Publ. Astron. Obs. Belgrade No. 60 (1998), 114 – 117 *Poster*

CATALOGUE OF DOUBLE STAR OBSERVATIONS MADE AT THE BELGRADE OBSERVATORY – CDSO

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Abstract. Information is presented about the newly formed data base at the Belgrade Observatory.

1. INTRODUCTION

The computation of the double star orbits at the Belgrade Observatory has been carried out from 1960 on, whereby the selection of the suitable pairs occupied from the beginning an important and prominent place in the process. The complete list of the measurements has been and remained the basic prerequisite of the successful selection of pairs. Very often the time consumed for completeing the measurement lists exceeded the one necessary for the orbit computation. Nevertheless, the measurement lists frequently remain uncomplete. Taking over the data from the Double Star Centre in previous time was practiced satisfactorily but difficulties are being met over several years already. Even on the assumption everything is functioning perfectly in the transfer of the observational data, the availability of the complete list remains the basic prerequisite in the orbit computation. It may make sense asking from the Centre the complete list only for the potentially suitable pairs but their defining is possible with possessing one's own data base. For this reason the observers and the orbit authors of the Belgrade Observatory decided on the keeping their internal data base of the double star measurements, apt to shorten the time needed for the orbit calculation. Many double star observers throughout the world are in possession of such data bases. At the Belgrade Observatory too, data bases of the double star observations have been kept from the very foundation of the Double and Multiple Star Group in 1951, however only for the pairs observed in Belgrade. Later on, the data base was enlarged to include other pairs too, but this work was interrupted during the years of computer technique being introduced.

2. CATALOGUE OF DOUBLE STAR OBSERVATIONS – CDSO

The computer recording of double star data was started in Belgrade in February 1996. This data base was named by the authors "Catalogue of Double Star Observations" or CDSO for short. It contains at present about 35 000 entries from upward of 100 references, among them also complete mesurements made at the Belgrade Observatory

at the Zeiss Refractor 65/1055 cm along with the interferometric measurements (Mc. Alister 1988). Measurements made by many authors are entered (References), however complete achievements of some authors have not yet been finished. Entering the series of W. D. Heinz and P. Baize is intensively being worked on. Shorter measurement series have precedence over those more extensive on account of time. The observing data from the measurement series are entered in the following order:

- ADS number – in default of it – the discovere's designation, IDS number or BD number, in that sequence
- time of observation
- position angle
- separation of components
- number of measurements
- designation of system's multiplicity
- apparent magnitudes or difference of apparent magnitudes, if given
- observer's designation and notes, if any.

A few series were taken over from INTERNET by R. Pavlović, adapted to the catalogue form. The Catalogue is Being Realized as an ensamble of measurement series, with the possibility of singling out all the measurements of a particular pair. It had been planed several collaborators to participate in the data recording, but for the time being the whole business fell on this Catalogue's authors, aided by two students. The work on data entering will be continued. The justification of this project manifested itself alread during the brief two years period, although this data base was used only by the orbit authors in Belgrade. In the cited References are all the measurements series contained in the Catalogue up to now. The References are given in the alphabetical order of the authors.

3. CONCLUSION

The elaboration of the Catalogue of Double Star Observations – CDSO serves an important purpose: substantially enhancing the efficiency of future work of the double star astronomers at the Belgrade Observatory.

Acknowledgements

The Authors are thankful to the students D. Djokić and M. G. Popović for their being helpful at providing some of data.

References

Baize P. M., 1928: J.O., **XI**, 46-48
Baize P. M., 1935: J.O., **XVIII**, 65-72
Baize P. M., 1935: J.O., **XVIII**, 89-92
Baize P. M., 1935: J.O., **XVIII**, 148-152
Baize P. M., 1936: J.O., **XIX**, 63-72
Baize P. M., 1936: J.O., **XIX**, 85-92

Baize P. M., 1937: J.O., **XX**, 60-68
Baize P. M., 1937: J.O., **XX**, 97-104
Baize P. M., 1937: J.O., **XX**, 111-119
Baize P. M., 1938: J.O., **XXI**, 141
Baize P. M., 1938: J.O., **XXI**, 161-168
Baize P. M., 1939: J.O., **XXII**, 11-16
Baize P. M., 1939: J.O., **XXII**, 169-180
Baize P. M., 1939: J.O., **XXII**, 205-216
Baize P. M., 1940: J.O., **XXIII**, 49-52
Baize P. M., 1940: J.O., **XXIII**, 56-64
Baize P. M., 1943: J.O., **XXVI**, 68-72
Baize P. M., 1943: J.O., **XXVI**, 97-104
Baize P. M., 1944: J.O., **XXVII**, 29-40
Baize P. M., 1945: J.O., **XXVIII**, 1-16
Baize P. M., 1945: J.O., **XXVIII**, 41-58
Baize P. M., 1948: J.O., **XXXI**, 99-112
Baize P. M., 1948: J.O., **XXXI**, 138-144
Baize P. M., 1948: J.O., **XXXI**, 151-160
Baize P. M., 1952: J.O., **XXXV**, 5-12
Baize P. M., 1952: J.O., **XXXV**, 16-24
Baize P. M., 1952: J.O., **XXXV**, 27-36
Baize P. M., 1954: J.O., **XXXVII**, 73-111
Baize P. M., 1964: J.O., **47**, 1-26
Barbier M. D., 1934: J.O., **XVII**, 146-148
Bos W.H.van den, 1958: Lick Obs. Bull. Nu 558.,63 -78.=A.J. **63**,63-78
Bos W.H.van den, 1963: Lick Obs. Bull. Nu 583.,57 -66.=A.J. **68**,57-66
Camichel H., 1956: J.O., **XXXIX**,198-199
Couteau P., 1954: J.O., **XXXVII**,37-48
Couteau P., 1957: J.O., **40**,113-125
Couteau P., 1964: J.O., **47**, 229-246
Couteau P., 1967: J.O., **50**,41-57
Clouet B., Sagot R. 1958: J.O., **41**,31-39
Danjon M. A., 1952: J.O., **XXXV**,86-95
Duruy M. M., 1937: J.O., **XX**,142-144
Duruy M. M., 1938: J.O., **XXI**,97-100
Duruy M. M., 1940: J.O., **XXIII**,22-35
Duruy M. M., 1940: J.O., **XXIII**,146-148
Duruy M. M., 1943: J.O., **XXVI**,17-19
Erceg V., 1978: Bull. Obs. Astron. Belgrade, **129**,22-24
Erceg V., 1979: Bull. Obs. Astron. Belgrade, **130**,37-39
Fokker A.D., 1951: Bull. Astron. Inst. Netherlands, **XI**, No430, 365-377
Fatou M.P., 1928: J.O., **XI**,76-81
Giacobini M., 1938: J.O., **XXI**,33-35
Heintz W.D., 1978: Ap. J. Suppl., **37**,343-370
Heintz W.D., 1980: Ap. J. Suppl., **44**,111-136
Heintz W.D., 1983: Ap. J. Suppl., **51**,249-268
Høg E., 1961: J.O., **44**,78-80
Holden F., 1963: J.O., **46**,131-144
Jasinta D.M.D., Soegiartini E., 1994: Astron. Astrophys. Supp. Ser.**107**,235
Korbut I.F., 1947: Izvestija G.A.O. Pulkovo, **XVII**, 97-114
Luplau C.-Janssen, 1955: J.O., **XXXVIII**,106-108
McAlister H.A., Hartkopf W.I., 1988: *Second Catalog of Interferometric Measurements of Binary Stars*, Version 1988 October, Georgia State University, *CHARA Contribution* No. 2, 1988).
Muller M.P., 1938: J.O., **XXI**,113
Muller M.P., 1946: J.O., **XXIX**,83-86
Muller M.P., 1947: J.O., **XXX**,105-112

Muller M.P., 1950: J.O., **XXXIII**,95-99
Muller M.P., 1950: J.O., **XXXIII**,106-120
Muller M.P., 1952: J.O., **XXXV**,95-100
Muller M.P., 1954: J.O., **XXXVII**,125-135
Muller M.P., 1954: Lick Obs. Bull. Nu 530., 115-123.= A.J., **59**,388-396
Muller M.P., 1956: J.O., **XXXIX**,127-133
Muller M.P., 1956: J.O., **XXXIX**,181-192
Muller M.P., 1958: J.O., **41**,109-114
Muller M.P., 1966: J.O., **49**,335-340
Muller M.P., 1970: Astr. Astrophys. Suppl., 1,399-407
Olevic D., 1975: Bull. Astron. Obs. Belgrade, **126**,42-46
Olevic D., 1977: Bull. Astron. Obs. Belgrade, **128**,33-36
Popovic G.M., 1974: Pub. Obs. Astron. Beograd, **19**,1-235
Popovic G.M., 1975: Bull. Astron. Obs. Belgrade, **126**,35-42
Popovic G.M., 1975: Bull. Astron. Obs. Belgrade, **126**,47-49
Popovic G.M., 1977: Bull. Astron. Obs. Belgrade, **128**,30-32
Popovic G.M., 1977: Bull. Astron. Obs. Belgrade, **128**,37-46
Popovic G.M., 1979: Bull. Obs. Astron. Belgrade , **130**,28-36
Popovic G.M., 1981: Bull. Obs. Astron. Belgrade, **131**,23-26
Popovic G.M., 1982: Bull. Obs. Astron. Belgrade, **132**,34-44
Popovic G.M., 1983: Bull. Obs. Astron. Belgrade, **133**,31-37
Popovic G.M., 1984: Bull. Obs. Astron. Belgrade, **134**,60-68
Popovic G.M., 1986: Bull. Obs. Astron. Belgrade, **136**,49-52
Popovic G.M., 1986: Bull. Obs. Astron. Belgrade, **136**,84-90
Popovic G.M., 1988: Bull. Obs. Astron. Belgrade, **138**,55-62
Popovic G.M., 1991: Bull. Obs. Astron. Belgrade, **144**,39-45
Popovic G.M., Zulevic D.J., 1993: Bull. Astron. Belgrade, **147**,45-62
Popovic G.M., Pavlovic R., 1994: Bull. Astron. Obs. Belgrade,**150**,109-116
Popovic G.M., Zulevic D.J., 1989: Bull. Astron. Belgrade, **140**,83-97
Popovic G.M., Pavlovic R., 1997: Astron. Astrophys. Suppl. Ser., **123**,487-493
Pretre P., 1954: J.O., **XXXVII**,25-30
Soulie G., 1966: J.O., **49**,359-362
Wieth-Knudsen N., 1956: J.O., **XXXIX**,193-97
Wieth-Knudsen N., 1956: J.O., **XXXIX**,201-206
Woolley R.v.d.R., Jones D.H.P., Candy M.P., 1961: Royal Obs.Bull.**38**, London
Worley E.C., 1960: Lick Observatory Bulleten 564, 156-162
Worley E.C., 1963: Lick Observatory Bulleten 584, 115-120
Zulevic D.J., 1976: Bull. Astron. Obs. Belgrade, **127**,20-32
Zulevic D.J., 1977: Bull. Astron. Obs. Belgrade, **128**,47-53
Zulevic D.J., 1988: Bull. Obs. Astron. Belgrade, **138**,63-75
Zulevic D.J., 1979: Bull. Obs. Astron. Belgrade, **130**,20-27
Zulevic D.J., 1981: Bull. Obs. Astron. Belgrade, **131**,27-32
Zulevic D.J., 1982: Bull. Obs. Astron. Belgrade, **132**,25-33
Zulevic D.J., 1983: Bull. Obs. Astron. Belgrade, **133**,38-44
Zulevic D.J., 1984: Bull. Obs. Astron. Belgrade, **134**,69-77
Zulevic D.J., 1986: Bull. Obs. Astron. Belgrade, **136**,91-99
Zulevic D.J., 1989: Bull. Astron. Belgrade, **140**,99-104