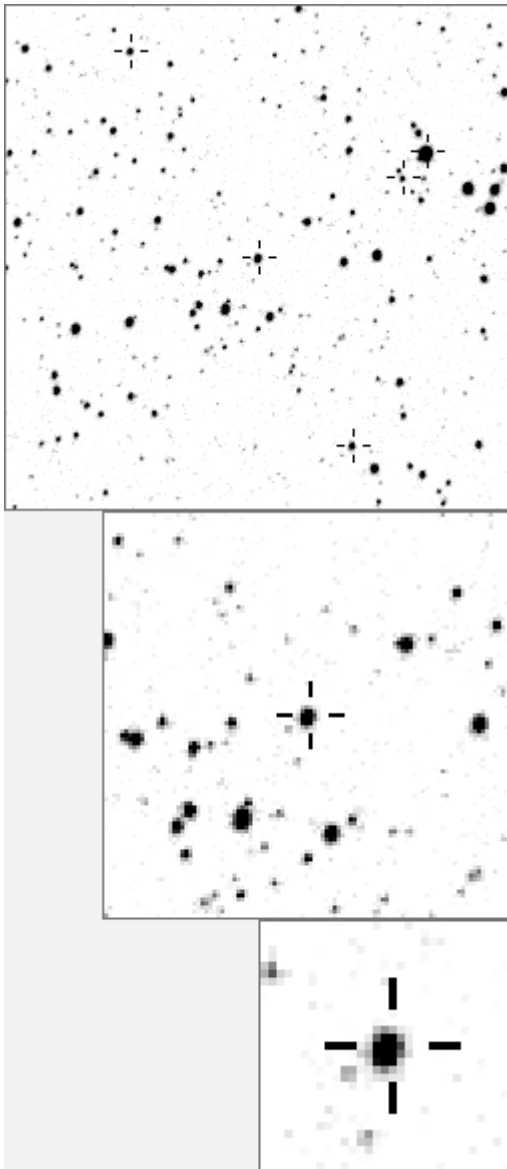


a04638



variable and brighter stars			
.	.	O	4638 v
.	m	a	878
.	.	k	955 v
.	.	c	1166
.	.	b	i
.	.	n	a
.	.	e	e
.	.	f	2392
.	.	O	d
.	.	g	2440
.	.	h	3263
.	f h	g	i
.	.	j	3664
.	.	k	4599 v
.	.	l	7766 v
.	.	m	8228 v
.	.	l	n
.	.	n	13120 v

.	.	O	4638 v
n	.	a	2440
.	.	j	b
.	.	c	4884
.	.	d	5203
.	.	d	i
.	.	e	6722
.	.	e	6761
.	.	f	8170
.	m	k	O
.	e	h	b
.	.	g	9796
.	.	h	13366
.	.	i	16118
.	f	j	18046
.	g	a	c
.	l	k	18103
.	.	l	18974
.	.	m	19922
.	.	n	20267

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 a04638

SWid: a04638 / **USNO id: 1374 481722 / other id:**

Co-ordinates, x,y in image z1051: 2061.7 3479.8

J2000 sky co-ordinates: 21 8 25.35 47 26 12.76

CMC r'magnitude and 2MASS J,H,K magnitudes: 12.679 11.235 10.848 10.795

USNO B1.0 magnitudes, B1,R1,B2,R2,I2: 13.96 12.01 13.67 12.1 11.66

Misc comments :

1 Sept 08 osc seems to have two periods of 0.7894 and 3.775 days. magm to 34 is 12.31,

magr 0.16 (the faster one is a bit smaller).

I get a good rov peak at 0.7894 in z and same in v but also a peak at 3.775 days and 0.574.

I measure 1717.322 at 12.307 going down at 106mmag a day and also 1778.262 at 12.307 and that is going down at 225mmag a day so that's puzzling and the difference corresponds to 77 cycles at 0.7914 or 106 at 0.574. The 0.574 one is very noisy as they all are if one looks at all the data.

Which period, if either, is right? Looking at the rates of change in the phase plot, both up and down are about 440mmag a day and the most I've seen is 225 in 1778. On the other hand the 3.775 plot averages about 160/d going down. The period of the ripple in the plot is about 8 in phase 1 or 2.1 cycles a day or 0.47.

It's all very difficult. I shall put the longer period down, it's better on a full plot also

Comparison reference star(s) co-ordinates:

117: 21 9 9.27 47 36 52.8

34: 21 8 9.76 47 41 47.24

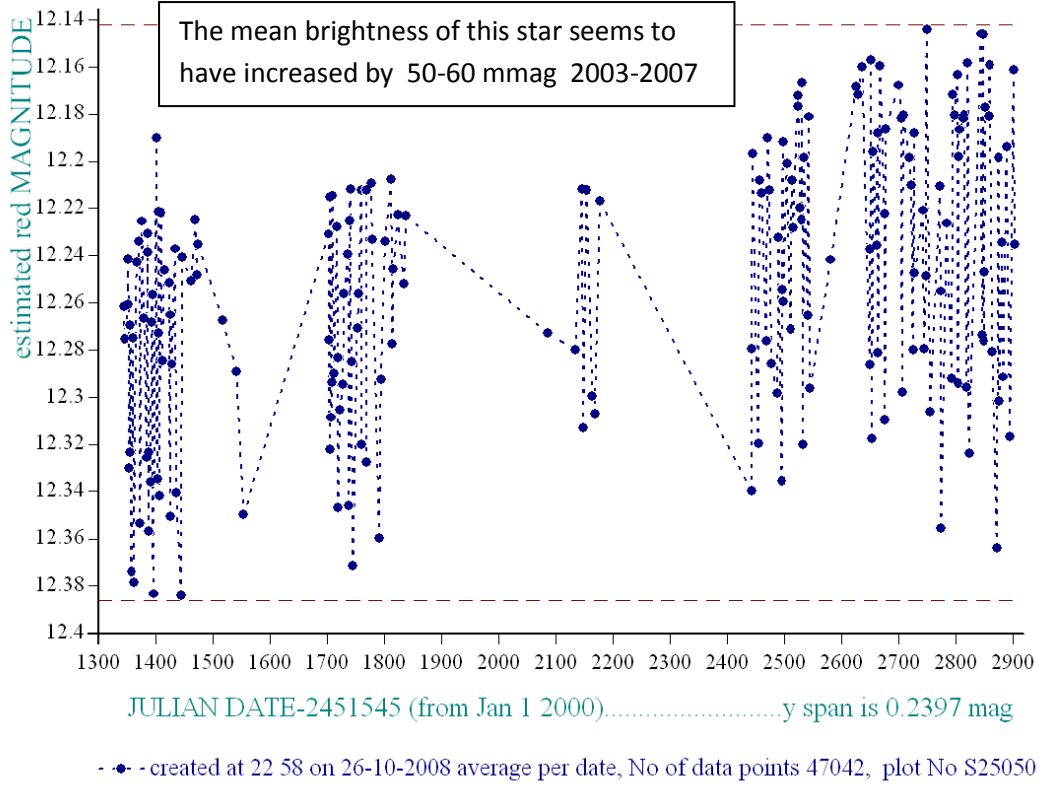
Reminder:

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

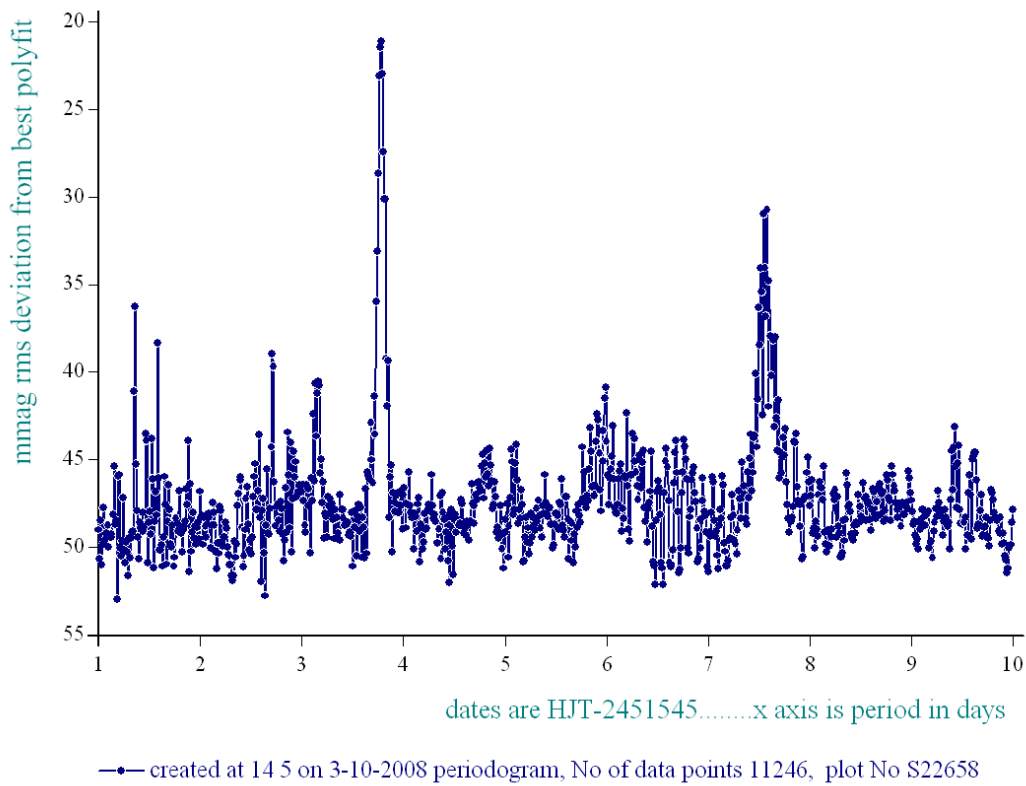
season 1: dates 1316 to 1553 is 9/8/2003 to 3/4/2004	(a)
season 2: dates 1696 to 1838 is 23/8/2004 to 12/01/2005	(z)
season 3: dates 2085 to 2177 is 16/9/2005 to 17/12/2005	(y)
season 4: dates 2442 to 2755 is 8/9/2006 to 19/7/2007	(w)
season 5: dates 2772 to 2903 is 4/8/2007 to 13/12/2007	(v)
season 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)

I'd like to know what this star is really doing! There is a reasonable s/n in the periodograms for periods of 3.774days and 0.7894days but they are very noisy unaveraged, see final plot. **See varnotes, the short period is false**

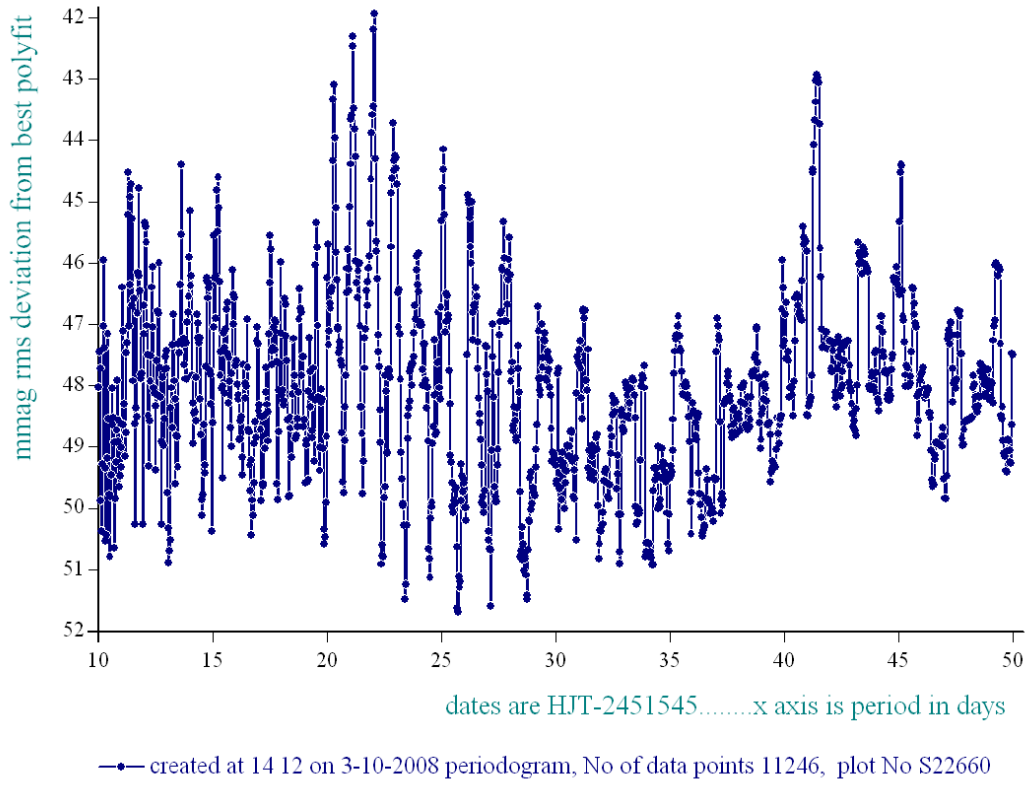
star a04638, refstar a00117 dia 10



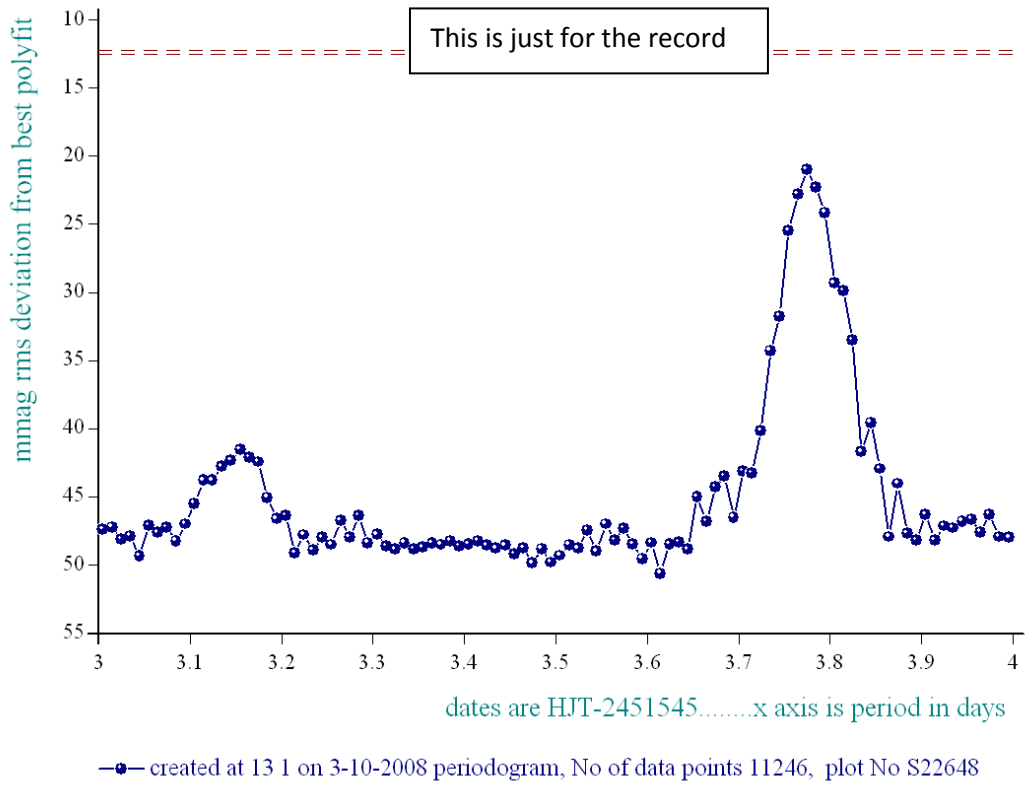
periodogram of star a4638 in dates 1702-1838, dia 10, ref a34



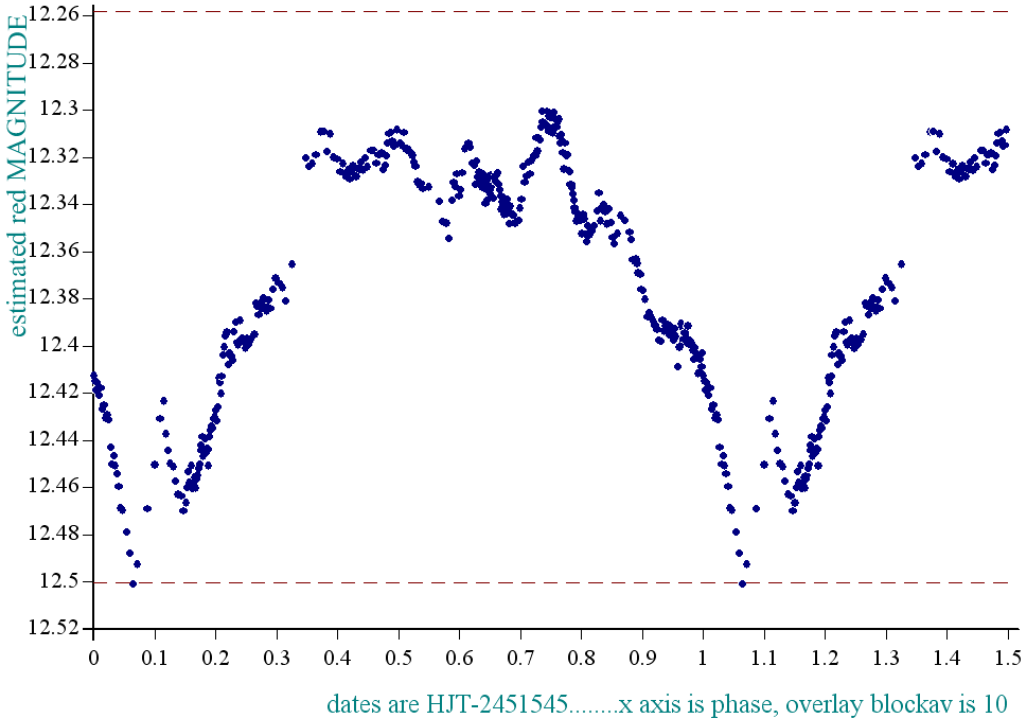
periodogram of star a4638 in dates 1702-1838, dia 10, ref a34



periodogram of star a4638 in dates 1702-1838, dia 10, ref a34

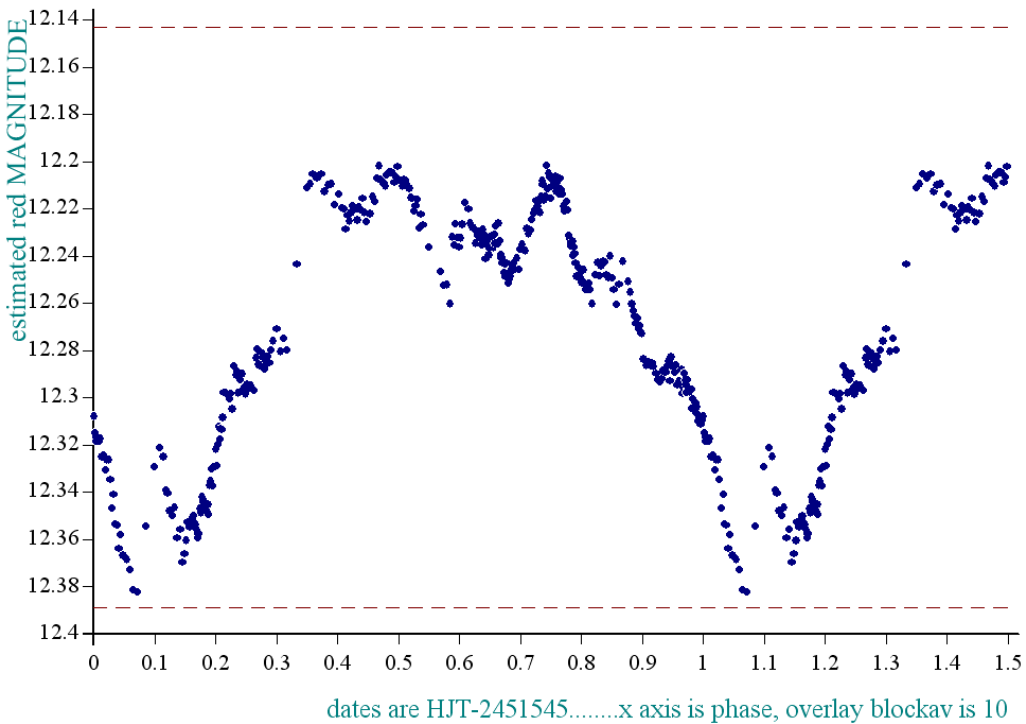


star a4638 dates 1702-1838, dia 10, ref a34, epoch 1700, period 3.774



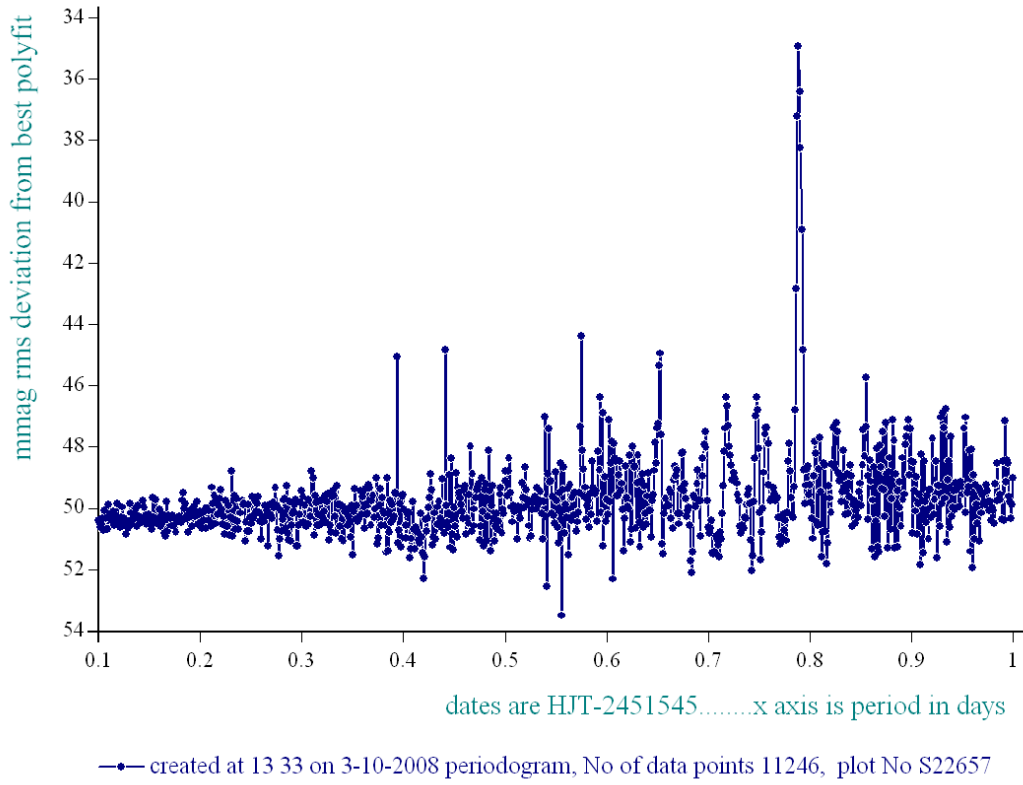
• created at 13 4 on 12-9-2008 phase plot, No of data points 11246, plot No S20515

star a4638 dates 1702-1838, dia 10, ref a117, epoch 1700, period 3.774

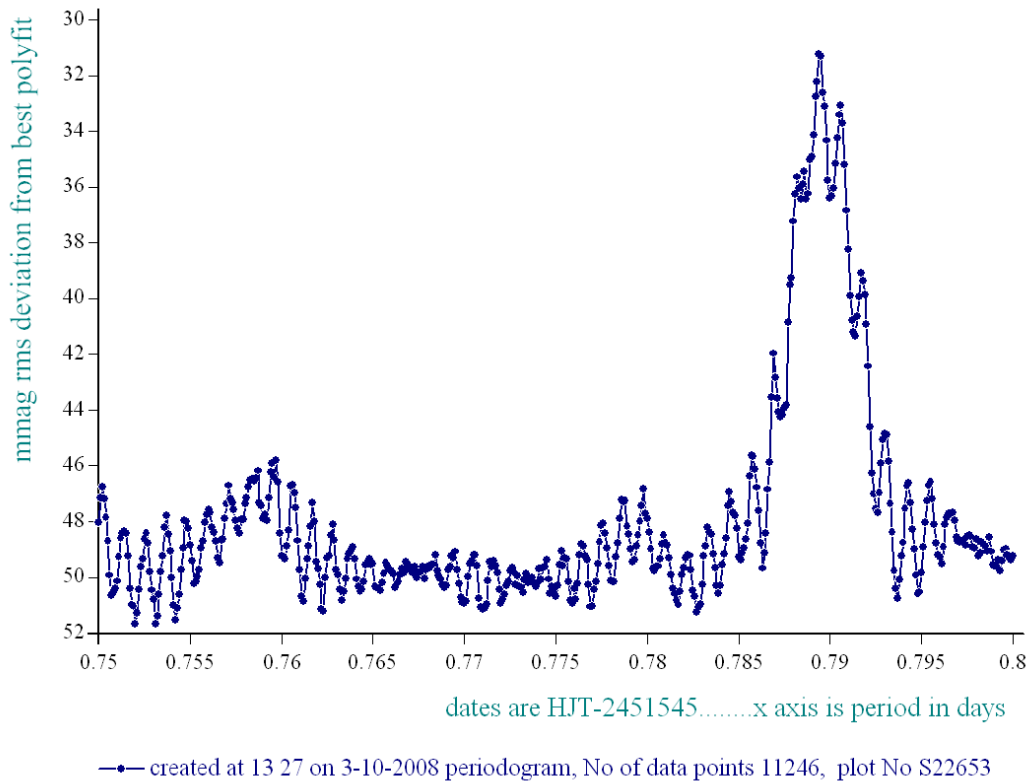


• created at 13 5 on 12-9-2008 phase plot, No of data points 11219, plot No S20517

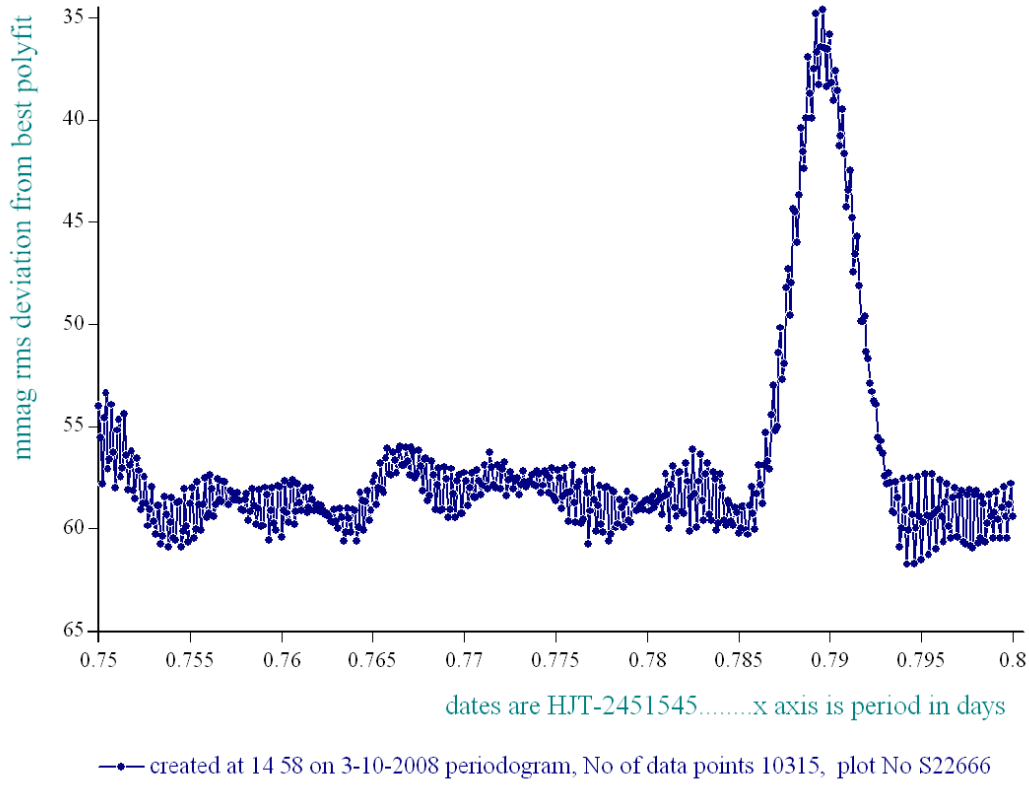
periodogram of star a4638 in dates 1702-1838, dia 10, ref a34



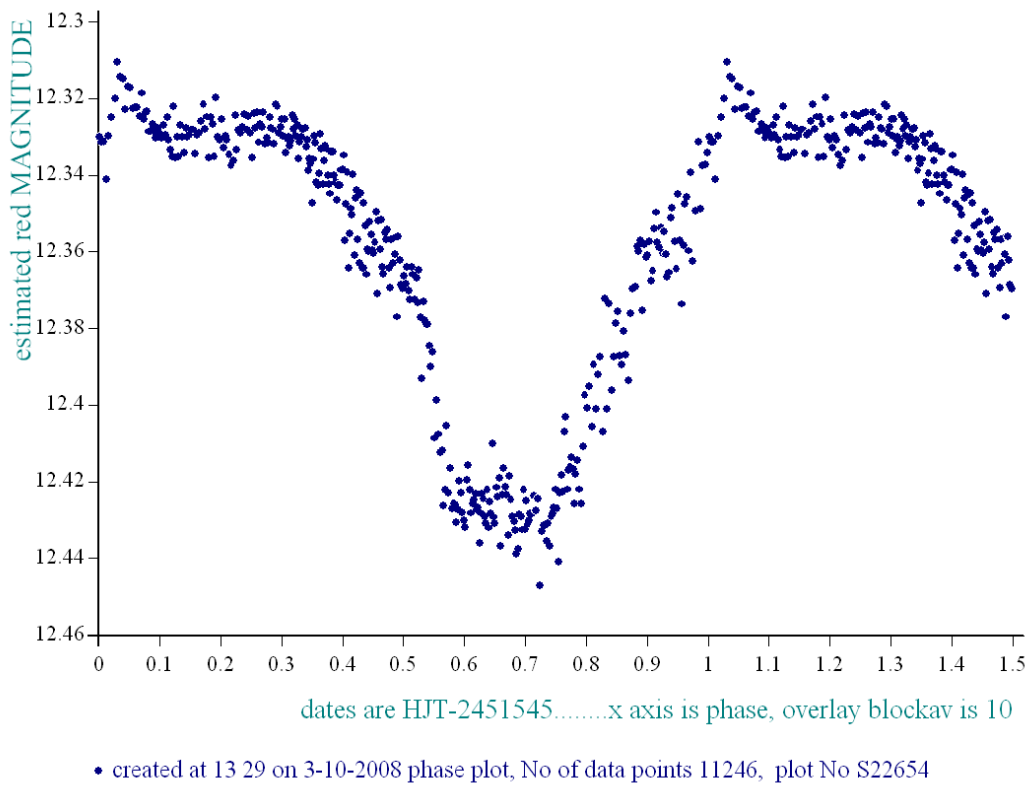
periodogram of star a4638 in dates 1702-1838, dia 10, ref a34



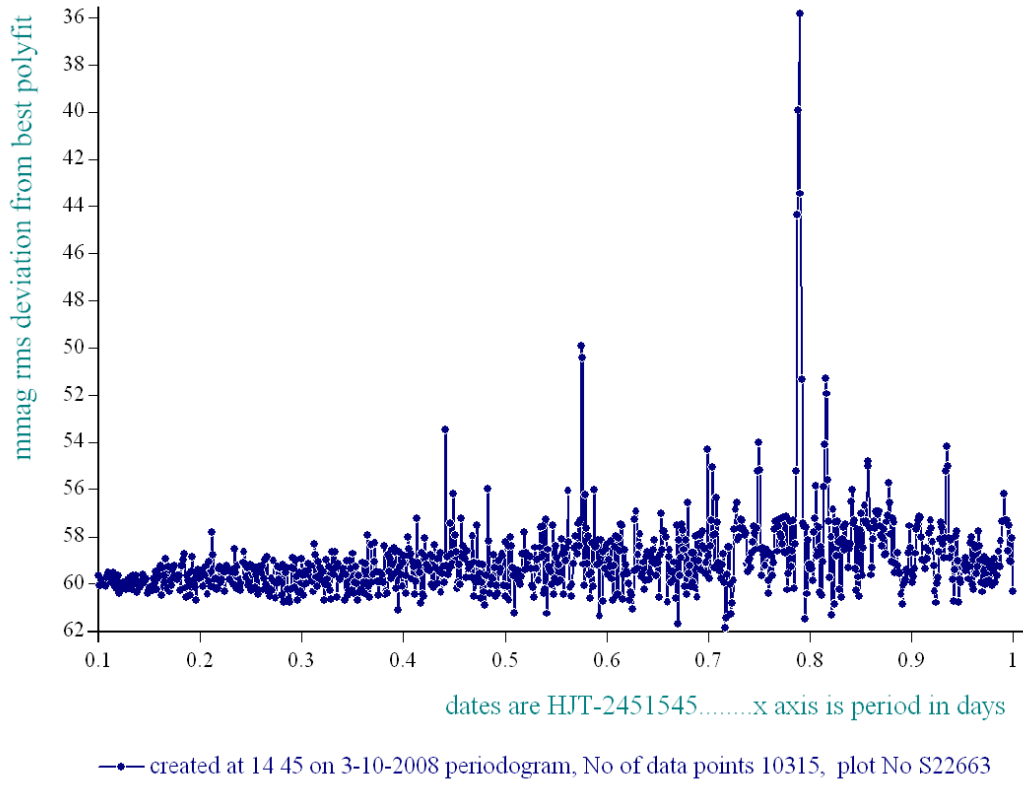
periodogram of star a4638 in dates 2772-2903, dia 10, ref a34



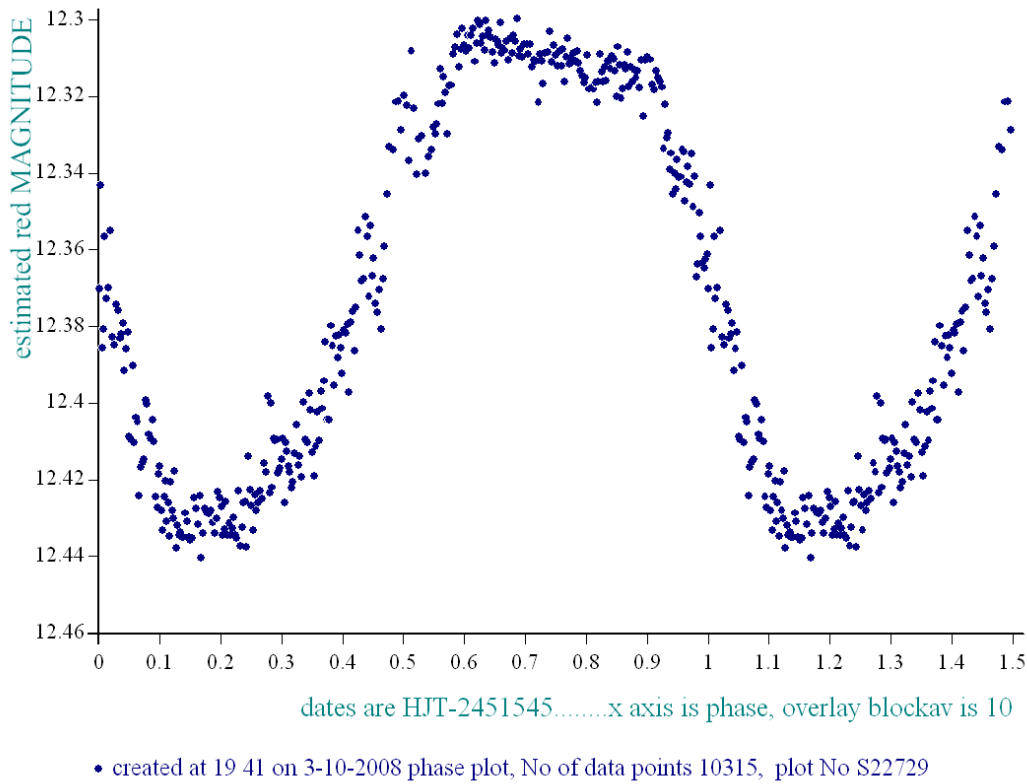
star a4638 dates 1702-1838, dia 10, ref a34, epoch 1220, period 0.7894



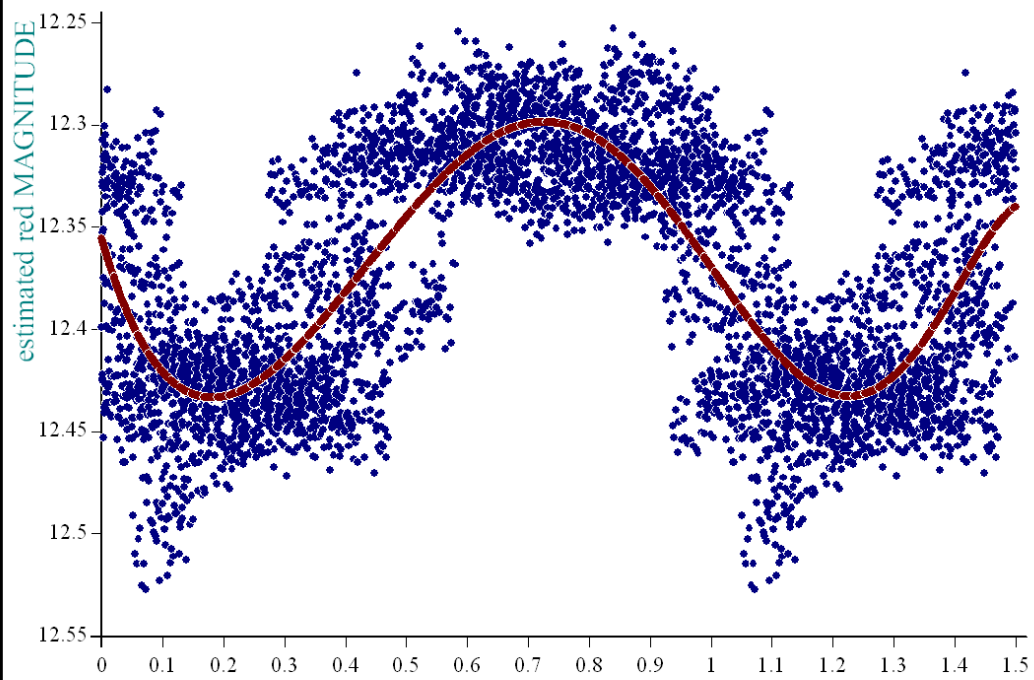
periodogram of star a4638 in dates 2772-2903, dia 10, ref a34



star a4638 dates 2772-2903, dia 10, ref a34, epoch 1220, period 0.7894



star a4638 dates 2772-2903, dia 10, ref a34, epoch 1220, period 0.7894



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

• created at 19 46 on 3-10-2008 phase plot, No of data points 10315, plot No S22730