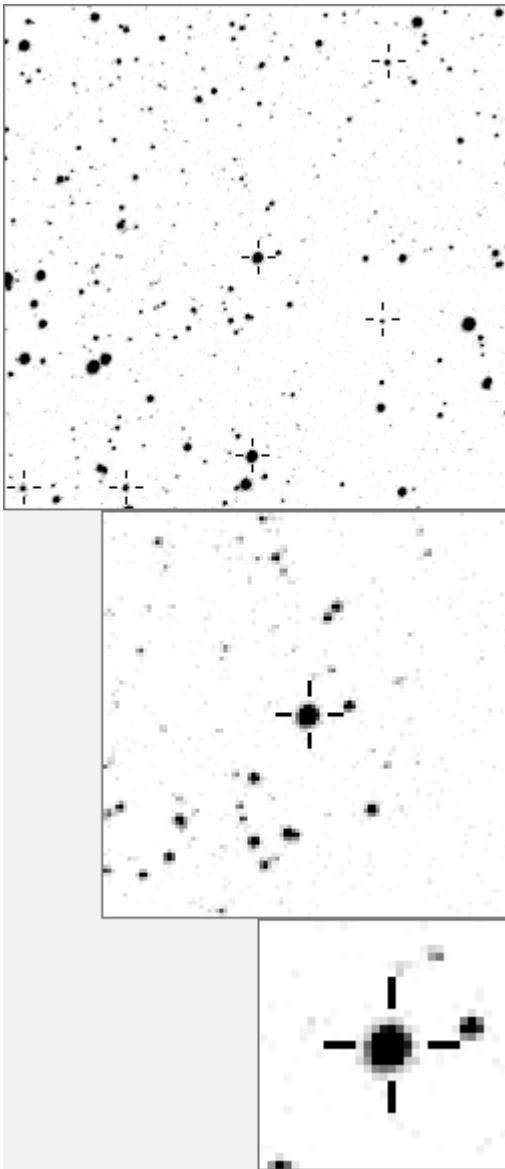


a01410



variables & brighter stars	
.....h..	O 1410 v
e.....l..	a 446
.....	b 576
.....	c 940 v
.....	d 1214
.....	e 1238
.....	f 1240
.....O.....	g 1254
.i.....	h 1510
.....n.a.	i 2251
g.d.....	j 2903
.....j	k 10997 v
.....	l 11721 v
.....c.....	m 12431 v
m.k.f.....	n 20255 v

.....m.....	O 1410 v
.....n.....	a 11570
.....	b 12101
.....i.....	c 13343
.....	d 14529
.....	e 16289
.....	f 17297
.....O.e.....	g 17631
.....	h 18877
.....d.....	i 20724
k.....a.....	j 21018
.g.c.b.....	k 24644
.f.c.....	l 26244
.l.j.....	m 30409
.....	n 33007

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 a01410

SWid: a01410 / **USNO id: 3592 640601 / other id:**

Co-ordinates, x,y in image z1051: 2048.2 3020.5

J2000 sky co-ordinates: 21 8 22.33 +47 8 3.73

CMC r'magnitude and 2MASS J,H,K magnitudes: 11.432 10.843 10.693 10.514

USNO B1.0 magnitudes, B1,R1,B2,R2,I2: 11.44 11.07 11.31 11.06 10.95

Misc comments :

- this star moves up to 8%, occ dips, irreg, not edgy or prox
- there is no doubt that it is moving and dippy, an excellent rounded minimum in 1355
- it seems to have a fairly well defined overlay at period of 2.362,3,4 to ref446 in 'z's
- but that does not happen in other years - it's an irregular fader!
- In zlongs it has a good curve at 2.362/5.. not sure about this one...

Comparison reference star(s) co-ordinates:

a00190: 21 7 49.8 +47 11 43.08

a00446: 21 8 46.93 +47 9 22.71

colour temperature estimate: 10128K

This seems to be an irregularly varying hot star. No period can be found up to 10days.

When revised, new plots and CMC mags are required

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)

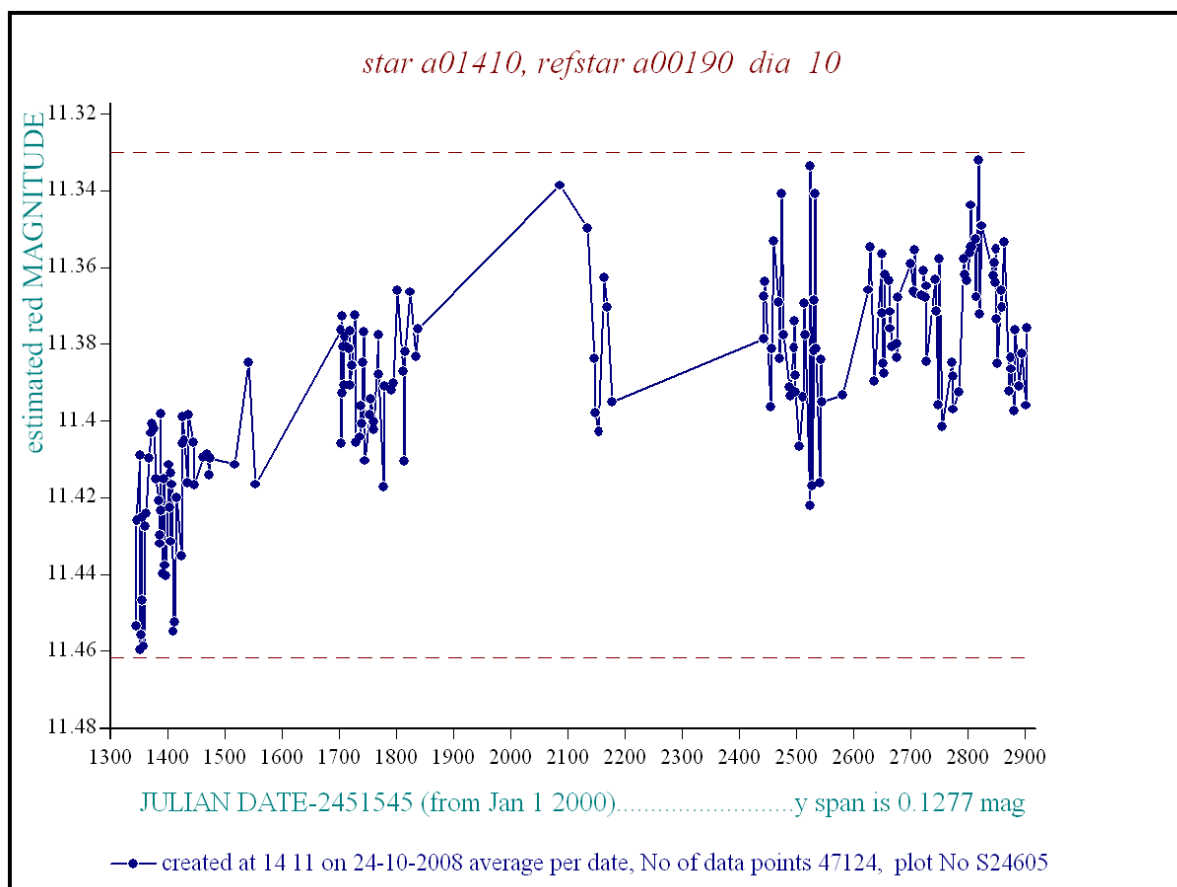
season 3: dates 2085 to 2177 is 16/9/2005 to 17/12/2005 (y)

season 4: dates 2442 to 2755 is 8/9/2006 to 19/7/2007 (w)

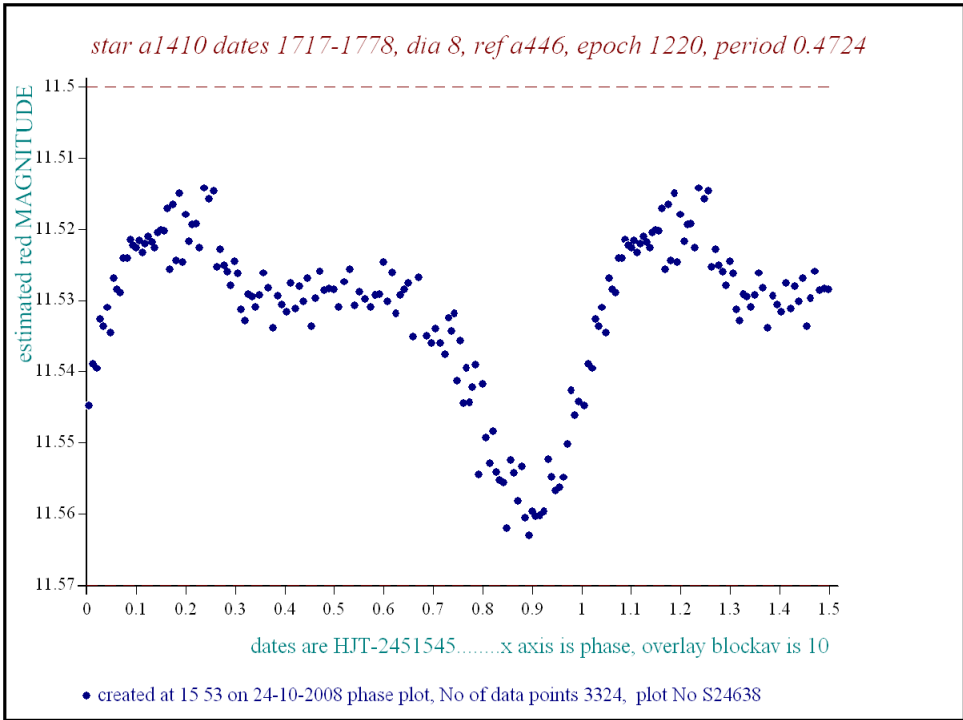
season 5: dates 2772 to 2903 is 4/8/2007 to 13/12/2007 (v)

season 6: dates 2930 to 3266 is 9/1/2008 to 10/12/2008 (u)

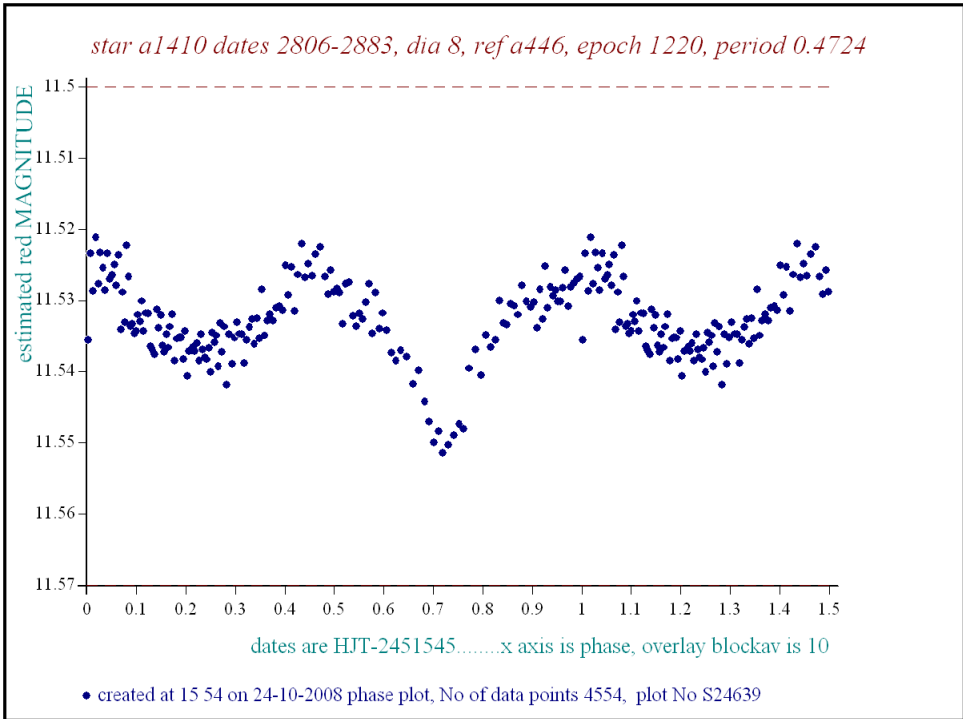
season 7: dates 3403 to 3539 is 26/4/2009 to 10/9/2009 (t)



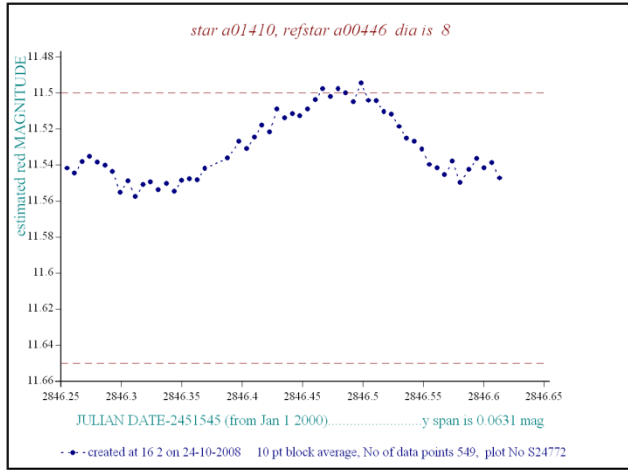
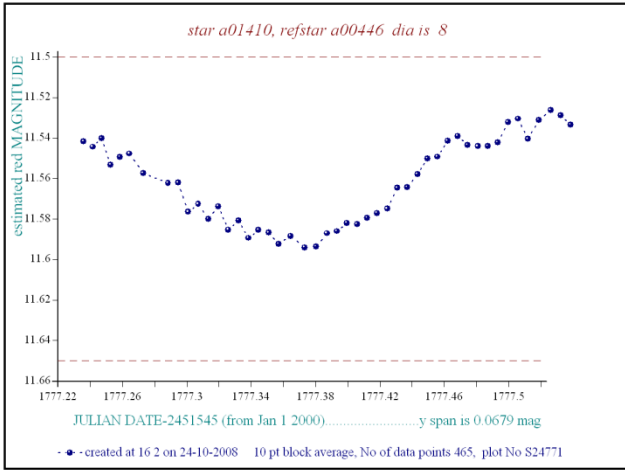
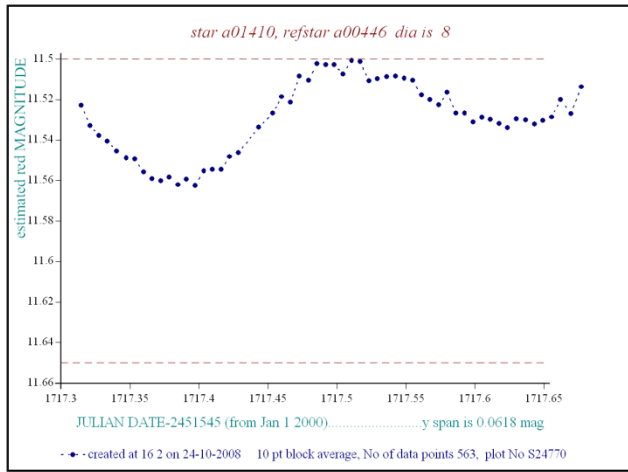
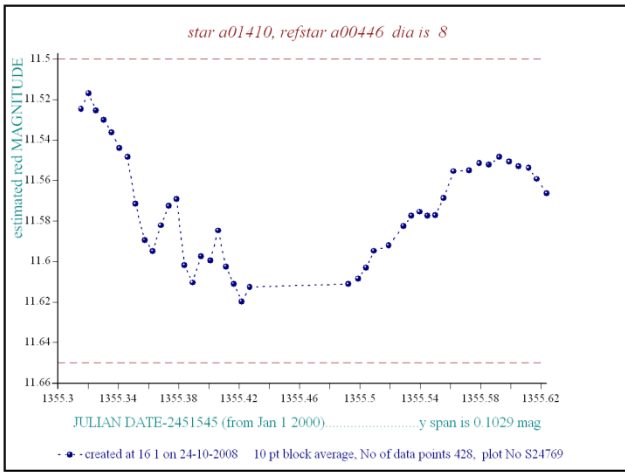
This star seems to have risen slightly in brightness since 2003. It varies irregularly by a few 10's of mmags (up to 70 in the red filter, more without it). These variations are about three times greater than a close star of similar brightness (1220)



These patterns can only be obtained if just the set of longer dates are used and they may be diurnal artifacts of some kind, though the shape and period is similar in the illustrations from 2004 and 2007. More work needed!



A selection of dates where significant movement occurs is shown below. These are 10 point blockaverages of single nights. The first image below is from the early part of the 2003 season (up to date 1360) when no red filter was fitted (only an IR block) and as this is a hot star greater movement may be expected and is seen.



For comparison two of the above dates are plotted below with a near check star (1220) to the same reference star

