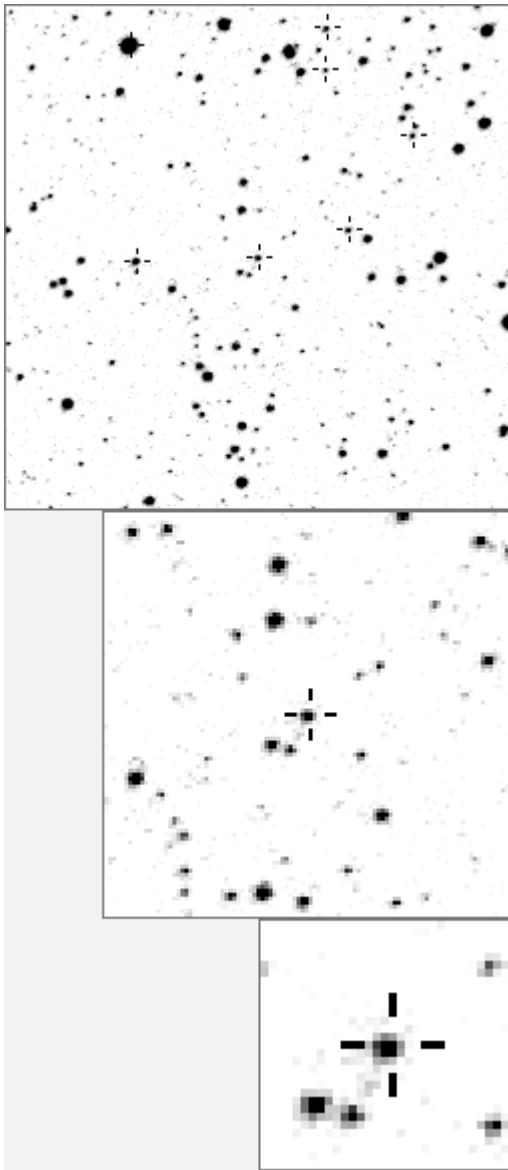


a12030



variable and brighter stars			
. d . . k b	O 12030	v	
. . . a h n	a 152	v	
.	b 1309		
.	c 1336		
.	d 1490		
.	e 1528		
.	f 1560		
. . . j O c . . .	g 1575		
.	h 2448		
.	i 2533		
.	j 7433	v	
. f i	k 13138	v	
.	l 16885	v	
.	m 17254	v	
.	n 20050	v	

. j k	O 12030	v	
.	a 6694		
.	b 7281		
.	c 7382		
. n . a	d 7704		
.	e 12058		
.	f 12750		
.	g 13618		
.	h 15396		
. d	i 16885	v	
.	j 18351		
.	k 19051		
.	l 19223		
.	m 19772		
. l b . g	n 23341		

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 a12030

SWid: a12030 / **USNO id: 1357 416761 / other id:**

Co-ordinates, x,y in image z1051: 2636.6 873.8

J2000 sky co-ordinates: 21 10 36.97 +45 42 45.68

CMC r'magnitude and 2MASS J, H, K magnitudes: 13.632 9.794 8.739 8.404

USNO B1.0 magnitudes, B1, R1, B2, R2, I2: 16.46 13.17 16.1 13.27 12.92

Misc comments :

oct09 mpv irreg, to multi, m13.50, 0.11mag 20-30d T3843 °K

Comparison reference star(s) co-ordinates:

a11716: 21 10 57.99 +45 43 9.87

a12058: 21 10 41.26 +45 43 44.58

a13618: 21 10 36.8 +45 44 36.29

a17040: 21 10 54.47 +45 46 0.29

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)**

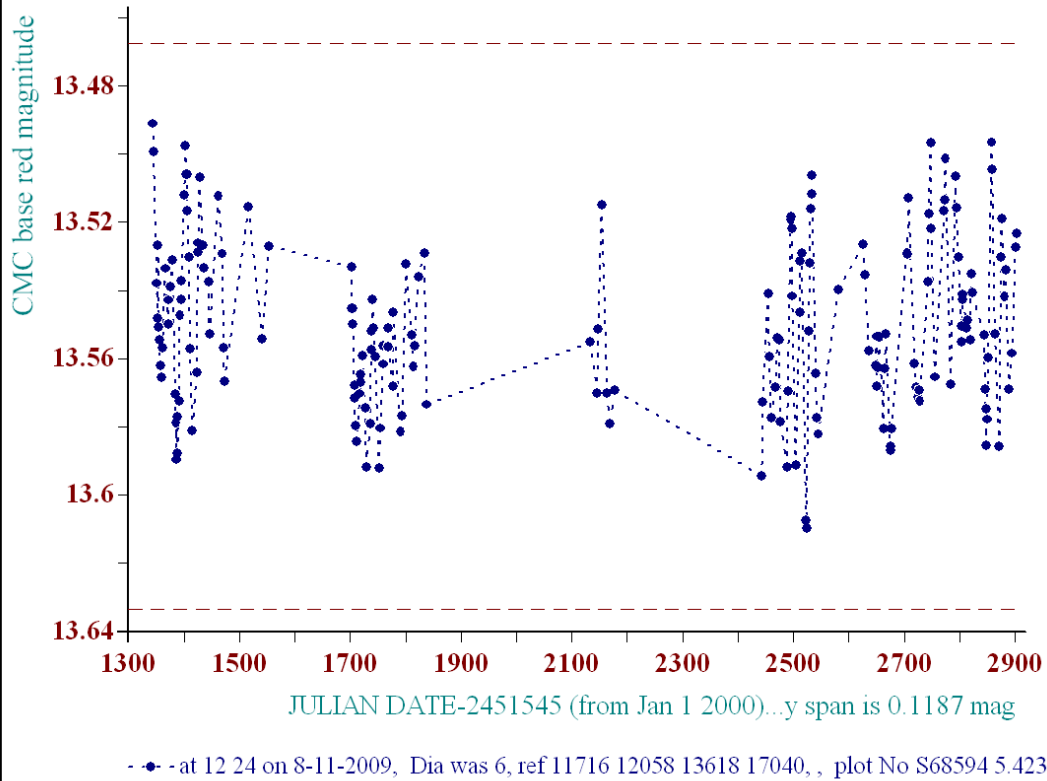
season 4: dates 2442 to 2755 is 8/9/2006 to 19/7/2007 **(w)**

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

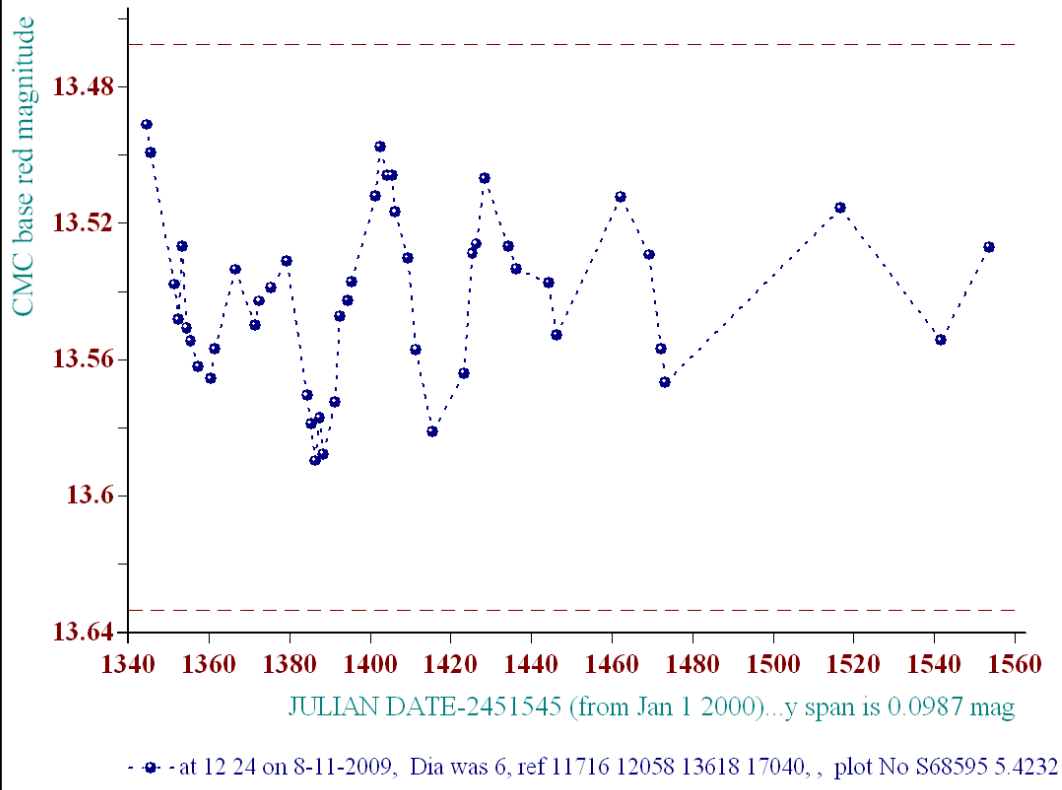
season 6: dates 2930 to 3266 is 9/1/2008 to 10/12/2008 **(u)**

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

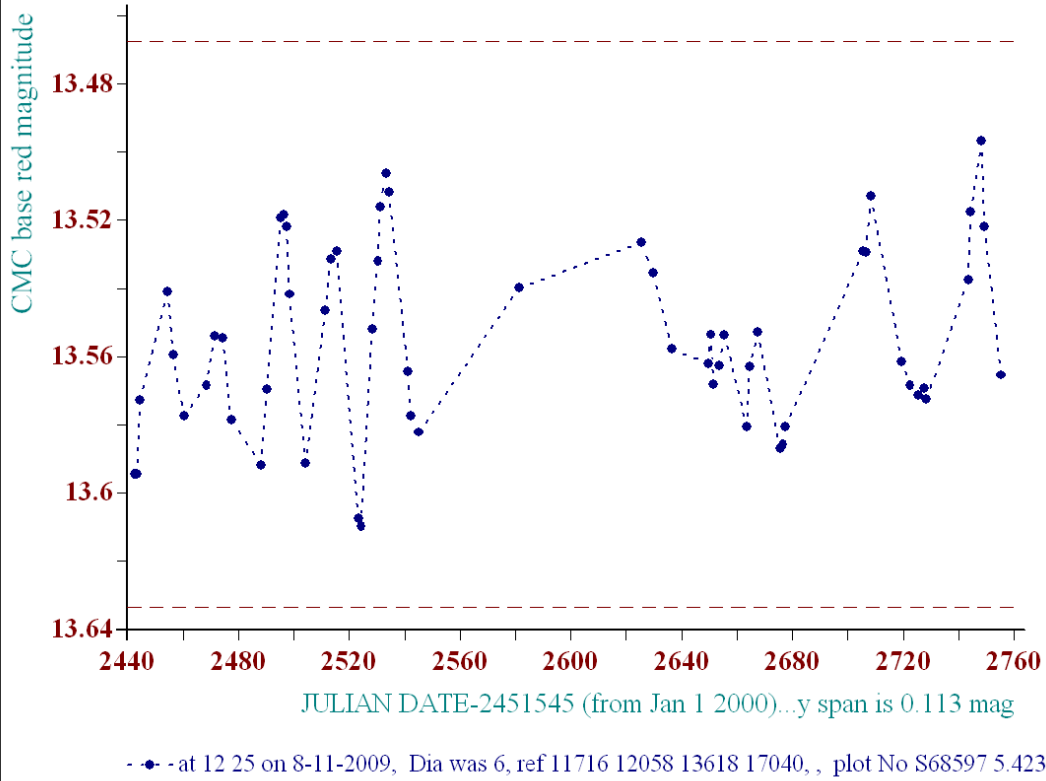
Average per date plot, star a12030



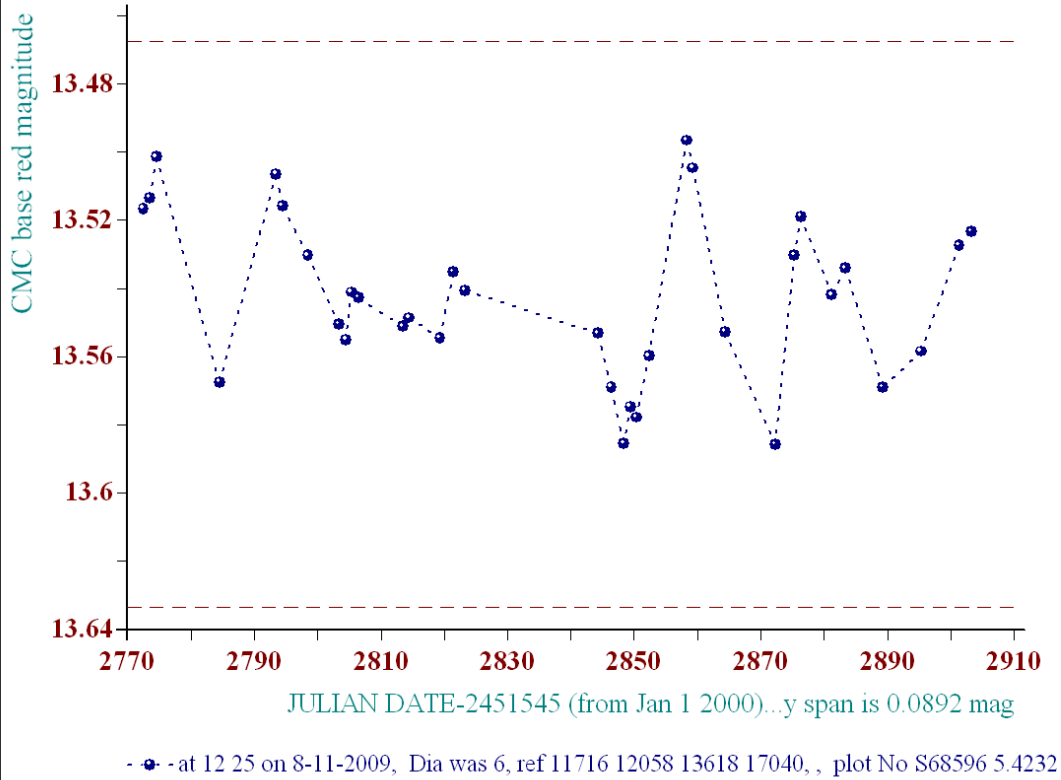
Average per date plot, star a12030



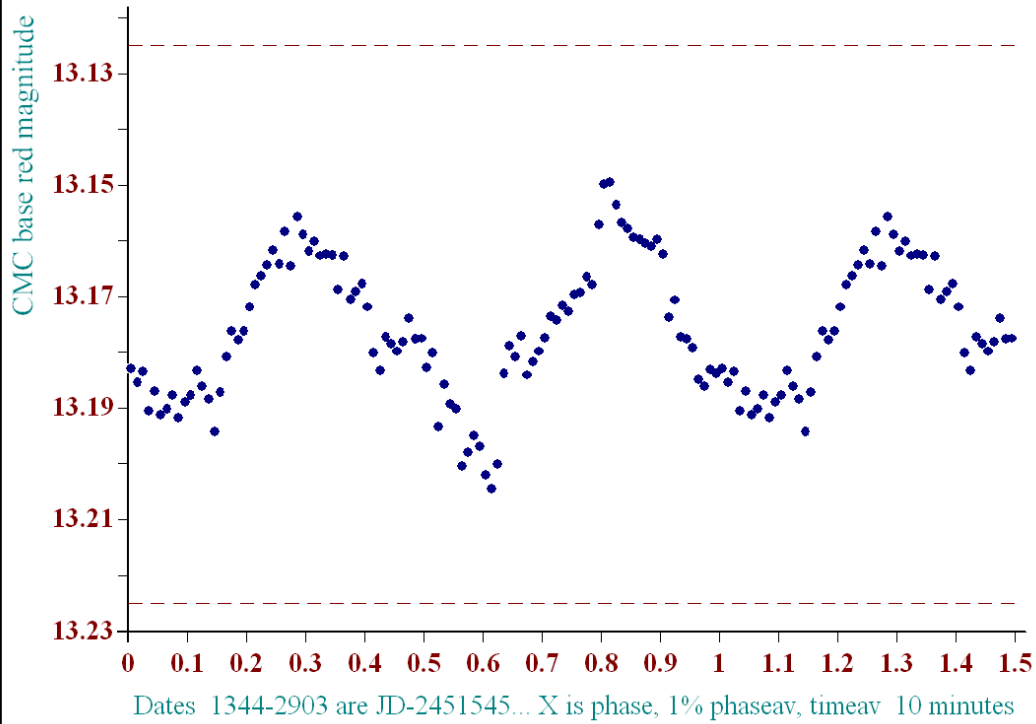
Average per date plot, star a12030



Average per date plot, star a12030

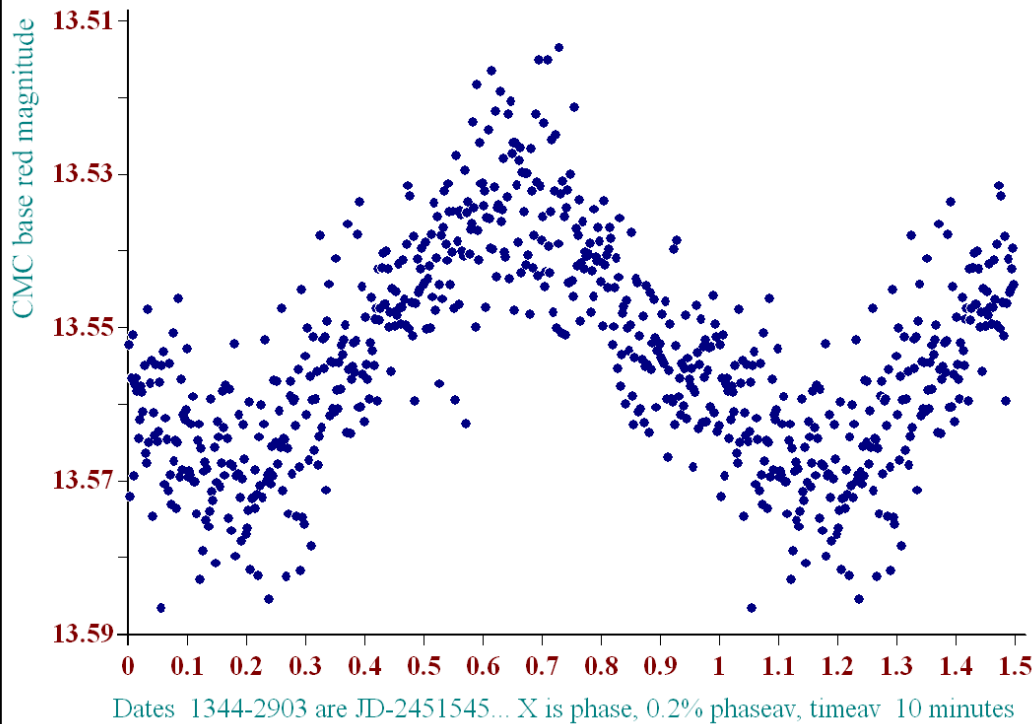


Phase Plot, Star a12030 period 2.098d



• created at 23 23 on 7-10-2009, phase plot, Dia was 6, ref a11716 12058 13618 17040c, epoch 1300, plot No

Phase Plot, Star a12030 period 1.04899d



• at 12 26 on 8-11-2009, Dia was 6, ref a11716 12058 13618 17040c, epoch 1300, plot No S68601 1.04899