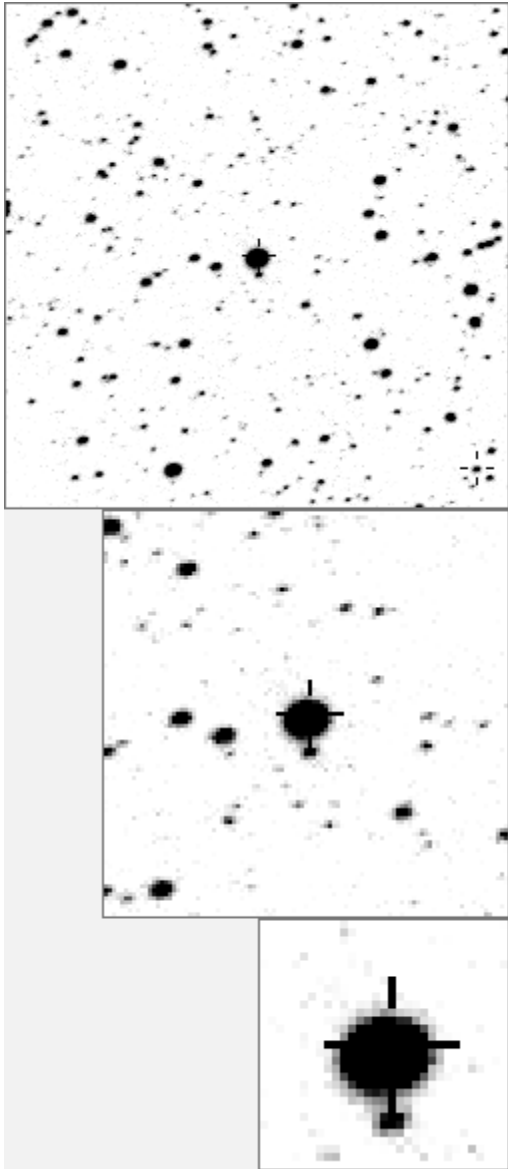


a00012



variables & brighter stars					
.	.	.	O 12 v		
.	g	.	i 400		
.	.	.	b 922		
.	.	.	c 966		
.	.	.	d 2074		
.	.	.	e 2089		
.	.	.	d 2089		
.	.	.	k e 2204		
.	.	O	.	l 2304	
.	j	.	.	c 3044	
.	.	.	.	f 3335	
.	h	.	b	n 3395	
.	.	.	.	k 3599	
.	.	.	.	l 3670	
.	a	.	.	m 8865 v	
.	.	.	.	n 19912 v	

c	.	n	.	O 12 v	
.	.	.	.	a 3044	
.	e	.	.	b 3795	
.	.	.	k j	c 3945	
.	.	.	.	d 4976	
.	.	.	.	e 6179	
.	.	.	m	f 7923	
.	d	.	O	.	g 12802
.	b	.	g	.	h 19826
.	i 22055
.	j 22107
.	i	.	.	f	k 22548
.	l 25381
.	a	.	.	.	m 26967
l	n 27401

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

Data and comments on star a00012

SWid: a00012 / **USNO id: 3588 756501 / other id: BD+45°3379**

Co-ordinates, x,y in image z1051: 644 2063.4

J2000 sky co-ordinates: 21 2 58.97 46 29 28.34

CMC r'magnitude and 2MASS J,H,K magnitudes: 0 0 0 0

USNO B1.0 magnitudes, B1,R1,B2,R2,I2: 11.22 8.65 10.23 8.58 7.76

Misc comments :

1 smooth sinusoidal in 2003, period 28d, max amp 0.233mag, irreg 2004, 28d visible in 2006, some missing in 2007

R: An M4-6 star, but the parallax implies $M_V \sim +6.3$. Well-marked oscillations in 2003/4, but period is variable. $P_{best} \sim 29.7-30.9$ for 2003/4, but this yields a noisy light curve. Possible to fit 2007/8 data with $P = 84.5$ d or $P = 95.6$ d. Perhaps a period around 42 d. Perhaps a multi-periodic red giant, with the parallax badly wrong.

It falls among the semi-regular variables in the IR two-colour diagrams.

S: magm is 8.1 to 253

Comparison reference star(s) co-ordinates:

76: 21 2 45.65 46 19 18.04 // 400: 21 3 42.16 46 26 30.99

161: 21 2 0.96 46 18 46.28 // 253: 21 2 48.84 46 33 37.9

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)

