

## THE DATABASE OF MEASUREMENTS OF THE DOUBLE STARS DISCOVERED IN BELGRADE WITH ZEISS REFRACTOR 65/1055cm, (2003.0)

G. M. Popović, R. Pavlović and I. Pakvor

*Astronomical Observatory, Volgina 7, 11160 Belgrade 74, Serbia and Montenegro*

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**SUMMARY:** At the website <http://www.aob.bg.ac.yu/staff/gpopovic/index.html> all measurements of double and multiple stars discovered in Belgrade at Zeiss Refractor 65/1055 cm in the 1951-2002 period are given. The size of database is about 310 Kb and it is available for download.

**Key words.** Catalogs – binaries: visual

### 1. INTRODUCTION

In the last few decades all double stars measurements are being submitted to the centres for double stars (Washington and Strasbourg) from where they are distributed, upon request, to interested astronomers. The measurements of pairs discovered in Belgrade are included in these databases, too.

The authors of the present paper consider that the lists of the measurements discovered in Belgrade can be kept up to date because the measurements are, from the moment of discovery, specially registered.

This would be useful for setting up an actual observation program for these pairs as well as for possible analysis of the collected material. The process of asking for the measurements from these Centers for double stars would be avoided or at least simplified. Therefore, at Belgrade Observatory an internal database was created and located at the above mentioned site. Information on this is given in the Information Circular No. 148 of IAU Commission for Double Stars. This database is already in use by astronomers at Belgrade Observatory and after putting it on Internet site it will be useful for all interested colleagues.

### 2. THE CONTENT OF DATABASE

Database contains information on 240 stellar systems (double or multiple) or 304 pairs discovered at Belgrade Observatory by its 60-cm refractor since 1951. Six astronomers participated in this program : P. Djurković with 11 discovered system, G. M. Popović with 220, D. Zulević with 1, D. Olević with 5, R. Pavlović with 2 and V. Trajkovska with 1 system. Besides, there are 15 pairs without a WDS number in the database. The total number of the pair measurements is approximately 1000.

For each pair a header is provided containing WDS number (or coordinates for epoch 2000.0), discoverer designation, and catalogues numbers for BD, HD, HIP and TYC (if they exist). The measurements are given in standard form and the measurement source is given according to Mason et al. (2001). The sample of data is shown in Table 1. From the WDS Catalogue only last updated measurement is given here.

Database can be found at  
<http://www.aob.bg.ac.yu/staff/gpopovic/index.html>  
The size is 310 Kb. Last updating was on January 8, 2003.

**Table 1.** The sample of data taken from database.

Discover.	no	Epoch	Theta	Rho	n	Magnitudes	References	Note
DJU	1	08587+3222						
DJU	1	1955.280	246.1	0.33	4	8.3 - 8.5	Dju1955b	
DJU	1	1955	246	0.3	1n	8.5 - 8.7	WDS	
DJU	2	10262+0302						
DJU	2	1954.201	180.1	1.17	2	10.0 -10.1	Dju1955a	
DJU	2	1955.331	180.7	1.01	1	10.0 -10.2	Dju1955a	
DJU	2	1964.367	178.3	1.02	2		Pop,Dju1967	
DJU	2	2000.3455	175.2:	1.11:	1		WSI2001b	
DJU	2	1964	177	1.0	4n	10.0 -10.1	WDS	
DJU	3	15118+1013						
DJU	3	1955.487	249.4	1.70	4	10.9 -12.7	Dju1955a	
DJU	3	1964.419	251.7	1.67	2	9.8 -11.8	Dju,Pop1967	
DJU	3	1968.35	256.6	1.67	2	11.0 -12.0	Cou1970c	
DJU	3	1988	247	1.8	5n		WDS	
DJU	4	19535+2405=BD+23.3820=HD 188260=HIP 97886						
DJU	4	1953.844	242.2	0.79	3	4.8 - 8.0	Dju1953c	
DJU	4	1954.69	242.7	0.81	5	-	Baz1957b	
DJU	4	1954.725	242.3	0.71	3	-	Dju1954c	
DJU	4	1954.77	243.2	0.83	3	-	Mlr	
DJU	4	1954.84	241.9	0.79	1	-	Cou	
DJU	4	1955.58	246.4	0.71	2	-	Cou	
DJU	4	1955.681	241.7	0.70	1	4.8 - 8.0	Dju1955b	
DJU	4	1955.76	240.2	0.80	3	-	Mlr1956b?	
DJU	4	1955.79	242.2	0.77	2	-	Baz1957b	
DJU	4	1956.69	244.1	0.82	2	-	Baz1957b	
DJU	4	1956.74	241.4	0.80	3	-	Mlr	
DJU	4	1957.25	242.1	0.66	5	-	VBs1960	
DJU	4	1957.61	242.5	0.74	2	-	Bos	
DJU	4	1957.73	240.9	0.71	3	-	Mlr	
DJU	4	1960.48	243.4	0.81	4	-	Baz1964	
DJU	4	1960.72	243.2	0.68	3	-	Cou	
DJU	4	1961.57	240.3	0.72	3	4.6 - 7.8	VBs1965	
DJU	4	1961.73	243.2	0.81	4	-	Baz1964	
DJU	4	1962.80	243.5	0.79	5	-	Hei	
DJU	4	1964.72	249.1	0.66	3	-	Cou1966b	
DJU	4	1964.75	241.1	0.85	4	-	Baz	
DJU	4	1965.25	246.0	0.93	4	-	Wor	
DJU	4	1965.58	242.2	0.69	5	-	Mlr1966a	
DJU	4	1967.19	241.2	0.91	3	-	Baz	
DJU	4	1968.42	240.8	0.74	3	-	Mul	
DJU	4	1970.89	241.7	0.95	3	-	Baz	
DJU	4	1977.566	243.7	0.84	2	3.5	Pop1979	
DJU	4	1978.625	241.3	1.03	2	-	WJr	
DJU	4	1979.228	250.8	1.12	4	2.2	Wor	
DJU	4	1981.7003	244.1	1.084	1		McA1984a	
DJU	4	1989.7113	245.2:	1.190:	1		Hrt2000a	
DJU	4	1991.25	244.5	1.082	1	4.57- 7.47	HIP97	
DJU	4	1991.69	247.0	1.319	1	4.63- 7.37	TYC2000a	
DJU	4	1993	248	1.2	38n		WDS	

According to component distances in the moment of discovery, the pair structure in database is as follows:

Less than 1 second of arc	:	28 pairs
Between 1 and 2 sec	:	32 pairs
Between 2 and 5	:	114 pairs
Above 5	:	130 pairs

## REFERENCES

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<http://ad.usno.navy.mil/wds/>

**ПРЕГЛЕД МЕРЕЊА ДВОЈНИХ ЗВЕЗДА ОТКРИВЕНИХ У  
БЕОГРАДУ НА ZEISS РЕФРАКТОРУ 65/1055 см, (2003.0)**

Г. М. Поповић, Р. Павловић и И. Паквор

*Астрономска опсерваторија, Волгине 7, 11160 Београд 74, Србија и Црна Гора*

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*Претходно саопштење*

На адреси <http://www.aob.bg.ac.yu/staff/gopovic/index.html> налазе се сва мерења двојних и вишеструких звезда откривених у

Београду на ZEISS рефрактору 65/1055 см у периоду 1951–2003. Величина датотеке је око 310 Kb и иста се може слободно преузети.