

COMMISSIONS 27 AND 42 OF THE IAU  
INFORMATION BULLETIN ON VARIABLE STARS

Number 4609

Konkoly Observatory  
Budapest  
6 July 1998

*HU ISSN 0374 – 0676*

**ACCURATE POSITION ESTIMATES FOR KNOWN VARIABLES**

GLENN GOMBERT

1041 Yorkshire Place, Dayton, Ohio 45419 (gleng@infinet.com)

The continued operation of the Amateur Sky Survey (Droege and Gombert 1998), Dayton, Ohio station, has resulted in accurate position estimates for a number of known variables found in the General Catalog of Variable Stars (Kholopov et al. 1985). These are observed three or more times from July 1997 to May 1998. Table 2 gives the variable name along with its position precessed to J2000 coordinates.

The data was taken with three custom-made CCD cameras using Kodak KAF-0400 chips and 135 mm camera lenses operating in drift-can (Time Delay Integration) mode. More information on the Amateur Sky Survey project can be found on the TASS Home Page maintained by Michael Richmond at the URL <http://www.tass-survey.org>. Data was reduced using a suite of astrometric/photometric programs written by Arne Henden (Henden and Kaitchuck 1982) of the United States Naval Observatory, Flagstaff station.

An analysis of Dayton TASS data was performed by Michael Richmond as a part of a poster paper presented at the Summer, 1998 AAS meeting. The paper itself can be found on the TASS Home Page under the “Meetings” section (Richmond et al. 1998). A number of stars (12,801) in the Tycho catalog were compared with corresponding entries from the Dayton TASS master photometry file (~93,000 stars). Star positions and corresponding measurement accuracy is summarized in Table 1.

Table 1

Tycho V mag	#stars	std. error of mean (arcsec)	st.dev. of mean (arcsec)
7 < V < 9	2075	0.97	0.85
9 < V < 11	9301	1.45	1.67
11 < V < 15	1425	1.97	2.10

Table 2

Name	RA (J2000)	DEC	Name	RA (J2000)	DEC
RY Psc	0 <sup>h</sup> 11 <sup>m</sup> 41 <sup>s</sup> .3	-1°44'55".7	AA Aql	20 <sup>h</sup> 38 <sup>m</sup> 15 <sup>s</sup> .1	-2°53'39".1
VV Cet	0 <sup>h</sup> 55 <sup>m</sup> 43 <sup>s</sup> .2	-2°05'38".4	W Aqr	20 <sup>h</sup> 46 <sup>m</sup> 25 <sup>s</sup> .1	-4°05'01".1
SZ Cet	1 <sup>h</sup> 04 <sup>m</sup> 59 <sup>s</sup> .1	-2°56'24".0	TV Aqr	20 <sup>h</sup> 53 <sup>m</sup> 41 <sup>s</sup> .2	-1°38'05".9
AS Eri	3 <sup>h</sup> 32 <sup>m</sup> 25 <sup>s</sup> .2	-3°18'48".2	VW Aqr	21 <sup>h</sup> 00 <sup>m</sup> 54 <sup>s</sup> .5	-1°31'11".6
BO Eri	4 <sup>h</sup> 36 <sup>m</sup> 26 <sup>s</sup> .6	-2°40'09".5	TW Aqr	21 <sup>h</sup> 04 <sup>m</sup> 5 <sup>s</sup> .6	-2°02'42".7
FL Ori	5 <sup>h</sup> 07 <sup>m</sup> 45 <sup>s</sup> .5	-2°44'36".6	CP Aqr	21 <sup>h</sup> 10 <sup>m</sup> 12 <sup>s</sup> .8	-1°43'15".9
MV Mon	7 <sup>h</sup> 03 <sup>m</sup> 38 <sup>s</sup> .1	-3°11'12".5	RS Aqr	21 <sup>h</sup> 10 <sup>m</sup> 58 <sup>s</sup> .1	-4°01'40".1
FF Mon	7 <sup>h</sup> 06 <sup>m</sup> 35 <sup>s</sup> .7	-3°21'21".2	BL Aqr	21 <sup>h</sup> 14 <sup>m</sup> 12 <sup>s</sup> .2	-1°58'43".7
MZ Mon	7 <sup>h</sup> 16 <sup>m</sup> 18 <sup>s</sup> .8	-2°18'47".9	RR Aqr	21 <sup>h</sup> 15 <sup>m</sup> 01 <sup>s</sup> .3	-2°53'45".2
HU Mon	7 <sup>h</sup> 19 <sup>m</sup> 46 <sup>s</sup> .6	-1°59'36".2	AC Aqr	21 <sup>h</sup> 16 <sup>m</sup> 21 <sup>s</sup> .8	-2°13'42".2
TU Mon	7 <sup>h</sup> 53 <sup>m</sup> 19 <sup>s</sup> .8	-3°02'32".3	CD Aqr	21 <sup>h</sup> 19 <sup>m</sup> 59 <sup>s</sup> .5	-4°06'31".7
IL Mon	7 <sup>h</sup> 55 <sup>m</sup> 35 <sup>s</sup> .6	-3°35'40".9	DL Aqr	21 <sup>h</sup> 22 <sup>m</sup> 49 <sup>s</sup> .3	-2°47'35".5
BO Mon	7 <sup>h</sup> 59 <sup>m</sup> 50 <sup>s</sup> .2	-3°28'36".5	VZ Aqr	21 <sup>h</sup> 30 <sup>m</sup> 24 <sup>s</sup> .8	-3°00'47".9
WW Hya	8 <sup>h</sup> 57 <sup>m</sup> 46 <sup>s</sup> .4	-3°16'55".9	FF Aqr	22 <sup>h</sup> 00 <sup>m</sup> 36 <sup>s</sup> .3	-2°44'25".4
TX Hya	9 <sup>h</sup> 23 <sup>m</sup> 48 <sup>s</sup> .1	-2°05'28".7	FU Aqr	22 <sup>h</sup> 08 <sup>m</sup> 12 <sup>s</sup> .2	-2°10'11".6
CM Aql	19 <sup>h</sup> 03 <sup>m</sup> 34 <sup>s</sup> .4	-3°03'16".2	UU Aqr	22 <sup>h</sup> 09 <sup>m</sup> 5 <sup>s</sup> .5	-3°46'28".2
IK Aql	19 <sup>h</sup> 05 <sup>m</sup> 44 <sup>s</sup> .3	-2°45'18".7	FX Aqr	22 <sup>h</sup> 13 <sup>m</sup> 1 <sup>s</sup> .3	-1°43'41".2
AZ Aql	19 <sup>h</sup> 13 <sup>m</sup> 41 <sup>s</sup> .2	-2°10'08".1	FY Aqr	22 <sup>h</sup> 16 <sup>m</sup> 34 <sup>s</sup> .9	-3°48'53".6
IW Aql	19 <sup>h</sup> 15 <sup>m</sup> 46 <sup>s</sup> .9	-2°19'23".9	DY Aqr	22 <sup>h</sup> 19 <sup>m</sup> 4 <sup>s</sup> .3	-2°38'30".1
BU Aql	19 <sup>h</sup> 32 <sup>m</sup> 52 <sup>s</sup> .4	-2°02'20".4	GM Aqr	22 <sup>h</sup> 21 <sup>m</sup> 57 <sup>s</sup> .8	-2°40'01".2
BX Aql	19 <sup>h</sup> 34 <sup>m</sup> 4 <sup>s</sup> .7	-2°00'11".2	GN Aqr	22 <sup>h</sup> 22 <sup>m</sup> 18 <sup>s</sup> .7	-4°12'21".9
CD Aql	19 <sup>h</sup> 38 <sup>m</sup> 15 <sup>s</sup> .1	-4°19'02".3	GX Aqr	22 <sup>h</sup> 34 <sup>m</sup> 57 <sup>s</sup> .2	-3°42'33".1
CF Aql	19 <sup>h</sup> 40 <sup>m</sup> 26 <sup>s</sup> .2	-1°52'40".1	GY Aqr	22 <sup>h</sup> 36 <sup>m</sup> 7 <sup>s</sup> .5	-1°37'54".1
CG Aql	19 <sup>h</sup> 41 <sup>m</sup> 23 <sup>s</sup> .7	-3°21'59".8	AO Psc	22 <sup>h</sup> 55 <sup>m</sup> 17 <sup>s</sup> .9	-3°10'36".1
RR Aql	19 <sup>h</sup> 57 <sup>m</sup> 36 <sup>s</sup> .1	-1°53'11".8	AF Psc	23 <sup>h</sup> 31 <sup>m</sup> 44 <sup>s</sup> .9	-2°44'35".5
QX Aql	19 <sup>h</sup> 58 <sup>m</sup> 19 <sup>s</sup> .2	-2°27'58".3			

## References:

- Droege T.R., and Gombert G.J., 1998, The Amateur Sky Survey, Sky and Telescope February issue
- Henden, A.A. , Kaitchuck, R.H., 1982, Astronomical Photometry, Willmann-Bell Inc.
- Kholopov, P. N., editor et al., 1985, General Catalog of Variable Stars, Moscow
- Richmond, M.A., et al., Summer 1998 AAS Poster Paper, "TASS, Two Years, Two Hundred Thousand Stars and Counting"