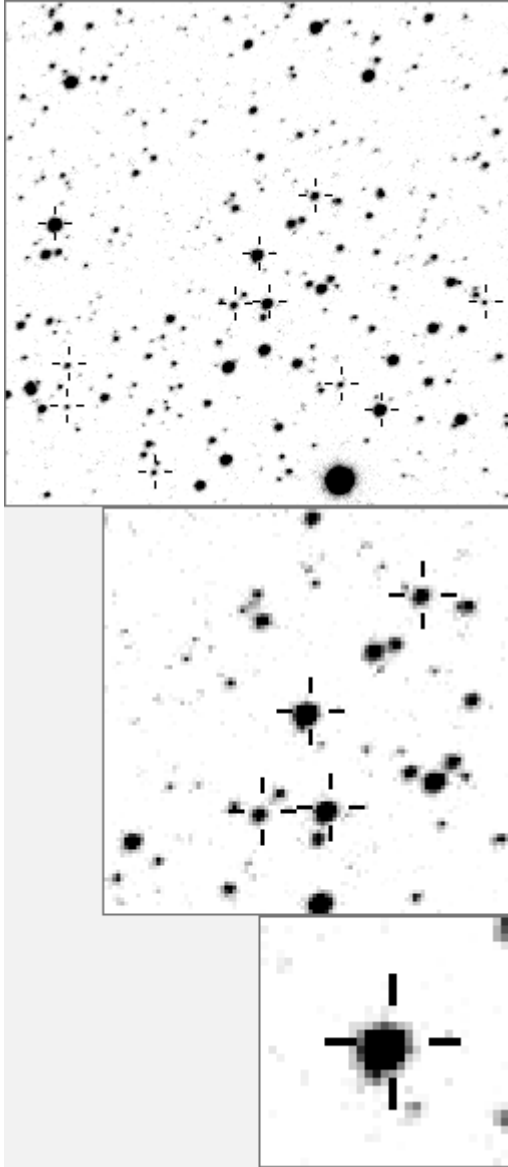


a01387



variables & brighter stars		
.....	O	1387 v
.....	a	533 v
l b	b	1014
.....	c	1135 v
.....	d	1309
..... f	e	3403 v
..... a	f	6063 v
..... O	g	8946 v
..... e	h	11233 v
..... g	i	13138 v
..... d	j	13730 v
..... j	k	17254 v
..... c	l	18111 v
.....	m	18593 v
..... k	n	20050 v

..... j	O	1387 v
.....	a	1780
.....	b	2634
..... f n	c	3403 v
..... i	d	4950
..... d l	e	5585
.....	f	6063 v
..... O	g	8482
..... k	h	8946 v
.....	i	9528
..... m g	j	9596
..... b	k	10432
..... h	l	10573
..... c	m	10608
.....	n	12204

Bitmap sizes are 251, 101 and 31 pixels square, South up.		
The keys to the right refer to the 1 st 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 a01387

SWid: a01387 / **USNO id: 1356 419129 / other id: GSC 3588-4281**

Co-ordinates, x,y in image z1051: 2765.5 704.2

J2000 sky co-ordinates: 21 11 5.91 +45 36 1.65

CMC r'magnitude and 2MASS J,H,K magnitudes: 11.861 10.611 10.564 10.525

USNO B1.0 magnitudes, B1,R1,B2,R2,I2: 11.44 11.1 12.73 11.61 10.89

Misc comments :

A fascinating eb type star with a period 1.8710 or so I thought, see below.

To ref 166, magm 11.517, magr 0.560 . This star needs more work on the period

This star needs more work on the period. I've not yet got a best answer for certain, results in 'v' differ from 'z'. See 20a. p84.

More thought reveals that I have the half period, there are two mins, min1 gets to 12.15 and min2 to 12.12 giving depths of 0.603 and 0.633 mag. It is slightly elliptical with phase1 -phase2 of 0.5149. The half width of the minima look a little different at m1=0.054 and m2=0.056. The best period I've found so far is 3.7470d by overlay inspection. However, by using a modified 'period'* which adjusts for ellipticity and using all complete mins (20 of them mins1387) I get a period of 3.746682 with a phase of .0145 where the phase is defined as the amount by which the secondary minimum is moved forward as a fraction of the full period, so .0145 (+0.5) is pretty close to the .5149 I've seen on the overlay plots. That gives a mod average error on the minima of 0.0033d with a mean error of 0.0006d.

epoch 1690.8 and 1338.57 are equivalent

Most likely period average 2003 to 2007 is 3.746682d +/- .000002d

Comparison reference star(s) co-ordinates:

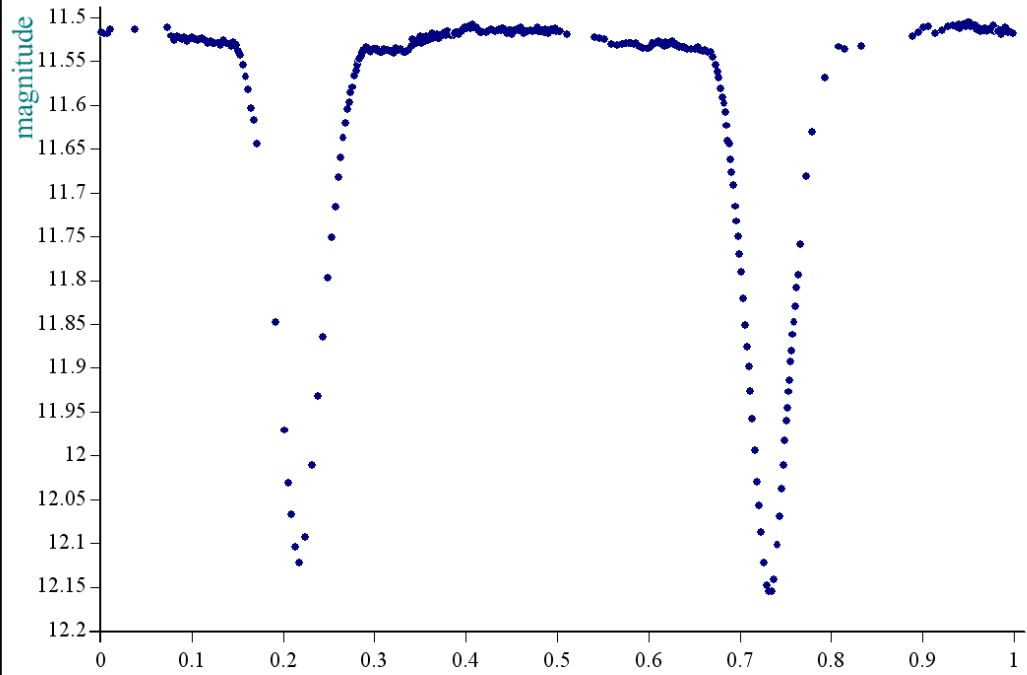
a00166: 21 11 0.15 +45 21 39.61

*these cryptic references refer to programs written in an APL workspace by SW

Reminder:

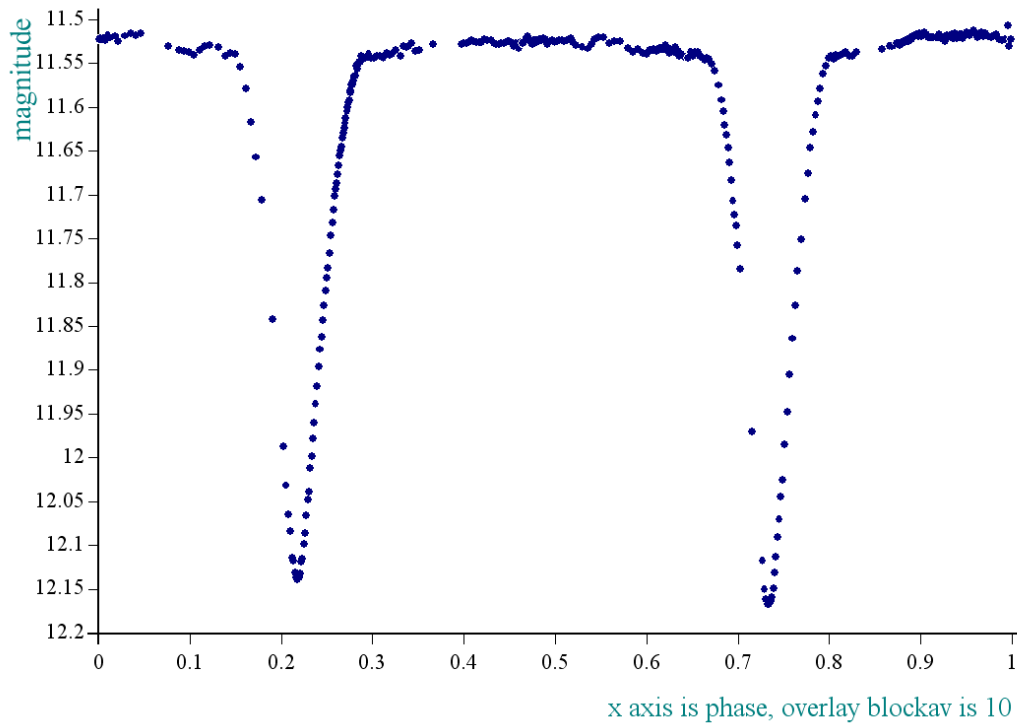
season 1: dates 1316 to 1553 is 9/8/2003 to 3/4/2004	(a)
season 2: dates 1696 to 1838 is 23/8/2004 to 12/01/2005	(z)
season 3: dates 2085 to 2177 is 16/9/2005 to 17/12/2005	(y)
season 4: dates 2442 to 2755 is 8/9/2006 to 19/7/2007	(w)
season 5: dates 2772 to 2903 is 4/8/2007 to 13/12/2007	(v)
season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

star a1387 in dates 1702-1838, dia 10, ref a166, epoch is 1690.8, period is 3.746682



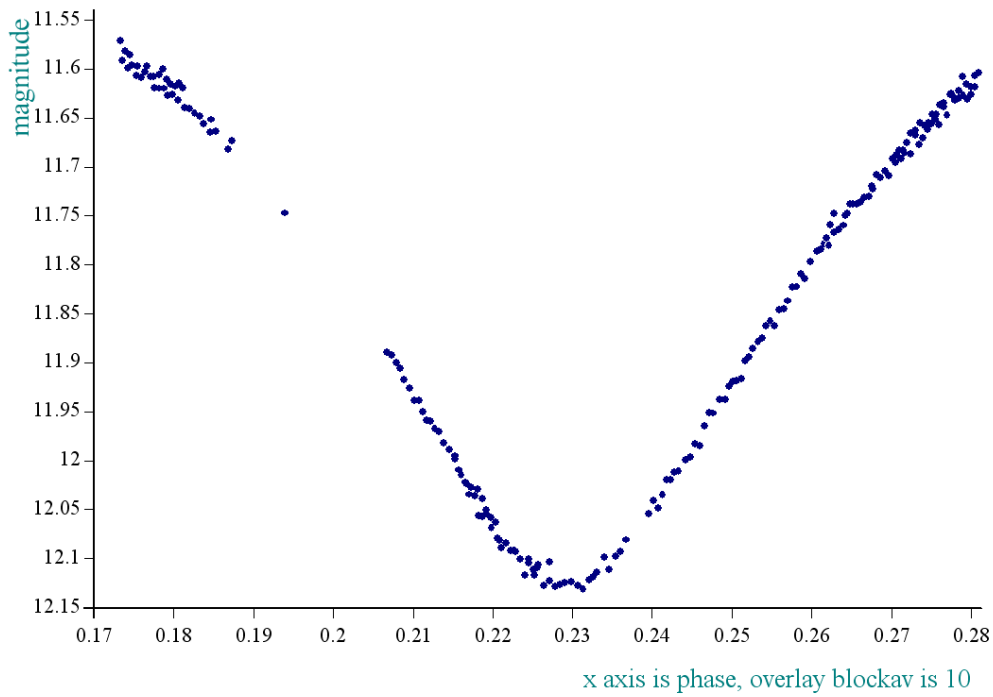
• created at 17 36 on 28-5 -2008 phase plot, plot No S8488

star a1387 in dates 2772-2903, dia 10, ref a166, epoch is 1690.8, period is 3.746682



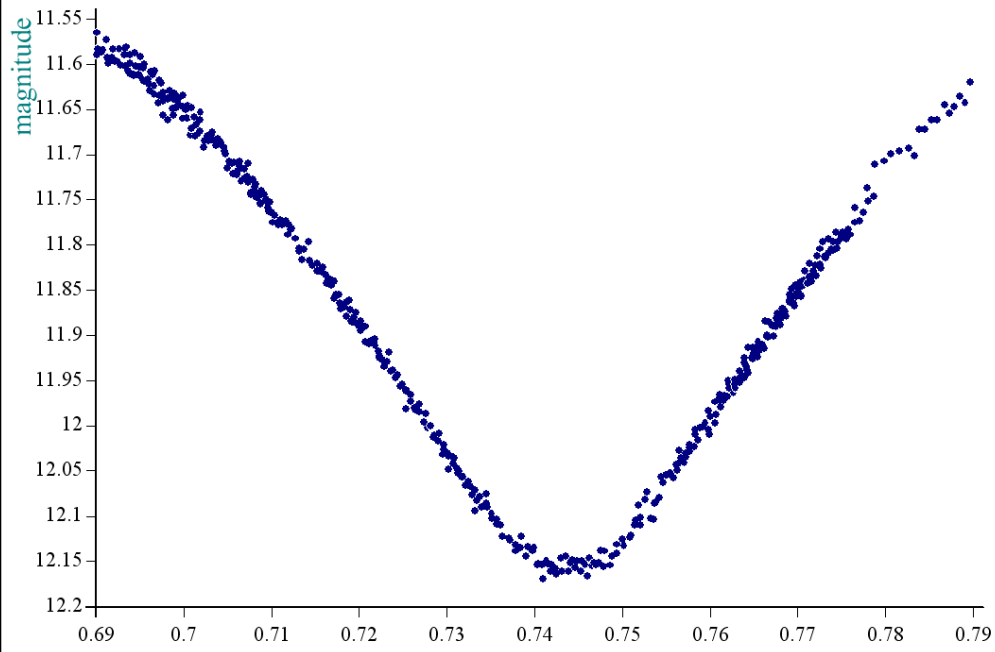
• created at 17 24 on 28-5 -2008 phase plot, plot No S8464

star a1387 in dates 1702-1838, dia 10, ref a166, epoch is 1338.57, period is 3.746682



• created at 23 33 on 28-5 -2008 phase plot, plot No S8534

star a1387 in dates 1702-1838, dia 10, ref a166, epoch is 1338.57, period is 3.746682



• created at 23 31 on 28-5 -2008 phase plot, plot No S8530