dates 2772-2903, dia 8, ref a1801



periodogram of star a17101 in dates 1344-1553, dia 8, ref a1801



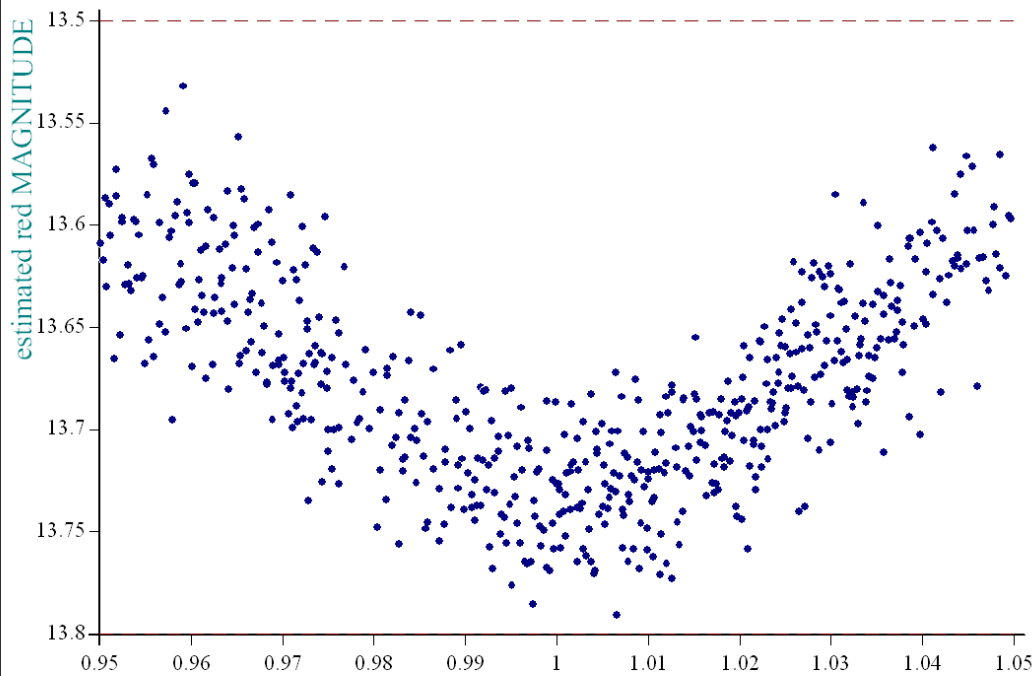
star a17101 dates 2772-2903, dia 8, ref a1920, epoch 2699, period 3.02



dates are HJT-2451545.....x axis is phase, overlay blockav is 10

• created at 17 48 on 23-9-2008 phase plot, No of data points 10330, plot No S21841

star a17101 dates 2772-2903, dia 8, ref a1920, epoch 2699, period 3.02



dates are HJT-2451545.....x axis is phase, overlay blockav is 10

• created at 17 47 on 23-9-2008 phase plot, No of data points 10330, plot No S21840

Below are some plots for the close star 17233 for comparison. They are to comparable scales. Clearly 17101 is behaving quite differently. They both have about the same noise in the phase plots so the movements in 17101 are likely to be real

